

Waste Management in Sumur Batu Village, Central Jakarta

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Abstract: Waste Management in Central Jakarta, Sumur Batu Village is a program organized by the Faculty of Economics, YARSI University for one of the functions of the Tridharma of Higher Education, namely Real Business Lectures (KKN). Waste from processing domestic and industrial needs is a major problem in all regions and regions, including Sumur Batu village in Kemayoran sub-district in Central Jakarta. If garbage is disposed of carelessly, for example thrown into a river and cannot be used at all, it can become shallow for the river, even the waste can become a flood disaster for the area. In fact, properly processed waste can prevent various diseases among residents, and waste can improve the economy and welfare of the people of Sumur Batu Village. Good waste management requires community involvement and participation. In Sumur Batu village, the support and knowledge of every head of household is very important for the welfare of the family. Household waste is separated beforehand and can encourage residents to engage in various activities and creativity to improve their economy, including fertilizer production, selling inorganic waste directly to businesses or turning recycled products into recyclables themselves. to recycle. You can earn money.

Abstrak: Pengelolaan Sampah di Jakarta Pusat, Desa Sumur Batu merupakan program yang diselenggarakan oleh Fakultas Ekonomi Universitas YARSI untuk salah satu fungsi Tridharma Perguruan Tinggi yaitu Kuliah Bisnis Nyata (KKN). Limbah dari pengolahan kebutuhan domestik dan industri merupakan masalah utama di semua wilayah dan wilayah, termasuk desa Sumur Batu di kecamatan Kemayoran di Jakarta Pusat. Jika sampah dibuang sembarangan, misalnya dibuang ke sungai dan tidak bisa dimanfaatkan sama sekali, bisa menjadi dangkal bagi sungai, bahkan sampahnya bisa menjadi bencana banjir bagi wilayah tersebut. Padahal, sampah yang diolah dengan baik dapat mencegah berbagai penyakit di kalangan warga, dan sampah dapat meningkatkan perekonomian dan kesejahteraan masyarakat Desa Sumur Batu. Pengelolaan sampah yang baik membutuhkan keterlibatan dan partisipasi masyarakat. Di desa Sumur Batu, dukungan dan pengetahuan dari setiap kepala rumah tangga sangat penting untuk kesejahteraan keluarga. Sampah rumah tangga dipisahkan terlebih dahulu dan dapat mendorong warga untuk terlibat dalam berbagai kegiatan dan kreativitas untuk meningkatkan perekonomian mereka, termasuk produksi pupuk, penjualan sampah anorganik langsung ke bisnis atau mengubah produk daur ulang menjadi barang daur ulang sendiri. untuk mendaur ulang. Anda bisa mendapatkan uang.

INTRODUCTION

Indonesia is a country with a relatively high population growth (Kurniawari, 2021). The population that continues to grow rapidly will



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increase the production of waste, especially household waste. This household waste is waste generated by daily household activities and does not contain certain contaminants and waste (Sudirman & Pharadiansah, 2019). It is estimated that around 300 million tons of waste are generated annually (Elamin et al., 2018).

Waste is defined as solid waste consisting of organic and inorganic materials which are considered unusable and must be processed to protect the environment and invest in development (Harjanti & Anggraini, 2020). There are many types of waste around us, including household waste, industrial waste, agricultural waste, market waste, hospital waste, vegetable waste, animal waste, business/office/school waste, household waste and industrial waste (Kustanti et al., 2020). Top-level waste management is divided into three categories: organic, inorganic and hazardous and toxic (B3) waste (Malina et al., 2017).

The composition of waste is a description of each component of waste and its distribution. Most categories of waste are based on their composition, for example paper, wood, leather, rubber, plastic, metal, glass, cloth, food, and other waste expressed in percentages or volume percentages (Republik Indonesia, 2012). The environmental issue that arises is the decrease in the carrying capacity of the environment due to the lack of public awareness of the importance of environmental protection (Runagetta et al., 2021). Garbage is closely related to the lifestyle and culture of the community itself. Therefore, waste management is not just a business and government, but also an administration that requires the participation of the wider community (Nugraha et al., 2018).

The waste problem consists of 3 parts, namely downstream, process and upstream. Downstream garbage disposal continues to increase. There are limited resources available from both the community and government in this process. At the top it is less systematic than the optimal one used for finishing (Mahyudin, 2017). Most people believe that incineration is part of the recycling process. However, it can cause environmental

pollution and damage your health. This attitude is influenced by knowledge and age (SNI, 2002).

To reduce resources with citizen participation, changes in the way people think about household waste management need to be integrated into the community waste bank project (Rinuastuti et al., 2019). In short, a waste bank is a concept of collecting dry and segregated waste and has an administration like a bank, but what is stored is garbage, not money. People who save (hand over garbage) and have a savings account, also called customers, then borrow money that can be re-used with borrowed money. Up to a certain amount of waste saved is rewarded and rewarded, which is then sold to factories that work with waste banks. Meanwhile, local PKK administrators can buy more plastic wrap to make handicrafts (Asteria & Heruman, 2016).

KKN is a course format implemented by three dharma universities, using the method of presenting and transmitting the work and learning experiences of students to strengthen the community (Syardiansah, 2019). Real Work Lecture (KKN) YARSI University is one of the influences of Tiga Dharma College or community service. This Real Work Lecture (KKN) is expected to be a new learning experience for students, to increase knowledge, skills and awareness of social life. The presence of students in public is expected to stimulate inspiration and innovation in the field of environmental health.

Real Work Lecture (KKN) is a form of education that provides a learning experience for students to live off campus in the community and to directly identify and solve problems they face in society. Real Work Lectures (KKN) are a form of staff consolidation in the process. development. These human resources are students and the community with whom they interact and interact in the learning process when taking real work courses. In the educational process, students are expected to be able to make connections between academic concepts and social reality. Through KKN, students can learn to recognize weaknesses and develop abilities to solve various problems in society (Hidayat & Purnami, 2018).

Real Work Lectures (KKN) must adhere to four principles and four approaches: learning, empowerment, inclusion, and sustainability (Tisnawan et al., 2020). Learning means that students recognize the conditions, skills, needs and challenges of human resource development. Strengthening means that the Real Work Lecture (KKN) program must be able to increase the productivity and quality of life of the community. Integration means that all programs must be based on community perceptions and character oriented approaches. Sustainability means the same university or other universities can support community empowerment.

This year YARSI University for the first time held a Real Work Lecture (KKN), which became a challenge for us students in semester 7 of 2016. The 2019 Real Work Lecture (KKN) started on July 13, 2019 and ended on November 28, 2019. We have a contract to build a waste bank in the Cempaka Baru area and we hope to build a waste bank that is beneficial to the environment. The clean and healthy Cempaka Baru area will store unused waste which can increase local revenue.

Real Work Lecture (KKN) is divided into approximately 3 stages: preparation, implementation and further evaluation. The preparation stage includes licensing, observation and social approaches, training, equipment development, observation and discussion of teachers and students. The implementation phase includes implementation, management, monitoring and program preparation. The final step is the next assessment, which includes an actual business course. There are two types of reports, group reports from groups of students, and individual reports from students. The methods used are currently in the observation phase: (1) question and answer, (2) documentation and (3) direct field assessment.

RESEARCH METHODS

This activity is carried out using socialization methods and practical training as well as assisting in waste management. Socialization in this activity is carried out by providing counseling about the dangers of waste that can pollute the environment and cause

flooding. Practical training is provided by resource persons which are then applied by the activity participants. The stages of the KKN implementation project are as follows:

Preparation phase

Preparations made before the Real Work Lecture (KKN), preparations were made, including: Group coordination meetings with the coordinator are held once a week before and after community observations. Presenting material in the form of topics related to activities, duration, program locations, benefits, implementation objectives and procedures for implementing Real Work Lectures. Monitoring/research activities include physical conditions, potential occupants, community facilities and activities. Purchase of items needed for KKN operations, such as gloves, plastic bags, scales, etc. Provide material/socialization to local residents about the dangers of waste that can pollute the environment and cause flooding, as well as encourage local residents to maintain and dispose of various forms of waste, aware of the implementation of community service programs.

Implementation Stage

The stages of KKN activities are as follows: The implementation of the first activity is garbage collection. Various types of waste were collected such as water bottles, iron, paper, cardboard, cardboard, plastic, and others. Each type of waste is sorted and separated according to its own type which will then be weighed. The next step in this project is to weigh the various types of waste according to their respective classifications. This is done to ensure transparency between the community and students and to provide understanding to community members for students. After weighing the weight of the waste, we recorded the weight of the waste according to the scale. On August 25 and October 2 2019, the sale of waste to collectors was carried out twice. After passing the weighing and recording of waste per type, we collect waste per type into one. Then after the waste is sold to collectors, we return it to them and get the latest information on the price of waste because that information can change at any time. The results that are distributed are in accordance with what each resident brings that we calculate.

Evaluation Stage

In general, Real Work Lecture (KKN) activities can produce good results. A very useful factor in the smooth running of Real Work Lecture (KKN) activities is the support and involvement of the community who are very enthusiastic about the agenda. However, students also encounter several obstacles in their Real Business Lecture (NLC) activities, namely: Heavy operation time control and lack of space. Time control with collector. And difference between collective scale and student scale.

RESULTS OF RESEARCH AND DISCUSSION

Waste management is defined as a systematic, comprehensive and sustainable activity that includes waste reduction and handling. A comprehensive/integrated waste management system can be applied starting from the source of waste, collection, transportation, intermediate processing at TPS (Temporary Disposal Sites), and final processing at TPA (Final Processing Sites) (PP No. 81 of 2012). The recycling process in an integrated waste management system is influenced by six aspects, namely technological aspects, aspects of community participation (social), economic and financial aspects, legal and regulatory aspects, organizational and management aspects, and operational aspects. Meanwhile, according to Law no. 18 of 2008 concerning waste management, it is explained that what is meant by waste management is a systematic, comprehensive and sustainable activity that includes waste reduction and handling.

Based on field observations, it was found that most of the residents of Cempaka Baru still do not understand the function of the waste bank and still throw garbage carelessly which can cause environmental pollution and cause flooding and can become a disease outbreak for local residents.

As a result of this activity, Cempaka Baru residents can understand the function of the waste bank and can sort waste according to its type which will then be sold to collectors and the results can be an additional income for local residents. And the residents of Cempaka Baru can change their behavior

patterns to focus on waste that can pollute the environment.

Real Work Lecture (KKN) was held for Cempaka Baru Village residents. The activity begins with an explanation of the function and purpose of the waste bank. The event began with remarks by the Chairman of the Royal Manpower Court (KKN) and representatives of Cempaka Baru residents.

The presentation of the waste bank program was presented at the Al-Gufron Mosque and attended by women from Cempaka Baru Village. This event will be held on Saturday, July 13 2019, at 10.00-12.00 WIB.

The waste bank was explained by KKN students. The atmosphere of the presentation of the waste bank program was quite good, which was reflected in the desire of local residents to pay attention to the presentation of the agenda. This waste bank program is a solution to change people's behavior to focus on waste that can pollute the environment.

However, it can also be used as an integrated economic resource with the 3R principles of reduction, reuse and recycling. After the presentation, the trash bags have been distributed to the tenants since the presentation day and will be picked up next week.

The activities of the waste bank program are as follows: Separation of organic and inorganic waste. The same applies to waste paper, plastic, metal, aluminum and iron. The next process is the handing over of the waste, then lifting the weight according to the type of waste, then recording is done to find out how many (kg) of garbage each resident has collected. After collecting all types of waste, it is then sold to collectors and the sales proceeds are distributed to residents who collect waste according to the amount of waste (kg) collected.

If all activities go well and according to plan, we hope that this waste disposal activity will not only take place during the Real Business Lecture (LRC), but also for the people around us to continue to provide comfort and improve the cleanliness of the surrounding environment.

CONCLUSION

Based on the experience and field conditions obtained in KKN, we can conclude that although there were activities, due to program changes, the actual conference program was not on time, but was well planned and well armed. Mass media. population. In addition, another obstacle is that it is very difficult for collectors to transport used goods because collectors cannot bring used goods to the collection point and we take the initiative to transport them. Help students respond to existing problems and mature to understand how to survive in society. In addition, it can train someone who is independent and responsible for their duties and responsibilities. This Real Work Lecture Program (PKB) can expand and motivate people's knowledge and skills, especially in the field of environmental hygiene. Students gain experience and social knowledge that has not been obtained in lectures. The Cempaka Baru community, gentlemen, are very happy to be able to participate in this KKN program.

SUGGESTION

From this conclusion, there are several things recommended to support the system good waste management, namely: for institutions or organizations in the area must be part of the waste management process, because these institutions/organizations play a role in producing waste. For Universities have an important role in increasing the capacity and ability of the community in managing and utilizing waste into goods of economic value by providing training or counseling. And then for the waste bank developed in the area must encourage and invite the community to change their behavior and have a habit of sorting waste.

People who already understand very well about waste management and know how to do it, should be maintained and improved again, it is also necessary to transmit it to other communities so that knowledge about the importance of maintaining and managing waste around settlements can be understood and carried out continuously for the sake of creating an environment. clean, healthy and comfortable.

REFERENCES

- Asteria, Donna., & Heruman, Heru. (2016). Waste Bank as an Alternative Community-Based Waste Management Strategy in Tasikmalaya. *Journal of Humans and the Environment*, 23(1).
- Elamin, Muchammad Z., Ilmi, Kartika N., Tahrirah, Tsimaratut., Zarnuzi, YA, Suci, YC, Rahmawati, DR, Kusumawardhani, R., Dwi, DM, Rohmawati, RA, Bhagas-koro, PA, & Nasifa, IF (2018). *Journal of Environmental Health*, 10(4).
- Harjanti, Intan M. & Anggraini, Pratamaningtyas. (2020). Waste Management at Atibarang Final Disposal Site (TPA), Semarang City. *Journal of Planology*, 17(2).
- Hidayat, Nur., & Purnami, Sri. (2018). Integrative Interconnective Real Work Lecture (Kkn) Model Based On Productive, Innovative And Creative Community Development. *Journal of Religion and Society Research*, 2(2).
- Kurniawari, Endah & Sugianto, Chess. (2021). The Effect of Population Age Structure on Economic Growth in Indonesia. *Indonesian Journal of Economics and Development*, 21(1).
- Kustanti, A., Rezagama, BS Ramadan, S. Sumiyati, BP Samadikun and M. Had-iwidodo. (2020). Review of the Value of Benefits on Plastic Waste Management by the Informal Sector (Case Study: Purwodadi District, Grobogan Regency). *Journal of Environmental Science*, 18(3), pp. 495-502. <https://doi.org/10.14710/il.18.3.495-502>.
- Mahyudin, Rizqi P. (2017). Study of Waste Management Problems and Environmental Impacts in TPA (Final Processing Site). *Journal of Environmental Engineering*, 3(1).
- Malina, Asmi C., Suhasman., Muchtar, Asikin., & Sulfahri. (2017). *Environmental Studies of Waste Sorting Sites in Makassar City*.

- Makassar Journal of Innovation and Public Service, 1(1).
- Nugraha, Aditya., Sutaho, Surjono H., & Amin, Akhmad A. (2018). Community Perception and Participation in Household Waste Management through Waste Banks in South Jakarta. *Journal of Natural Resources and Environmental Management*, 8(1).
- Republic of Indonesia, PP (2012). PP no 81 of 2012 concerning the Management of Household Waste and Kinds of Household Waste. republica. Retrieved from http://www.researchgate.net/profile/Agus_Sugiyono/publication/264784175_Analisis_Manfaat_dan_Biaya_Ssial/links/53ef4ede0cf2711e0c42f08f.pdf%5Chttp://ferryfebub.lecture.ub.ac.id/files/2013/01/Sections/2013/01Analysis-Cost-and-
- Rinuastuti, Handayani., Saufi, Akhmad., Asmony, Thatok., & Suadiartha, Handry. (2019). Waste Banks as One of the Alternative Community-Based Waste Management Strategies in Sesaot Village. *Gema Ngabdi Journal*, 1(2).
- Runagetta, Brigitta., Mia, Firston., Pradana, RW, Pausa, ME (2021). Socialization of Waste Sorting and Utilization to Be a Blessing. LPPM UMJ Community Community Service National Seminar.
- SNI 19-2454-2002. Technical Procedures for Urban Waste Operations. Department of Public Works : Bandung.
- Sudirman, Faturachman S. & Pharadiansah. (2019). Overview of Sustainable Development Implementation: Kendari City Waste Management. *Journal of Social Politics*, 5(2).
- Shardiansah. (2019). The Role of Real Work Lectures as Part of Student Competency Development. *JIM UPB (Scientific Journal of Management, University of Putera Batam)*, 7(1).
- Tisnawan, Rahmat., Anugrah, M. Fajar., Husnah. (2020). Managing Waste Into Compost Fertilizer in Rantau Panjang Rumbai Village, Pekanbaru. *Journal of Multidisciplinary Community Service*, 4(2).
- U.N. 18 T. (2008). Law of the Republic of Indonesia Number 18 of 2008 concerning Waste Management. In the Republic of Indonesia (pp. 1-46).