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## MANAGING WASTE WITH THE CONCEPT OF REDUCE, REUSE, RECYCLE (3R) AS AN EFFORT TO CREATE A CLEAN ENVIRONMENT

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### Abstract

This study aims to find out and analyze the effectiveness of waste management with the concept of *Reduce, Reuse, Recycle* (3R) in Gorontalo City. This study uses a qualitative method whose data is sourced from primary data and secondary data derived from field findings. The results of the research found that the effectiveness of waste management with 3R has not been effective because it has not made significant progress. Public understanding of waste management programs with the concept of Reduce, Reuse, and Recycle in Gorontalo City is still minimal, including urban and rural communities, as well as certain sectors that produce large volumes of waste (e.g. markets, restaurants, schools). Waste management with the 3R concept is still not fully said to be effective because of several things, such as budgeting, public awareness, and the government's seriousness to create a healthy Gorontalo City, so it is necessary to have the role of all levels of society to pay more attention to the waste problem in the city of Gorontalo. So that Gorontalo City in the future becomes a clean city that is free of waste.

**Keywords:** Managing Waste; Reduce, Reuse, Recycle (3R); Create A Clean Environment

### INTRODUCTION

The environmental problems that we are experiencing now are a problem of healthy survival, harmony with nature and the continuation of life from generation to generation. In reality, the rapid pace of development seems to be unable to escape from pollution and environmental destruction, so the earth is decreasing its carrying capacity. The environmental crisis that is happening today has reached a serious stage and threatens the existence of the earth where humans, animals and plants live and continue their lives. Modern humans today are not aware that they are doing a slow and definite destruction of the environmental system that helps their lives.

Various environmental problems will arise from poor waste handling. Waste that is thrown into the waterway will clog the channel and will cause flooding. In addition, burning garbage will also cause air pollution. The waste problem is coupled with the awareness of waste sorting efforts from the community which is still low. Low public awareness, lack of facilities and infrastructure and lack of professionals are things that are still encountered in Indonesia,

so it is not surprising that waste management is still not running optimally. In fact, in Indonesia itself, regulations on waste management have been regulated in Law Number 18 of 2008. The law is also a reference for every region in Indonesia to have regulations in the context of regional regions because there has been a mandate related to decentralization and regional autonomy where regions have their own authority to regulate their regions, one of which has regulations related to environmental sustainability by processing waste. So that many regions implement 3R-based waste management to minimize the amount of waste produced by the community.

One of the cities that has problems related to waste is Gorontalo City. As regulated in Gorontalo City Regional Regulation No. 12 of 2017 concerning waste management. The problem of waste in Gorontalo City is still a serious problem that must be solved. Not only the government, but the community must also be aware of the conditions that occur. Not only the government, but the community must also be aware of the conditions that occur. Of course, the community is asked not to throw garbage carelessly. In addition to not throwing waste, the community is also asked to be productive in managing waste into economic value.

This condition occurs because it is still ineffective related to waste management with the *3R Program*. Therefore, it is necessary to do related to waste management, especially based on *3R* so that the community understands the importance of waste management starting from households, so that waste problems can be solved. Based on the 2018 Gorontalo City Household Waste Management Regional Policy and Strategy Documentation Data (JAKSTRADA), Gorontalo City is one of the largest contributors to waste in Gorontalo Province. Meanwhile, based on data from the National Waste Management Information System, waste production in Gorontalo City reached 140 tons per day. Of the 140 tons, only 70 tons were able to be lifted by the Gorontalo City Environmental Agency to the landfill, the remaining about 70 tons were left alone and could not be managed properly. Some of them are carried by river water into the ocean, this is bad for the environment.

Waste handling, especially in Gorontalo City, is a serious problem. This can be seen that there are still complaints from the community regarding the way to handle waste. The waste handling that has been carried out so far is only transporting it from garbage cans in residential areas and throwing it into the final garbage disposal site or burning it. This method is not able to solve the waste problem because it can still cause environmental pollution.

## **METHOD**

This research was carried out at the Gorontalo City Environmental Agency and TPS 3R in Gorontalo City with the focus of the research on the Effectiveness of Waste Management with the concept of *Reduce, Reuse, Recycle* (3R). This approach uses a qualitative approach, with a descriptive qualitative type. Data collection uses interviews, observations, and documentation. Data analysis uses the According to Miles and Huberman model.

## **RESULTS AND DISCUSSION**

Waste management with the 3R concept aims to reduce the volume of waste in circulation, and aims to maintain environmental cleanliness. The waste management process includes waste collection, waste sorting, waste transportation, waste processing and recycling, and waste disposal at the landfill when recycling is completed, recycled waste will be disposed of at the landfill.

### **Program understanding**

In its implementation, a policy is certainly inseparable from the participation of the community, can determine whether the results of a program are achieved or not as regulated in the Gorontalo City Regional Regulation Number 12 of 2017 concerning waste management that the community can play an important role in waste management organized by the local government through the provision of proposals or suggestions and the realization of waste management programs, and carried out independently or in collaboration with local governments. To support the implementation of the program to the community about understanding waste management with the 3R concept, Gorontalo City has a main waste bank in Kota Tengah District, Pulubala Village and TPS 3R as a buffer for the main waste bank in Wonggaditi Village, Pulubala Village, and Donggala Village.

Waste management at TPS 3R is carried out with a participatory method, namely the community is directly involved in every waste management activity which is expected to provide understanding and positive impact on the community. However, the fact encountered in the field is that the understanding of the program cannot be said to be effective because the management of TPS 3R and the Environment Agency rarely conduct socialization, so this results in the understanding of the program to the community is not fully effective.

According to Edie Sutrisno, the understanding of the Program in the effectiveness indicator is to find out the extent to which the community can understand the 3R Program, the activities contained in the 3R program, as well as the process of implementing 3R, the success of a program from the intensity of socialization carried out by the Environment Agency and TPS 3R. With socialization, there will be a common understanding of the knowledge or information conveyed to the target group.

Through understanding the program, all forms of planning will be more organized and will be younger to operate. This indicator is used to find out the extent to which the community and the manager as the implementer of the program know all the details of the 3R program at the 3R polling station.

### **Target accuracy**

The results obtained are that in terms of waste management, it is still not on target, such as the main goal of the 3R program is so that people are able to be aware and be able to sort waste from their homes, but other encounters in the field, many people are indifferent to the waste problem. Because the right disposal site is not provided. So that the indicator of waste management effectiveness on the right target indicator cannot be said to be effective.

Target accuracy According to Edie Sutrisno, target accuracy is the most important thing to determine the success or failure of a program. In the implementation of the program, the most important thing to see is the accuracy of the target, whether it is in accordance with the predetermined goals or vice versa.

The accuracy of the targets in this effectiveness indicator is to see the extent to which TPS 3R has succeeded in realizing the goals to be achieved. The waste management program with the 3R concept should have the right goals because the accuracy of the targets in each implementation of program activities is one of the important aspects and affects the success of the 3R program in achieving the expected goals.

#### **Timeliness**

Punctuality is a decisive indicator in determining the effectiveness of a program, if the program is not on time according to the time that has been determined and mutually agreed, then the program cannot be said to be effective.

In its implementation, waste management with the 3R concept in Gorontalo City is still far from effective. Because there is still a lot of waste that is not finished being recycled and piled up at the 3R TPS, due to several obstacles in the field, such as the lack of damaged equipment and transportation as well as the budget from the city government, and the lack of interest in running this 3R Program, they complained that the community is not very interested in this, only immigrants from outside Gorontalo are interested in the 3R program to be used as a business field, Most of the enthusiasts are Javanese, even though in the management of this work is still slow due to some of the obstacles above, this is the factor that makes waste management with the 3R concept ineffective in Gorontalo City.

#### **Achievement of goals**

The achievement of the goals of a program can be seen from how far the goals are achieved, as we all know that waste management services are included in public services to be able to serve the community in terms of waste management itself, in waste management it is very necessary to do waste management work so that the program runs and achieves its goals.

Gorontalo City in terms of waste management with the 3R concept has still not achieved its goal because of the 10 TPS that have been made in Gorontalo City, only 3 are operating, there are even some that are no longer active, only those in Pulubala Village and Wonggaditi Village and also Donggala Village are still routinely operating, then there is still a lot of recycled waste that accumulates at the Final Disposal Site (TPA), This is because many 3R TPS are no longer operating, besides that the lack of budget also makes workers lazy in working on this 3R Program. So that the waste that should be transported to the TPS becomes piled up and the transporters are forced to dispose of the recycled waste at the landfill. It can be seen that waste management with the 3R concept, if measured in indicators of effectiveness in achieving goals, waste management with the 3R concept in Gorontalo City has not been effective.

The 4th effectiveness indicator, namely the achievement of the goal according to Edi Sutrisno, is to measure the extent to which the objectives of the waste management program with the 3R concept can be realized properly, this can be seen from the extent of the implementation of the 3R waste management program whether it is in accordance with the expected goals or not, thus it can be concluded that if the goal is not achieved properly, it is said to be ineffective and if the goal has been achieved well, it can be said to be effective. In the indicator of the achievement of the goal, it can be ascertained that it is not effective because the goal of waste management with the 3R concept is to create a waste-free environment,

especially bottle waste, but what happens in the field is inversely proportional. Waste that is not finished in recycling is more dominant than waste that has been recycled. In the landfill itself, Gorontalo City is the largest contributor to waste.

### Real Changes

Waste management with the 3R concept is a good thing in the community, in addition to helping reduce waste that ends up in landfills, it also helps the community and MSMEs in running a business. Because recycled waste can produce rupiah coffers.

The results of this study found that the effectiveness of waste management with the 3R Concept in Gorontalo City is not good, and cannot be said to be effective. Because there is still a lack of cooperation between related parties, lack of public interest and awareness, and lack of budget cause waste management to be hindered. Waste management with the 3R Concept needs to receive more attention from the Gorontalo City government, so that the waste produced by households can be managed properly, so that a clean and healthy life is created.

### CONCLUSIONS

Based on the results of the research and discussion, it can be concluded that the effectiveness of waste management with the 3R concept has not made significant progress and has not been effective when viewed from; *understanding of the program*, cannot be said to be effective because the management of TPS 3R and the Environment Agency rarely conduct socialization so that this results in the understanding of the program to the community is not fully effective. Meanwhile, *the accuracy of the target* has not been effective because the community is indifferent to waste, this behavior makes the 3R program not on target. When viewed from *the perspective of timeliness*, it is not effective because a lot of waste has not been recycled within a predetermined period of time, the slow sorting, collection and collection of waste results in the waste management process becoming ineffective.

Furthermore, if you look at *the achievement of the goal of* waste management, it cannot be said that it is effective because the construction of TPS which was initially 10, which operated only 3, then there is still a lot of waste that ends up in the landfill, many people still have a bad habit of throwing waste directly at the garbage pile without sorting it first, this makes there is no achievement of the goal of waste management with the 3R concept. *Real changes* have not been effective because waste management with the 3R concept does not bring real changes to the community Many people are reluctant to participate in 3R-based waste management, because the community considers the work less promising, then with the lack of workers makes waste in Gorontalo City more and more piled up, so that the environmental conditions of the community before and after the waste management with the 3R concept have not undergone any changes Significant.

### REFERENCE

- Agnes, W. (2017). Pengaruh Peningkatan Taraf Hidup Masyarakat Penjual Tanah Terhadap Perilaku Konsumtif di Wilayah Desa Singasari, Kecamatan Jonggol, Kabupaten Bogor. *Jurnal Taraf Hidup Konsumtif*.
- Ambina, D. G. (2019). Tinjauan Pemilahan Sampah Menurut Undang-Undang Nomor 18 Tahun 2008 Tentang Pengelolaan Sampah. *Jurnal Bina Hukum Lingkungan*.
- Aryenti. (2011). Peningkatan Peran Serta Masyarakat Melalui Gerakan Menabung Pada Bank Sampah di Kelurahan Babakan Surabaya. *Jurnal Pemukiman*.

- Dwiyanto, B. (2011). Model Peningkatan Partisipasi Masyarakat dan Penguatan Sinergi Dalam Pengelolaan Sampah Perkotaan. *Jurnal Ekonomi Pembangunan*.
- Edi Sutrisno (2018) Efektivitas Pelaksanaan Program 3R (Reduce, Reuse, Recycle) dalam Pengelolaan sampah di kelurahan Sukamiskin Kota Bandung.
- Ferdi Muhammad. (2018) Pengelolaan Sampah Gedung di Kawasan Kampus Terpadu Universitas Islam Indonesia Berdasarkan Hasil Perilaku Mahasiswa. *Skripsi*
- G. Manulu and M. F. Ma'ruf, " Kerjasama Pemerintah Kota Surabaya dan PT. Sumber Organik Pada Program Pembangkit Listrik Berbasis Sampah di TPA Benowo Kota Surabaya," *publika*, vol. 8, no.2. pp. 1-10, 2020.
- George R. (2013), *Dasar-dasar Manajemen*. Jakarta: PT Bumi Aksara.
- Irfan Fahmi. (2018) *Perilaku Organisasi Teori Aplikasi dan Kasus*. Alfabeta Bandung
- Kakilo, Bais; Igirisa, Irawaty; Isa, Rusli (2023). Implementation of waste management policy in Kwandang sub-district, north Gorontalo regency. *World Journal of Advanced Research and Reviews*.  
[https://scholar.google.com/citations?view\\_op=view\\_citation&hl=id&user=DtOb4BAAA&AJ&cstart=20&pagesize=80&citation\\_for\\_view=DtOb4BAAAAAJ:hSRAE-fF4OAC](https://scholar.google.com/citations?view_op=view_citation&hl=id&user=DtOb4BAAA&AJ&cstart=20&pagesize=80&citation_for_view=DtOb4BAAAAAJ:hSRAE-fF4OAC)
- Kusnawati, E. (2012). Pemberdayaan Masyarakat dalam Pengelolaan Sampah di Dukuh Mrican Sleman Yogyakarta. *Health & Sport*.
- Lasanudi Noviyawati Y S. (2020) Deskripsi Pemahaman Masyarakat Terhadap Strategi Pengelolaan Sampah dengan Sistem 3R di Kelurahan Moodu Kota Gorontalo. *Skripsi*
- Margayaningsih, D. I. (2017). Peran Masyarakat Dalam Kegiatan Pemberdayaan Masyarakat di Desa. *Jurnal Masyarakat*.
- Murtini Anindya Ajeng. (2024) Efektifitas Program 3R (*Reduce, Reuse, Recycle*) Dalam Mengatasi Permasalahan Sampah Plastik di Surabaya. *Jurnal Relasi Publik*
- Octavia S. M (2023). Efektivitas Pelaksanaan program 3R (Reduce, Reuse, Recycle) Dalam Pengelolaan Sampah di Kelurahan Suka miskin Kota Bandung. *Skripsi*
- Perda Kota Gorontalo No 12 Tahun 2017
- Peter Salim, dkk (2002), *Kamus Besar Bahasa Indonesia Kontemporer* (Jakarta : Modern English Press)
- Sugiyono. (2019). *Metode Penelitian*. Bandung: Alfabeta. Riswan, R. &. (2011). Pengelolaan Sampah Rumah Tangga di Kecamatan Daha Selatan. *Jurnal Ilmu Lingkungan*.

Sugiyono. (2020). *Metode Penelitian Kuantitatif Kualitatif dan R&D*. Bandung: Penerbit Alfabeta.

Sulistiyorini, L. (2005). Pengelolaan Sampah Dengan Cara Menjadikannya Kompos. *Jurnal Kesehatan Lingkungan*, 78- 82. Suryani, S. (2014). Peran Bank Sampah Dalam Efektivitas Pengelolaan Sampah (Studi Kasus Bank Sampah Malang). *Jurnal Aspirasi*.

Surmayani Putri N, dan Ni Wayan Sunita. (2023) Pengelolaan Sampah Melalui Konsep 3R Dalam Mengurangi Sampah Rumah Tangga di Desa Kaba-Kaba Tabana. *Jurnal Jasintek*

Surya, A. & Noor, D. A. (2019). Pengelolaan dan Pengelolahan Sampah Pasar Desa Gunung Tengah Melalui Konsep 3R dan Teknologi Lingkungan. *Jurnal kacapuri :jurnal keilmuan teknik sipil*

Ulfaridha Ghina. (2017) Implementasi program 3R (Reduce, Reuse. Recycle) Melalui Bank Sampah Dalam Upaya Pengelolaan Sampah Berbasis Masyarakat di Kota Bandar Lampung. Skripsi

UU No 18 Tahun 2008

Yeremias T Keban. (2014) *Enam Dimensi Strategis Administrasi Publik*. Gava media