

LIBRARIAN AS A ZERO WASTE WARRIOR

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ABSTRACT: *Indonesia is the second-largest plastic waste contributor in the world. This condition certainly needs to be observed and followed up. This paper records the efforts of the Indonesian government in realizing a zero-waste program to overcome various waste problems in Indonesia and highlights the variations of zero waste programs carried out in multiple provinces. This paper also attempts to map the position of the librarian as a zero waste warrior. Librarians can strengthen their role as managers and providers of various sources of information needed to educate the public in making waste a new resource for improving the quality of life.*

Keywords -zero-waste, librarian, agent of change, literacy program, social inclusion

I. INTRODUCTION

In 2015, the United Nations (UN) launched the Sustainable Development Goals (SDGs). The SDGs are a global action plan that all world leaders have agreed to eradicate poverty, reduce inequality, and protect the world. The SDGs consist of 17 goals with 169 targets targeted to be achieved in 2030.¹

The 12th goal of SDGs is to ensure sustainable consumption and production patterns. This goal then gave birth to a zero-waste program, an alternative solution to achieve this goal. The zero-waste program was born because every consequence of various human consumption and production activities will inevitably impact the environment. And a zero-waste program to minimize this to a minimum. The simplest thing to promote a zero-waste lifestyle is to reduce the packaging of shopping materials when buying various necessities in the market (supermarket). In this way, we reduce waste products and contribute to a material reduction in multiple landfills. By contributing to a zero-waste lifestyle, we will produce less waste.²

The Zero Waste program is well received in Indonesia. The Ministry of Environment and Forestry recorded that Indonesia is the second-largest plastic waste contributor globally. The Indonesian Plastic Industry Association confirms this fact, and the Central Statistics Agency stated that 3.2 million tons of waste dumped into the sea was plastic. This is very dangerous for the survival of marine life in the oceans of Indonesia. While on land, the amount of national waste produced reaches 175,000 tons per day. That means 1 person makes 0.7 kg/day. So that Indonesia can have as much as 64 million tons of waste per year, that's a significant number...!! The Ministry of Environment and Forestry study also states that only 10-15% of waste is recycled, while 60-70% of waste is only disposed of in landfills. The remaining 15-30% of waste is thrown into the environment. As a result, the TPA becomes the final place for the piling up of garbage to no longer accommodate the pile of rubble. The Leuwigajah TPA in Cimahi, which collapsed and buried 143 people in 86 houses.⁴ These facts state that Indonesia is already in a state of waste emergency.

Therefore, the Indonesian Government must act quickly and precisely in overcoming the waste problem in Indonesia. One of the strategies used is to embrace the younger generation in disseminating various programs and policies on zero waste. Zero waste communities appear in actual movements in society and social media on the web. The community is trying to promote a zero-waste lifestyle starting from daily life, socializing various new habits that are minimal in waste to practical ways to recycle waste at the household level.⁵ The Government also strongly supports the formation of a zero-waste city that applies an environmentally sound, sustainable, and decentralized waste management model in various settlements.⁶

In addition, the National Government will strengthen programs to the regions by stipulating that the zero waste program is a priority program. And this is welcomed by the local governments in various provinces. The Provincial Government is following up on program policies by making the zero waste program into its priority program. Anyone can see this program from the procedures carried out by the Bali Provincial Government with the Governor's Regulation limiting the Stockpiling of Single-use Plastic Waste (PSP),⁷ the waste school program, the waste bank program, and assistance for the implementation of 4R in Makassar,⁸ as well as various policies carried out by the NTB Provincial Government.⁹

In NTB itself, the local Government has established zero waste as a unique program by improving the quality of the community-based environment. The target set by the NTB Regional Government is 70% in the form of waste management and 30% reduction in waste to be achieved by 2023. The efforts that the NTB Regional Government has made to complete work targets include increasing cooperation between OPDs,¹⁰ allocating regional budgets, issuing local regulations regarding waste management,¹¹ build waste banks to villages,¹² involving religious leaders and the younger generation in various zero-waste-based programs, as well as hold multiple communities and community-based events and activities to develop and increase awareness. Public.¹³

The tagline that was launched, "your trash, your responsibility," is expected to mobilize public awareness in increasing their participation in overcoming waste problems in their respective environments. Madani Mukarom, Head of the Environment and Forestry Office of NTB stated that within 2 years of implementing the zero waste program, there was an increase in waste management, from 20% (513.55 tons/day) in 2018 to 37.63% (980.35 tons/day) in 2020. Likewise, the amount of waste that is processed without going to the landfill (reduction of waste), from 0.5% (12.8 tons) in 2018, increased to 14 times 7.1% in the year 2020.¹⁴

Nevertheless, the Indonesian Forum for the Environment (WALHI) NTB, through its Regional Executive, actually stated that the implementation of the zero-waste program for the past 2 years has been running very slowly despite the support of a large budget. The direct role of the provincial government to the local community seems to have taken over the part of the Regent and Mayor so that cooperation is like a discourse without application and implementation. Follow-up regulations after the launch of the zero-waste program that are technical at the Regency/City level to reach rural areas have received less attention from the provincial government. This suggests a lack of coordination between the regional and district/city governments. The existence of organic waste management sites that are not managed optimally, the lack of waste management policies at the district/city level, the lack of supervision of waste management performance at the district/city level, and the unmanaged coastal and marine waste are the weaknesses of the local government management in dealing with the zero-waste program. According to WALHI, an indicator of the success of implementing the zero waste program in NTB is the acceleration of the program by turning the waste management movement into a collective action for the entire community. This will be achieved through collaboration, assistance, and coordination between the provincial Government and district/city governments.¹⁵

However, zero waste is a program that requires a change in thinking and the development of a new culture in waste management. It takes more than cooperation and synergy between the provincial government and district/city governments to change the patterned mindset of the people. Efforts must be made to meet the needs of knowledge, understanding, awareness building to reach the level of behavior change in the community. This is where the significance of optimizing the role and function of a library and librarian may be in providing literacy enlightenment to the community.

II. INNOVATION AND SOLUTION

In 2011, the Coca Cola Foundation Indonesia (CCFI), in collaboration with the Government, created a phenomenal program by targeting the library as a center for learning and community activities in various Information and Communication Technology (ICT)-based literacy programs with the brand "Perpuseru" (Library Seru). The "Perpuseru" program has proven that the library can be an effective joint literacy vehicle to develop community potential with various training activities (skills).¹⁶ The program, which ran until 2018, successfully delivered 67% of the 768 libraries that became partners to be independent through the district government. And in 2019, the task of managing the "Perpuseru" (Library Seru) program was handed over to the National Library.¹⁷

The success of the "Perpuseru" program in improving the living standards of rural communities cannot be separated from the strategy for implementing literacy programs based on social inclusion in the library. Social inclusion-based library service is the role of the library as a vehicle for lifelong learning so that the library is not only a source of information but also a socio-cultural center that can empower and democratize the community for the sake of improving people's welfare.¹⁸ As Budd said that "The library makes the creation of new knowledge possible at its most fundamental level"¹⁹

An inclusive approach that sees libraries as part of a social sub-system in the community allows libraries and librarians to take a social system-based approach or a humanistic approach in their various program implementations. For this reason, the library must have high usability through its connectivity, content, and human factors. So with this approach, the library can be a means of society in obtaining solutions to every problem of life.²⁰ Both concepts and programs have succeeded in raising the prestige of the library as an agent of change in society.²¹

Reflecting on the success of the library program by strengthening the role of libraries, as well as the potential of libraries in various service programs based on social inclusion, the authors ventured to propose the

concept of librarians as zero waste warriors to strengthen the impact of implementing zero waste programs in NTB Province. This is based on several facts, namely:

1. The United Nations Educational, Scientific and Cultural Organization (UNESCO) states that the interest in reading in Indonesian society is very low based on a study entitled *World's Most Literate Nations Ranked* (2016), showing that interest in reading in Indonesian culture is ranked 60th out of 61 countries that researched.²²
2. Indonesia has the second-largest library in the world after India.²³
3. Roy Tennant stated that "only librarians like to search, everyone else wants to find".²⁴

The authors conclude from the three facts above and try to formulate a hypothesis about challenges that the library can utilize as an agent of change with librarians as warriors in zero waste information management. These are:

1. Indonesian people are people who have a lazy culture of reading. This culture is supported by the reality of the solid oral culture of the written culture, the low appreciation of books, and the value of books in society. Indonesian society has been patterned to consume practical information. This reality strengthens the urgency of the meaning and role of the librarian as a warrior (warrior) of zero waste information to the community. Librarians can take on the following functions:
 - a. Create, and compile various practical information packages on 5W1H regarding waste management and the economic potential of household waste management. Librarians can do emphasize the monetary value of waste empowerment. Packaging information that is practical and directly touches the community's basic needs will provide a new discourse for the district to find alternative sources of income from waste empowerment. This will undoubtedly increase people's motivation to participate in the success of the zero-waste program.
 - b. Librarians can collaborate with certain parties in making various variations of attractive information packages in digital and printed forms. This will make the information presented to the public more dynamic and not stagnant.
 - c. We are serving these information packages to the public, using an information service strategy based on social inclusion.
2. The distribution of information will be carried out effectively and efficiently because it is supported by a large number of libraries in Indonesia, reaching rural areas. As an information management institution, libraries can maximize their potential in the following ways:
 - a. They are building good synergy and cooperation between local libraries, district/city libraries, and village libraries in managing and disseminating information on various issues regarding zero waste. Good synergies include dividing roles and clear coordination lines between the Provincial Libraries, which play the role of leader (manager), village libraries, and district/city libraries, as agents. With this cooperative model, the library has an extensive information network that can significantly impact the distribution of knowledge to achieve self-understanding and awareness. Changes in attitudes and living habits in the community can be improved little by little.
 - b. Higher education libraries can dig up data on various potentials for waste management based on the community's economy in multiple villages, sub-districts, or sub-districts. This data can be obtained through various research activities and community service of lecturers at universities, which are then synergized to the Provincial Library to be re-socialized by librarians (as agents) to the village community.

Synergy and cooperation between libraries will strengthen the role of libraries as information institutions and librarians as zero waste warriors.

III. CONCLUSION

Changes in people's way of thinking and the development of a new culture in waste management, which are indicators of the success of the zero-waste program, are not easy to achieve. Continuous efforts and programs are needed, and synergy and cooperation from various parties. The efforts made by the Provincial Government have shown results, although they cannot be said to be maximal (by some parties). However, it should be appreciated for bringing changes to the community's life for the better.

The concept of maximizing the role of libraries as agents of change with all their potential and librarians as fighters for zero waste information will maximize and further strengthen the thrust and impact of the zero waste program running for two years. Various improvements and reinforcements as evaluations should be carried out because that is the dynamics of program implementation towards improvement. However, with synergy and cooperation with multiple parties, maximum results are not impossible to achieve.

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