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Zero Waste Store: A Way to Promote Environment-friendly Living

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ABSTRACT

This study focuses on the emergence of Zero Waste Store: A Way to Promote Environmental-Friendly Living. The principle behind zero waste is to reduce the environmental pollution that decomposes less decomposes. Waste management begins with waste prevention and continues with waste sorting, producer accountability and waste charges based on the amount of waste disposed of the implementation variable of zero waste is community waste management and the lack of resources and government subsidies. Throughout the study, the perceptions, adaptation, and promotion about zero waste store as an eco-friendly and plastic-free environment. The researchers used a phenomenological qualitative research design, in which the researchers set aside both perceptions and biases to completely comprehend the respondents' perspectives and lives. The study was conducted using Google forms as the platform of the questionnaire. The participants of this study are five (5) sari-sari store owners residing around the area of Batangas City. Implementing Zero Waste Store can benefit the reduction of plastic pollution that occurs to our environment both inland and water. The zero-waste store must be implemented in different places to gradually reduce the usage of plastic and trash in our households.

INTRODUCTION

Nowadays, our country faces an evident problem which is the increasing amount of plastic waste in our environment. The misbehavior of individuals against waste management is one of the causes of these problems. In throwing their wastes, some individuals are irresponsible. They do not worry about the potential environmental and health-related issues that can affect their behavior. Plastics are not organic, and it is nearly impossible to decompose. These plastics are one of the common causes of flooding due to clogged drainages and pollution in our bodies of water. The global pace of waste generation is growing. In 2016, cities worldwide produced 2.01 billion tonnes of solid waste, amounting to 0.74 kilograms per person per day. Due to rapid population growth and urbanization, annual waste production is expected to increase by 70% from 2016 to 3.40 billion tonnes in 2050 (The World Bank, 2019). Zero Waste Store promotes a plastic-free environment to the customers where they bring their containers to refill

their food, cleaning supplies, and personal care. This also contains some reusable and zero-waste alternative that is suitable for household goods. The store also has containers that can be purchased by those customers who forgot to bring their own. The objective of the store is to reduce the trash from being disposed of in landfills and from being incinerated. A zero-waste store is not only eco-friendly, but it also offers a holistic, healthy lifestyle with local and organic merchandise. This idea is primarily to eliminate disposable plastics rather than promote the use of containers and reduce the trash in our own houses. Zero waste is a proactive and optimistic aim that encourages people to join the ranks of sustainable natural cycles, in which all wasted items are repurposed as tools for others. Zero waste refers to the practice of designing and managing goods and processes to limit the amount and toxicity of waste and materials, as well as recycling and recovering all resources rather than burning or burying them. In Lagerkvist and Dahlén's (2012) book "Solid Waste Generation and

Characterization". The creation of solid waste is inescapable by-product of all processes that involve the use of materials. Garbage is produced as a result of raw material extraction, product manufacturing, consumption, and waste disposal. The rate of material consumption today is so enormous, both in terms of overall volumes and as a per capita average, that it will have a global impact on environmental quality and human health if rubbish is not properly managed. Solid waste output was a fraction of what it is today a few centuries or even decades ago, with greater energy availability and, secondarily, population growth serving as the primary drivers. Waste production is also linked to urbanization and international trade. Archaeologists gather information about ancient times from the wastes that the oldest cities are built on. In a nutshell, zero waste is a concept, policy, and collection of resources to eliminate rather than manage waste. Any discharges to the soil, water, or air that could jeopardize the Earth's health, humans, animals, or plants would be eliminated. The impact of plastic waste on aquatic organisms, humans, and the environment as a whole is a subject of public concern, emphasizing the necessity of ecosystem preservation and the lives that rely on it. As per Abdel-Shafy and Mansour (2018), waste management incorporates a wide variety of methodologies, including engineering, humanities, sociology, and biology. The influence of a country's level of development on solid waste management preference is represented in its state of development. Many developing countries utilize different waste management techniques to derive renewable energy and other products, such as compost. These countries reinvest into waste recycling to benefit the agricultural sector. The method of solid waste management is guided by city leaders' initiatives and mechanisms related to the nature, quantity, and quality of locally generated waste. Even though plastics are incredibly beneficial in everyday life, the harmful chemicals used in their production must be considered to protect one's health and the environment. Increasing the possibility of a clean environment and a healthy society by reducing community exposure to dangerous compounds produced by plastic garbage. Environmental protection rules that assess plastics' production, use, and disposal must be enacted and enforced rapidly by government

agencies and health authorities. Several dangerous chemical elements used in the creation of plastics (e.g., phthalates, BPA, and others) should also be banned in consumer goods and plastic products that come into direct contact with food, beverages, and children (Alabi et. al., 2019).

According to Song et. al., (2014), with rapid economic change and advancement, a large amount of solid waste was produced, attracting global attention due to the possible environmental impacts and resource waste, such as improper disposal and transboundary movement of industrial waste, informal recycling of e-waste, food loss and greenhouse gas emission, resource consumption of excessing packaging. Today, we are confronted with more severe solid waste concerns than in the past, and addressing solid waste issues poses a huge threat for the entire world. The "Zero Waste" notion is an

An effective way to address solid waste issues. The goal of zero waste is to promote their design of resource life cycles so that all products can be reused. To fully understand zero waste, the usual zero waste practices were discussed in this paper. Now, many meaningful efforts are being made in cities, businesses, and individuals, which provide many great recommendations for us to achieve zero waste in the future. When integrated into business operations, the Zero Waste strategy provides an easy-to-understand stretch goal that can lead to innovative ways to identify, inhibit, and minimize waste of all kinds. It favors sustainability by saving the environment, lowering costs, and creating new jobs in the management and disposal of wastes back into the industrial cycle. Businesses, communities, industrial companies, schools, and homes can all benefit from a zero-waste strategy. Zero waste encompasses not just previously mentioned environmental and technological aspects, but also socio-economic and political aspects, with numerous stakeholders. All of these elements are interconnected and dynamic in nature.

According to Transparent Market Research, the key drivers for a global shift toward a plastic-free packaging market are (1) health concerns about food packaging harming human metabolism, (2) increased awareness of the problem of plastic pollution, and (3) policies and regulations that prohibit single-use plastics. More than 60 countries have passed legislation to limit the use of plastic

bags and Styrofoam goods at the source, with more to follow. Meanwhile, in 2017, the US states of Michigan, Arizona, Idaho, and Missouri approved legislation prohibiting the banning of single-use plastic items, including plastic packaging, “supposedly to safeguard the industry”. Despite this, the zero-waste movement continues to expand. This research attempts to provide a more environmentally friendly environment for humans to live in. The study's methodology also reduces the usage of plastics, which is one of the most significant sources of pollution in the environment.

METHODS

A phenomenological qualitative research design is used to meet the desired goal of gathering information from the respondents living in Batangas City about their insights on the Zero Waste Store. Lambert, V. A., & Lambert, C. E. (2012) stated that the data from this approach involves a well-structured descriptive summary of the informational contents arranged logically. It is based purely on the data from the sources of the study. Furthermore, the descriptive qualitative approach is also applicable for searching for information about the circumstances, who are the concerned citizen, what was the concerns, and where things happened. The data collection for this approach focuses on discovering the nature of the specific events that are under the study. This study also used the case study approach for the gathering of data procedures. As stated by Thomas (2011), that individuals, events, settlements, periods, projects, policies, organizations, or other systems were analyzed using one or more methods in a case study. Furthermore, a case can also be the cause and subject of an inquiry. In this study, the case is about the perception of people living in Batangas City on Zero Waste Store. Upon the conclusion of the interview, the researchers used a qualitative approach to gather the information necessary for the study. Convenience sampling, which was utilized in this study, is a method of sampling in which the first available primary data source is used for the study with no other criteria. In other words, this sampling process entails gathering participants anywhere they can be found, which is usually wherever it is convenient (Saunders et. al, 2012). The results from the conducted interviews through Google Form were used as acquired data for the

study. It was then critically analyzed and carefully interpreted for the study.

RESULTS AND DISCUSSION

The data profile of the respondents in terms of sex, age, and address are carefully gathered and analyzed by the researchers. The distribution of age according to their age was ranging from eighteen (18) to forty-six (46) years old. All the respondents live in the area of Batangas City which is the main location to put up the zero-waste store. The researchers use questionnaires to determine the properly needed information starting from the basic profile of the respondents. Based on the gathered information, the researchers identified that the number of female respondents is much higher than the number of male respondents. According to the data collected with regards to the age of the respondents, the researchers found that most of the respondents' ages fall between teenagers up to the middle-aged bracket. The majority of the findings were mostly in the age where they are mature enough to share thoughts based on their real-life experiences, making the data gathered more precise and accurate. On the other hand, the respondents come from different locations around Batangas City.

The respondents' answers vary, but the majority think it is possible to eliminate disposable containers in Batangas City through the Zero Waste Store. One of the respondents answered no and stated that the people of Batangas City only follow the rules if there is a punishment or penalty. In contrast, the other respondent answered that the government should also help the project in all aspects. According to the last respondent, “Not in the near future”, as the people of Batangas City are too dependable in using plastics that it is tough to change the habit. For the respondents who answered Yes, they are very optimistic that it is possible to eliminate disposable containers through the Zero Waste Store and stated that it is up to the citizens of Batangas City, if they will support this project, it is more likely to happen and be possible. Also, the respondents think that implementing the No Plastic Policy in Batangas City is a success and effective, so it is not impossible that the Zero Waste Store would be successful. Moreover, with regards to the question, “How would they get rid of the disposable wastes that are produced every day?” All the sari-

sari store owners answered that they will use reusable items like having their containers or eco bags for necessities. A journal entitled “The Concept of Waste and Waste Management” states that it is widely acknowledged that waste is a direct result of human interaction and activity.

Waste management is the process of collecting, transporting, and disposing of wastes in the most environmentally friendly way possible to limit or eliminate the harmful effects of wastes. This aspect of environmental management is just as essential as other public amenities or infrastructures that make modern man's life difficult. And since factors such as population growth and people banding together to form communities result in increased waste generation. Initiatives should be directed toward making long-term projections to ensure that existing and new settlements are achieving sustainability to accommodate any future increase in the volume of waste generation. Planning wisely ahead of time will successfully avoid indiscriminate disposal and other hazardous practices, reducing the accumulation of open dumps and breeding grounds for rats and other vermin, posing a health concern (Amasuomo & Baird, 2016).

The respondent's answers to the question “What are the pros and cons in implementing Zero Waste Store?” provides related views regarding the pros and cons the respondents think for implementing the Zero Waste Store in Batangas City. For the advantages, the respondents answer how the Zero Waste Store can lessen pollution and how it can positively affect climate change. One respondent mentioned that flooding can be caused by the clogged canals that can be resolved through this project. Solid waste generation can also be viewed as a source of opportunities, such as the creation of renewable energy, new jobs, new economic benefits, private investments, and increased public knowledge of environmental issues. In developing countries, where glass, metal, plastic, and paper have created markets, the informal sector plays a key role in recycling. Appropriate methods, such as increased public awareness, the enactment of particular laws and regulations, and the implementation of Solid Waste Management infrastructures, should be implemented to support these efforts (Ferronato, & Torretta, 2019).

All the respondents agreed that implementing Zero Waste Store is beneficial for them. Summing all the respondents' reasons, implementing Zero Waste Store will be beneficial for their health because this project will lessen the number of plastics and the pollution in our environment that eventually can create an environment-friendly living around Batangas City. The environment will be the primary beneficiary of the Zero Waste Store hence, the respondent thinks that it will be also beneficial to them because if the Zero Waste Store project has a good impact on the environment it will bounce back and give a good impact to the people as well. In addition, the question pertaining to the benefits of this project if it is implemented, the sari-sari store owners answered that they will benefit from it because it will change the usual habits which will also be beneficial to the environment, and it will teach the citizens of Batangas City to be more practical which is one way of reducing waste generation.

Many environmental issues, such as air pollution, land pollution, water pollution, and greenhouse gas emissions, can be greatly reduced. More technological advancements in this field are needed so that more waste can be recycled efficiently. More public awareness campaigns should be conducted by the government so that more people are aware of the benefits of effective trash management. Every household should begin with effective trash management. It can be done daily, resulting in significant waste reduction. Further, when asked about their opinion if it is a great idea to implement a zero-waste store in Batangas City, four (4) of the sari-sari store owners stated that if Zero Waste Store is implemented, they can rid of the disposables produced every day by bringing reusable containers/ tumblers during their everyday activities. Some of the respondents said that they would be supporting the store in their ways. The respondents stated that they would be more attentive and disciplined about what they buy in a store and how they would get rid of its waste. Most of the reasons of those respondents who agree are they see the implementation of the Zero Waste Store as a support to the Anti-Plastic Ordinance that the City of Batangas is implementing up to this day.

The respondents also agree that Zero Waste Store can indeed make a good change in the environment. Only one (1) of them thinks that it is

not a great idea for that respondent believes that being disciplined, generated wastes can already be controlled. Zero Waste is a good starting point in the current fight against climate change and environmental issues. It cannot instantly change the situation, but it does change people's perceptions and behaviors, which have a significant impact on the environment. If the Zero Waste lifestyle can be expanded and applied globally, the volume of waste produced will be drastically reduced. However, implementing Zero Waste in daily life will necessitate a significant amount of effort on the part of everyone (Tran, 2019).

Additionally, when asked if there would be a change in the number and size of the trash before and after this project is implemented, the sari-sari store owners all agreed that there would be a change in the amount of wastes if this project will be implemented because most of the time people tend to dispose of plastics – so this project could have a remarkable success if promoted most conventionally. According to Mamady (2016), waste indiscriminate dumping is regarded as a problem. It is a significant source of pollution in the environment and has been linked to health issues. In Guinea's capital region (Conakry), the proper management and recycling of residential waste is a serious concern. Mamady also noticed that the neighborhood's people are lacked waste management abilities and behaved in an unhealthy manner. As a result, increasing environmental awareness and public education, as well as implementing community action programs for illness prevention and health promotion, will improve the community's environmental friendliness and safety.

If this will be implemented in different stores in Batangas City, it would be a great help to restore the beauty of Mother Earth that needs the care of the people for a healthy living. Also, the neighboring cities or places will adopt this until all people will put this into practice. The future generation will surely enjoy living on this planet Earth for it is not harmed or damaged by their ancestors.

CONCLUSION

The locals will support Zero-waste stores, therefore, building such stores in Batangas will successfully reduce waste products in the city. Zero-

waste grocery stores are one way to substantially cut down on single-use plastic packaging, bags, and other throwaway products like straws. This new, old shopping experience is now on the rise and attempting to scale. It requires the involvement of all parties in implementing the concept of Zero Waste, ranging from private parties, communities, and governments. Zero waste is one of the quickest, simplest, and most cost-effective methods for our local communities to make a difference in creating a more sustainable, resilient, and prosperous world for future generations. The researchers concluded that a Sustainable Earth would have to go beyond plastic recycling and the policymakers should examine zero-waste stores as a short- and long-term solution to the global problem of plastic waste.

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