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PoliSave the Earth: The Marikina and Quezon City Youth's Engagement in the Zero Waste Movement

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POLISAVE THE EARTH:
THE MARIKINA AND QUEZON CITY YOUTH'S ENGAGEMENT WITH THE
ZERO WASTE MOVEMENT

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DEDICATION

To Mother Earth

ABSTRACT

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The government plays an integral role in responding to natural and human disasters. Guided by Stuart Hall's Encoding/Decoding Model of Communication, this study compared how Quezon City and Marikina City communicate and implement their environmental policies to their residents, and how the residents, in turn, receive and understand the message. The Zero Waste Movement emerged at the time where people were becoming more conscious about the hazardous effects of garbage to the environment which aims to reduce or to eliminate waste through subtly changing one's lifestyle. Hence, guided by the Social Ecological Model, this study also examined the environmental facilitators and barriers of the youth in their engagement in the movement through gathering insights and experiences from 18 youth informants.

The study discovered that most of the youth living a zero waste lifestyle were majorly motivated by their environmental facilitators in starting and continuing their zero waste journey regardless of the existence and implementation of environmental policies in their cities. However, informants who were residents of Marikina were heavily influenced by their city's implemented ordinances and programs related to waste management and plastic use. Moreover, the study found that having well-implemented and properly disseminated policies may be a key factor in an individual's likelihood of living a zero waste lifestyle.

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CHAPTER I. INTRODUCTION

A. Background of the Study

1. The Philippines' Environmental Condition

The Philippines is considered as one of the most disaster-prone countries all over the world. Based on the study conducted by the United Nations Office for Disaster Risk Reduction (UNISDR) and the Centre on the Epidemiology of Disasters (CRED) entitled “The Human Cost of Weather Related Disasters,” the Philippines is among the top 10 countries with the most number of people affected by natural disasters. The study also reported that 4 in 10 deaths are caused by storms, which affected a total of 2.3 billion people from 1995 to 2015, making floods as the top cause of disaster casualties in the country (Wallemacq, 2015).

Moreover, the world is experiencing a long list of environmental problems caused by both natural means and by humans. The Philippines is feeling the effect of global warming from strong typhoons, heavy flooding, drought, and landslides. Datukon (2016) enumerated the top five environmental problems the country is facing— pollution, global warming due to emission of greenhouse gases, overpopulation, natural resources depletion, and waste disposal. Out of the five problems, improper waste disposal entwines with the others, adding more harm than ever.

With the recent events of flooding in the Philippines caused by heavy rains the citizens and the government are on the lookout for a solution to the flooding problem. Some of the major culprits for flooding in Metro Manila are rapid industrialization and irresponsible waste disposal in waterways, such as canals and rivers (Chavez, 2018).

Improper waste disposal causes air, land, and water pollution which may then lead to the death of plants and animals, while also taking a toll on the health of people, especially those living near garbage dump sites. Unsegregated trash including plastic and toxic materials may clog and block waterways and canals which can have the tendency to cause flash floods (Datukon, 2016).

According to Ocean Conservancy and McKinsey Center for Business and Environment in 2015, the Philippines is the world's third largest contributor of plastic waste in the ocean which, in turn, "chokes" waterways that worsens the country's environmental problems. Surigao del Norte Rep. Robert Ace Barbers added that the Filipinos' "coordinated action" in the form of waste segregation and recycling can help alleviate the effect of plastic waste pollution on the environment (Porcalla, 2018).

Various control efforts have been done in order to lessen flooding. In Quezon City, 17 city-funded waterway infrastructure projects including the de-clogging of waterways and the improvement of drainage systems have been completed. Other cities are starting to follow suit (Chavez, 2018). Furthermore, purchasing products with less packaging and ditching plastics are both necessary habits that will help avoid clogging waterways, dumping in landfills, and affecting marine life, especially since plastic takes millions of years to decompose. An individual may already be dead for millions of years, but a candy wrapper someone threw will still be in the soil ("What is sustainable living?", n.d.).

Trash has been a part of the city's landscape, especially in Metro Manila. This is evident in the current state of Manila Bay and other rivers and waterways all over the metro— trash strewn all over the side of the bay, and the air in neighboring areas filled

with its stench. While several measures to rehabilitate the different waterways around the city such as cleanups have been done, polluted waterways still remain a problem in Metro Manila and continues to pose a threat to the health of Filipinos, especially those who live along the waterways or swim in them (Jazul, 2018).

2. The Government's Response to Environmental Concerns

Steps have been taken in trying to regulate the waste problem that the country is facing. One of which is Republic Act 9003, also known as the Ecological Solid Waste Management Act of 2000, which ensures the “protection of the public health and environment” and ensures “the proper segregation, collection, transport, storage, treatment, and disposal of solid waste.” The act comprehensively discussed the policies, terms, institutional mechanism, board, provisions, and concrete actions in relation to the protection and implementation of the solid waste management act. More than the given emphasis on the role of the local governing unit (LGU), it also created the National Solid Waste Management Commission represented by 14 members from the government sector and three members from the private sector to approve or review waste management plans in LGUs according to the rules and regulations (“Republic Act 9003”, 2001).

Waste management solutions and pro-environment actions have also been done individually by various cities. One of the cities that has done great efforts geared towards the protection, conservation, and rehabilitation of the environment is Marikina City, which is popularly known for its residents' discipline on waste management, among others. The local government has numerous ordinances on maintaining the city's

public places and ensuring that they are clean and livable. Some of which includes the prohibition of improper disposal and burning of garbage, the Anti-Littering Code that charges violators with 500-peso fine, the required segregation of wet and dry waste, and the required annual waste management seminar for all business establishments in Marikina prior to getting a business license (“City Environmental Management Office”, n.d.).

Aside from the strict implementation on proper waste disposal, the city created programs in congruence with their vision of being “clean and welcoming” through the Eco-savers program (started in 2004; aims to educate the children about the three R’s), the *Balik-Bateria* program, the centralized facility for sorting recyclable materials and non-recyclable waste, and the food waste truck (collection of food waste from restaurants and *carinderias* then turning them into fertilizer). Recently, in 2018, Mayor Marcy Teodoro spiced up the recycling program by turning used cooking oil, styrofoam, and plastic into decorative bricks that can be used for pavements and benches. Lastly, during the All Saints’ and All Souls’ day, people were expected to fill the cemetery with decayed flowers, melted candle wax, and trash. In order to maintain cleanliness, volunteers were asked to collect trash for ten days in exchange of allowance. However, even with the presence of cleaners, testimonies proved that the residents themselves were proactive in segregating and throwing their trash properly (“City Environmental Management Office”, n.d.; Mangunay, 2012; Ranada, 2015; Lalu, 2018; “From Trash to Bricks, Marikina Recycles as Part of Waste Management Program”, 2018).

On the other hand, Quezon City– the most populous city in Metro Manila, was reported to be the biggest producer of waste, followed by Manila and Caloocan. However, Ares Gutierrez, chief of QC’s public affairs office, stated that “Quezon City has an efficient waste management system” (par. 10) despite the statistics (Badilla, 2017). This surfaces the issue of strict implementation of ordinances as well as the residents’ participation and compliance with the ordinances. Although the city enforced some ordinances on proper waste management similar to Marikina, there have been cases of negligence and oversight in the regulation of waste. In 2014, the centralized system of garbage collection in Quezon City wasted 250 million pesos worth of taxpayers’ money to private sectors who would collect trash, but ended up disposing waste in the landfills in Payatas. The local unit failed to decentralize garbage collection and disposal where recyclables are separated from compostable and residual, which can be further used in recycling and as fertilizers (Ranada, 2014).

3. The Rise of Online Social Movements

Concerned groups and individuals have taken these environmental problems to social media in order to appeal to the general public. Social media is widely known as a way to communicate and connect with peers, interact with a myriad of online content, and disseminate information rapidly. The platforms made it possible to spread awareness about a certain issue and engage stakeholders to participate and support it (Guo & Saxton, 2012). In the Philippines alone, major social networking sites such as Facebook, Twitter, and Instagram are being utilized beyond sharing personal content,

which includes spreading news and information, and even furthering an advocacy or movement.

Two prime examples of recent online movements in the Philippines are #BoycottJollibee and #BoycottNutriAsia, which are two popular hashtags created by Filipino netizens. The said hashtags are both seen on Facebook and Twitter as a way to support the workers' plight against their employers' violation of their labor rights (Rey & Bautista, 2018). The continuous posting, tweeting and sharing of posts related to the issue caused a stir, which resulted to encouraging Filipinos to 'boycott' the products manufactured by the aforementioned companies in solidarity with the laborers. The purpose of the call to action was in hopes to pressure the companies to rethink its labor policies.

Without the presence of online means to forward the workers' plight for justice and urging Filipinos to make a stand, they would not be widely recognized, and their stories would not be heard. Traditional media can only cover a portion of the story which goes through different frames identified to be 'newsworthy.' Social media has become this free extension of information, stories, and sentiments compared to other limited means of communication. It is also able to amplify a movement and give it a voice that can reach millions of people online, allowing more individuals to become aware of its existence and its beliefs.

The aforementioned movements have proven the power of social media in effectively forwarding an advocacy. Hence, in direct response to the environmental issues the whole world is currently facing, an online movement has been created to

spread awareness and encourage others to make small changes in their everyday lives in order to help alleviate such environmental concerns.

The Zero Waste Movement, pioneered by Bea Johnson, is a movement that focuses on reducing waste production through subtle changes in one's lifestyle, which includes composting, recycling, and using sustainable products (Bacamas, 2017). This movement has been recently gaining traction as millennials have been reported to demand corporate social responsibility and advocate for ethical consumerism (Bailey, 2018; "Millennial movements that are shaping the future of ethical consumerism", 2018). Moreover, 73% of millennials are said to be more willing to spend more on a product that comes from a brand that is sustainable ("The sustainability imperative", 2015). Living a sustainable lifestyle is "reducing [one's] demand on natural resources by making sure that [he or she] replace what [he or she] use to the best of [his or her] ability." This means that an individual should continuously use products to its full potential and refuse to use single-use products such as Styrofoam, plastic utensils, straws, among others. This also reduces carbon footprint or environmental impact every person contributes through the alteration of their lifestyle. It is not limited to using reusable bags and purchasing sustainable products, as simple measures such as taking public transportation instead of using private cars and reducing energy consumption in the house by turning off the lights can already be of great help ("What is sustainable living?", n.d.).

However, social media efforts are not enough to solve the country's waste problem. There is a need for national and local regulations concerning waste management. In terms of public policies, the Zero Waste Movement is slowly being

adopted by Filipinos, as evident in the legislative efforts to ban single-use plastic (Senate Bill No. 2759) and single-use plastic straws (Senate Bill No. 1866) in all establishments in the country (Salaverria, 2018; “Bill seeks nationwide ban on plastic straws, stirrers”, 2018). Some groceries, restaurants, and shops in the country have banned the use of plastic bags and single-use plastic straws and encourage consumers to bring their own eco-bags and utensils to cut down waste production. The number of stores that sell sustainable products such as reusable utensils, organic hygiene products, and recyclable clothing are on the rise.

The utilization of technology and social media in social movements does not necessarily mean that social movements that have an online presence are more powerful than those that do not, as movements “adopt tools that amplify their capabilities and modify their tools to improve that amplification.” In addition, “revolution does not happen when society adopts new technologies – it happens when society adopts new behaviors” (Shirky, 2008, p. 160). All of the abovementioned factors are codependent and interrelated, as a social movement will thrive best when given structural support and is also amplified through social media, which will then increase the likelihood of individuals supporting the movement.

It is important to note that structural factors, such as the aforementioned public policies, are integral in the mechanism of social movements, whether it be an online or offline movement. Various resources need to be mobilized in order to support a movement and to fuel its plight in forwarding an advocacy; this includes, but is not limited to, the media, financial support, societal support, allocation of resources, policy support in some contexts, among others (McCarthy & Zald, 1977). Consequently, the

burden of change in an individual's behavior relies on these variables and the level of support that the structure is able to provide should an individual decide to participate in the movement. While a small change may create a ripple that can make a big difference, there is a need for the structure to support what the movement calls for, as this makes the process more accessible to those who would like to participate in such movements. Moreover, it is highly integral for Filipinos, citizens and companies alike, to comply with regulations concerning waste management in order to fully make a change in the country's current waste landscape.

As such, it is integral to explore how the structure is able to support the mechanism of movements such as the Zero Waste Movement, and how the environment of an individual contributes to his or her engagement with the movements. How each component that comprises the ecology in a given community acts as a mobilizing structure for movements, as well as how implemented policies contribute to an individual's lifestyle is a phenomenon that requires a deeper understanding, and is a gap worth discovering.

B. Statement of the Problem and Research Objectives

With the rise of environmental problems in the Philippines, specifically in the waste management and plastic use in Metro Manila, there is a need to understand how environmental policies such as those related to waste management and plastic use are being communicated and received by the citizens under the jurisdiction of their respective cities. Moreover, how the implementation of such policies and the social ecology of an individual contribute to their participation in the Zero Waste Movement

was also worth exploring in order to discover how the two are connected. Thus, this study aimed to answer the question:

How do Marikina and Quezon City communicate their local policies and ordinances on waste management and plastic use to their local communities?

How do these local policies and ordinances, along with the youth's ecological factors, contribute to the Marikina and Quezon City youth's meaning making and engagement in the Zero Waste Movement?

The general objective of this study is to explore how ordinances, projects, and programs of Quezon City and Marikina concerning waste management and plastic use, along with the youth's environmental facilitators and barriers, contribute to the youth's meaning making and engagement in the Zero Waste Movement. This was achieved through fulfilling the following specific objectives:

Specific Objectives:

1. To gather and compare the policies and ordinances of Quezon City and Marikina on waste management and plastic use
2. To determine the online and offline encoding methods of Quezon City and Marikina in communicating their policies and ordinances to their respective local communities
3. To discover the environmental facilitators and impediment barriers on Marikina and Quezon City youth's participation in the Zero Waste Movement in the following levels:
 - a. Individual

- b. Interpersonal
 - c. Organizational
 - d. Community
 - e. Public Policy
4. To understand how the youth decode the policies and ordinances communicated by Quezon City and Marikina City, and how they translate these messages in their engagement with the Zero Waste Management and;
 5. To analyze the link between having rich local environmental policies and ordinances and the Marikina and Quezon City youth's online and offline engagement with the Zero Waste Movement

C. Significance of the Study

This research aimed to understand how the local government units in the Philippines enforce the law on ecological solid waste management and communicate ordinances and local policies established to their communities. The researchers felt the need to delve on this topic because although there are national and local laws on ESWM, Filipinos still suffer from floods, weak sewage system, and pollution which can be traced back from improper waste disposal. The biggest concern that the researchers observed is that there are numerous existing policies on waste management, however, the communities are not aware of any information and knowledgeable of concrete actions to take.

Additionally, this study aimed to shed light on the importance of having a strong connection within members of a community given that it amplifies the significance of one's role of contributing to the community and aids in developing one's sense of

personal and social responsibility (Lagunzad, 2008). Thus, through highlighting the power of community-based coordination, the researchers wish to pave the way to building better communication strategies between local government units and their respective communities, especially in the context of communicating policies.

This research is in direct response to the world's environmental problems, specifically in the Philippines. The researchers found it necessary to focus on waste management and the impact of single-use plastic especially since the country has been experiencing heavy rains and flooding due to the weak sewage system and severe water waste. Until now, Pasig River and Manila Bay is polluted with different kinds of waste, 70% of which come from households ("Manila Bay", n.d.). According to a country report on climate change by Ocampo (n.d.), participatory communication is one of the suggested actions to be undertaken to address environmental problems, specifically by engaging different members of the community – may it be the youth, schools, businesses, and the Church. Thus, social media, being a powerful platform, can be utilized in spreading awareness, disseminating information, and promoting various ways to alleviate the country's waste problem; one of which is through participating in the Zero Waste Movement.

Aside from the potential contribution of LGUs' policies and ordinances on waste management and plastic use, the researchers added that it is also possible that the local laws have nothing to do with the engagement of the individual in the Zero Waste Movement. Thus, the research also looked into the environmental motivations of the individual that would push them to a more environmentally-friendly lifestyle. By knowing these motivations, the government, social groups, or non-government

organizations can devise a communication strategy to further their advocacies for the environment.

Aside from being instrumental to the practical application of communicating environmental problems, the study wanted to contribute knowledge in the development of the theories to be used, specifically the Encoding/Decoding Model of Communication and the Social Ecological Model, especially in the Philippine context. The research also aimed to further understand Marikina and Quezon City youth and the environmental factors and barriers that may engage them in pro-environmental movements or movements in general because the youth is comprised of students up until the young professionals which the researchers believe will be the future leaders for the generations to come.

CHAPTER II. REVIEW OF RELATED LITERATURE

This section synthesized environmental communication, public policy, the role of social media in forwarding movements and advocacies, the different determinants and factors in one's pro-environmental attitudes and behaviors, and the increasing importance of youth for social change.

A. Environmental Communication

Klößner (2015) addresses the importance of environmental communication as an indispensable part of environmental strategies which will be necessary to tackle problems in the society. He noted that environmental communication should be placed in the context of engineering, economics, sociology, governance, and psychology to act as the binding element in all of the approaches to effectively change people's behavior.

Aside from the usual definition of environmental communication as information or a "talk" on environmental topics, it was further defined to serve two functions: pragmatic and constitutive. Pragmatic communication informs, demands, educates, alerts, and persuades environmental issues, whereas constitutive communication shape, orient, and negotiate meaning, values, and relationships. It does not only describe what people know, but also define and identify the environmental topic as a "problem" which constitutes an entire attitude (Cox & Pezzullo, 2015).

People use verbal and non-verbal communication to reflect their attitudes about the environment which are shaped by environmental communication practices every day from one's peers, family, leaders, religious groups, and more. Furthermore, one's understanding and actions do not only depend on information and technology, but also through how mediated communication shape our environmental values, choices, and

actions in news, social networking sites (SNS), popular culture, and everyday conversations (Cox & Pezzullo, 2015). The authors argued that “at a basic level, our beliefs, attitudes, and behaviors toward the environment are shaped by human ways of communicating” (p. 20).

Greaves, Zibarras & Stride (2013) presented a research to explore intentions to improve environmental behaviors in a workplace setting using the Theory of Planned Behavior. Their rationale on choosing the behavior of employees is that several studies on environmental behavior focused on the domestic sector. However, the authors took note that the motivations at home and at work are different. For instance, members of the family are conscious with their daily energy consumption because it reflects on their monthly bill, whereas employees do not need to take care about it, but the company may be more concerned with utilizing video-conferencing for meetings instead of organizing travel order and expenses.

B. Communication and Public Policy

According to Peterson (2008), the importance of communication on public policy was not unique or new. In fact, Young (2000) considered that communicating policies to the citizens was a way to test the “legitimacy and success” (p. 1) of democracy. To inform and educate the people about the problems in society, the laws to follow, and everything in between is an essential part in communicating public policy (as cited in Peterson, 2008).

More than drafting “good” policies that may cover all aspects and situations in a given context, it remains useless without proper implementation and communication to

its constituents. Determining the right stakeholders and audience should be first and foremost be considered for effective communication. One must take note the aspects needed for it, which includes: tone of the message, channels to be used, and the right timing. The tone of the message should depend who will be receiving it; know how knowledgeable the audience is with your policy, and know how your audience would want the communicator to get his or her message across. Next, for an efficient distribution of the message, channels or the medium to be used should have been identified. Does majority of the target audience literate enough with the use of social media? The internet? Or would they be more reached through the use of traditional forms of media (television, radio, newspaper, pamphlets)? Or would it be more convenient for them to through meetings or public forums? Lastly, the communicator should be able to timeline when the policy or law be communicated to the public. One has to determine the policy's urgency and importance to plot when it needs to be laid out ("Implement and Communicate Policy, 2018).

C. Factors that Influence Pro-environmental Behavior

1. Individual factors

Social scientists have deduced that attitude has a significant influence on one's behavior. However, according to a survey of community attitudes to the environment, a great majority of Hong Kong high school students believed that "individuals have a responsibility to protect the environment" (p. 298), but less than half of these respondents were reported to have done concrete pro-environmental actions, such as recycling and avoiding the use of plastic bags. The results of the survey demonstrated a

disparity between the respondents' attitudes and their actual behavior (Environmental Campaign Committee, 1993, as cited in Chan, 1996).

Other variables are said to influence one's pro-environmental behavior. In order to identify what variables motivate one's pro-environmental behavior, Hines, Hungerford and Tomera (1987) conducted a meta-analysis of 128 pro-environmental behavior studies was conducted. It was discovered that the following variables are said to be associated with pro-environmental behavior: knowledge of issues, in which an individual must be aware of an environmental concern; knowledge of action strategies, in which an individual must know what actions he or she must take in order to alleviate such environmental concerns; locus of control, which represents an individual's perception on whether or not his or her action will bring about significant change. Individuals with a strong internal locus of control believe that their actions will bring change, whereas individuals with external locus of control perceive that their actions are insignificant and only powerful individuals are capable of bringing about change; attitudes, in which individuals with a predisposed pro-environmental attitudes are more likely to demonstrate pro-environmental behavior; verbal commitment, in which an individual's expression of their willingness to take action is associated with their likelihood of taking pro-environmental action; and lastly, individual sense of responsibility, in which an individual with a great sense of responsibility is said to be more likely to engage in pro-environmental behavior. All these variables are what comprises the Model of Responsible Environmental Behavior, which was also based on Ajzen and Fishbein's Theory of Planned Behavior. However, the said model is still

lacking in situational factors thus, is said to be inadequate in explaining an individual's pro-environmental behavior (Hines, Hungerford & Tomera, 1987).

Kollmuss and Agyeman (2002) delved further into investigating variables that influence one's pro-environmental behavior through reviewing various literature and frameworks. Gender and years of education are said to be demographic determinants of pro-environment behavior. Women are said to be more "emotionally engaged" (p. 248) and demonstrate greater concern on environmental problems than men (Fliegenschnee & Schelakovsky, 1998; Lehmann, 1999, as cited in Kollmuss & Agyeman, 2002; Holbert, 2003).

Furthermore, Kollmuss and Agyeman also expounded on the external factors that influence pro-environmental behavior. One of which are institutional factors, which posits that there is a strong need to provide the necessary infrastructure such as public transportation and recycling plants in order to facilitate pro-environmental behavior. The lack thereof may be a barrier for individuals to demonstrate their pro-environmental behavior. Next, economic factors are said to have a strong influence on one's pro-environmental behaviors, and economic incentives such as discounts are great motivators for purchasing eco-friendly products. Lastly, cultural norms are critical in shaping one's behavior.

Values are crucial in shaping one's inherent behavioral motivations. The microsystem, which is comprised of an individual's immediate social network such as family, neighbors, and peers, is what strongly influences one's values. The exosystem, which includes the media and organizations, influences one's values at a lesser extent, whereas the macrosystem which includes the cultural context the individual belongs to

minimally influences one's values (Fuhrer, 1995, as cited in Kollmuss & Agyeman, 2002).

Environmental awareness is defined as "knowing of the impact of human behavior on the environment" (p. 253), which is said to have cognitive and emotional limitations. This includes the lack of immediate environmental impact that can be perceived and witnessed by any individual, given that most environmental concerns such as the depletion of the ozone layer does not demonstrate a noticeable or drastic change in the world. The complexity of some environmental concerns also becomes a barrier in further understanding the situation better (Preuss, 1991, as cited in Kollmuss & Agyeman, 2002).

Having an emotional connection with the environment is also a facilitator for an individual's environmental concern. The greater an individual reacts emotionally to environmental degradation, the more likely he or she will behave pro-environmentally. However, one's lack of awareness, apathy, and denial may hinder one's willingness to perform pro-environmental activities (Grob, 1995). Furthermore, those who are more emotionally involved in environmental concerns are more willing to pay higher prices for renewable energy than those who expressed less concern for the environment (Bang, Ellinger, Hadjimarcou & Traichal, 2000).

2. Interpersonal factors

Family and peers may also influence an individual's pro-environmental behavior. A study conducted by Palmer, Suggate, Robottom, and Hart (1999) reported that one's parents significantly influence one's development of environmental

awareness through shared experiences during the early years of childhood.

Furthermore, close friends and family were regarded by the respondents as one of the most significant influencers of their pro-environmental behavior. Shared experiences, especially childhood experiences, help shape one's pro-environmental behavior. One respondent attributed his love for the environment to his father, as he explained that he "certainly credit[s] [his] father with [his] love of the outdoors. He was an amateur naturalist and shared his enjoyment in learning about the environment" (p.195).

Another respondent shared that "[his] father, uncle and [him] spent most of [their] time at home fishing, snowshoeing and hiking. This is when [he] cemented [his] love for the outdoors and [his] personal commitment to the environment (p. 192)." Family members who taught individuals the importance of caring for the environment is also the leading sources of one's environmental commitment (Chawla, 1999). Thus, it is essential for parents to serve as role models and educate their children through shared experiences in order to positively influence their child's pro-environmental behavior.

Moreover, one's close peers are likely to influence their pro-environmental behavior, especially among adolescents. Adolescents are said to be more likely to follow their social circle's environmental norms in order to gain the approval of their peers (Lee, 2010). Social norms were reported as one of the factors that greatly influence one's environmental-friendly consumer behavior, which in turn, contributes to one's internalized personal norms (Minton & Rose, 1997). According to Ajzen and Fishbein (1980), one's closest peers have the power to cultivate, suggest, circulate, and reinforce a pro-environmental behavior such as involvement in local environmental

projects, thus, one's peers may act as a great factor in the construction of one's environmental behavior.

In line with this finding, Lee's study on young Hong Kong "green" consumer behavior reported that peer influence has the most significant influence on adolescents' green purchase behavior, which implies that one's peers may affect their purchase behavior both directly and indirectly (Lee, 2010). Peers may also influence an individual through inviting them in an environmental organization that they are a part of, as shared by some informants when asked about the sources of their environmental commitment (Chawla, 1999).

3. Community factors

a. Education

Education is integral in developing one's environmental knowledge. This includes knowledge on environmental issues and concerns that need to be addressed, as well as the ways to help alleviate the said issues. It is said to "fuel the three great engines of environmental knowledge" (p. 205) which comprise of environmental awareness, environmental understanding, and environmental skills (Chapman & Sharma, 2001).

It is critical to start environmental education based on personal experiences during the onset of a child's learning years since these experiences are integral in molding the child's attitudes, values, and behavior toward the environment in the long run (Tilbury, 1994; Palmer, Suggate, Robottom, & Hart, 1999). One of the best ways to educate children regarding the environment is through regularly immersing and

exposing them in outdoor environments, such as parks and backyards, given that children learn best through direct and concrete experiences. Teachers are said to play a critical role in educating children, thus, being a role model through demonstrating care for the environment will have a bigger impact on learning than telling them about it (Wilson, 1996; Palmer, Suggate, Robottom, & Hart, 1999).

Community-based learning is one of the pedagogical approaches that immerses students in the real world and enables them to learn and gain relatable experiences beyond their classrooms. According to a study conducted by Dalida, Malto, and Lagunzad (2018) which examined how community-based learning influenced Manila senior high school students' environmental knowledge and attitudes, a community-based learning approach has a positive impact on students' knowledge on the environment. Furthermore, community-based activities serve as a venue for students to implement concrete actions that will help address environmental concerns present in their own community. Having a strong connection with their community amplifies the significance of their role of contributing to the community, which in turn, develops their sense of personal and social responsibility.

b. Media

Various studies revolving around media effects reported that exposure to media content regarding the environment may have a positive influence on one's environmental concerns. Media has the power to set what environmental agenda should be gain everyone's attention through disseminating issues that the audience should think about (Holbert, Kwak, & Shah, 2003).

The framing of media content can also affect one's pro-environmental behavior. Frames are "interpretative storylines" (p. 15) used in communicating media content and, more often than not, condition the audience on what they should think about. These are present in news and public affairs, which may directly affect how the audience perceive the information that they consume. Framing influences the audience's perception and feelings on climate change, which in turn, affects how they decide to respond to an environmental concern (Nisbet, 2009). For instance, thematic news framing (providing general trends) of media content related to the climate change increases the audience's likelihood of supporting government policies that address the environmental concern, as compared to episodic news framing (case study). While both types of framing have no direct impact on one's behavior change, it is important to know that thematic framing of media content may increase one's policy support as a result of attributing the environmental responsibility to the government (Hart, 2010). Fact-based media content such as public affairs and nature documentaries were also reported to have a strong, positive influence on one's pro-environmental behavior compared to fictional-based media content (Holbert, Kwak, & Shah, 2003). Furthermore, television news, despite its over dramatization, still has a positive impact on one's desire to engage in pro-environmental behavior such as recycling, conserving energy, and purchasing eco-friendly products (Hart, 2010).

D. Utilization of Social Media for Advocacies and Movements

Social media sites, like Facebook and Twitter has boosted nonprofits' organizations for effective stakeholder communication. The technology has "provided a

way to expand advocacy efforts” (p. 2) through networks of community actors and using networks to act. Guo & Saxton (2013) mentioned that emerging literature saw how these advocacy groups have been utilizing social media or *whether* they are using social media to forward a message. However, researchers have not delved into the “*how* they use them” (p. 2). For the authors, it is imperative to also look into the core dynamic feature of social media sites for it has been “increasingly relevant tool for political and advocacy campaigns” (p. 4).

Social media’s characteristics such as interactive, decentralized, and low cost makes it very beneficial for organizations in engaging supporters, developing healthy communication to large audiences, and giving light to issues that are ignored or are not given importance by traditional media (Bortree & Seltzer, 2009; Lovejoy, Waters, & Saxton, 2012, as cited in Guo & Saxton, 2013).

As Guo & Saxton (2013) pointed out the need for message level analyses of nonprofit organizations’ social media accounts, they have adapted Lovejoy & Saxton’s (2012) three communicative functions in tweets, namely *information, community and action*, which was employed in the quantitative content analysis of tweets sent by 100 largest nonprofit organizations in the United States. Results showed that the content of most tweets was disseminating information to stakeholders, rather than tweets that build community and call for action from the audience. The study recommends that future research is needed to examine the “interaction of organizations’ offline and online advocacy efforts.” (p. 19).

Web 2.0 and the boom of social networking sites (SNS) had increasing opportunities to the interaction and direct communication between political actors, voters,

and journalists, forcing parties and politicians to broaden their communication tools and campaign strategies. (John, 2013; Blumler, 2013, as cited in Štětka, Lilleker, Tenscher & Jalali, 2014). Štětka et. al., (2014) investigated the perceived importance of traditional media platform versus the new media in election campaigns. Despite the cost-cutting and wider reach through online campaigns, the use of traditional media still remains dominant for campaigns as the primary source of information for the general public. Moreover, the authors noted that new media is used by parties as an additional platform to traditional media rather than it being a complete substitute. Literature reveals election campaign strategies now gear towards “hypermedia” campaign style integrating both old and new communication platforms. Thus, authors saw how “social media communication is now a serious rival for traditional news management and activities” (p. 21) where future campaigns should seek towards a more interactive and social communication.

Arguably, social media had been a free platform to give voice to unheard problems and issues individuals find necessary. This prompted “new studies to look at social media as a tool in shaping social movements’ agendas and aiding collective action both online and offline at the local or global level” (p. 2) (Lopes, 2014). Multiple studies emphasizes how social media enables individuals and organizations to forward an advocacy or movement with little to no cost, while having the whole world to bear witness (Štětka, 2014; Guo & Saxton, 2013; Lopes, 2014).

Furthermore, Lopes (2014) tested the relationship of social media to social movements using three models: Facebook, with Internet penetration, and with life expectancy and GDP. The study sought to find out how social media has been used as an alternative tool to recruit and call for collective action. Results imply that although the

Facebook model does not show a relationship with protests, the Internet penetration revealed that social media was statistically significant predictor of protest activity.

E. Clicktivism and Social Movements

Clicktivism is broadly defined as a derogatory term when compared to the traditional form of social movement and political activity. The term was employed to denote “the simplification of online participatory processes: online petitions, content sharing, and social buttons” (p. 115) (e.g. Facebook’s “like” button). It is even considered to be a “feel good and ‘easy’ activism” and is further defined as a “lazy or overly convenient alternative to the effort and legitimacy of traditional engagement” (p. 116). Despite being ill-defined and not identified as a specific form of online action, the study by Halupka (2014) tried to use heuristics in exploring clicktivism as a reality in online social movements. The author found it necessary that before being set with the normative derogatory meaning of clicktivism, the act itself must be understood, for it enables a low-cost and low-risk activity in social media that raises awareness on a movement. Some common examples of clicktivism include using a social button, creating memes, and changing profile pictures. These acts are driven by a “desire for instant gratification and self satisfaction” (p. 116) which individuals perceive as a legitimate way of protest without the need of actually engaging and participating in the movement (Morozov, 2009; Lee & Hsieh, 2013, as cited in Halupka, 2014).

Sibbersen (2012) argued online petitions have accomplished more only in a couple of days or weeks compared to months or even years through traditional means. This is in contrast with the previous paragraph on the impact an online petition can do.

On the side of the individual, it may be out of self-gratification; but looking at the larger picture, it has created a greater purpose. The same author stressed out how technology was able to “connect, organize, and mobilize without the physical co-presence” (p. 1) of the individuals. Traditionally, participation in social movements identifies a person as an activist. Today, general citizens who need not identify themselves as activists can participate in any social movement. The use of traditional means and technology in mobilizing advocacies cannot be segregated from each other. From the distribution of print materials, the use of electric megaphones, and the use of VHS recorder tapes, social activists have been utilizing the available technology to further spread their goals. It just so happened that through the Internet, the means of social movement is so advanced that it created a whole new phenomenon in online activism.

F. Youth and Movements

As digital natives, the youth is able to comprehend old ideologies and philosophies and is literate with the use of smart technology and the Internet. Their knowledge and skills imply that they will be able to understand online social movements because they are part of the system. A few scrolls on their phones already give them access to the existing movements that have long started.

The youth is categorized differently in all parts of the world; some define them to be between 15 to 39 years old, while other African countries consider the youth to be as young as 12 to 30 years of age. For statistical purposes, the UN identifies the youth as individuals between 15 to 24 years old (Idike & Eme, 2015). In the Philippines, the National Youth Commission states that citizens between 15 to 30 years of age are

considered to be part of the youth (Republic Act 8044, n.d.). Idike & Eme (2015) considered the youth to be the engine of growth and development because they are and will be the labor force for the production of goods and service. Besides being at the forefront in the economic development and socio-political attainments, they outnumber the middle-aged and the senior citizens. The youth have energies and ideas that can potentially be better for the nation. Even the National Youths Policy affirms that the youth's responsible roles in society is positively correlated to the development of the country, which their importance cannot be overemphasized.

However, Carpini (2000) stated that young adults (ages 18-29) are disengaged in civic affairs which includes political topics, voter registration, and participation beyond voting. He noted that this is not because of lack of interest and involvement, but because these young adults are alienated from institutions (as cited in Thackeray & Hunter, 2010). Providing the youth a voice, opportunities to participate, and involvement in civic affairs may develop a generation with sensibility and skills in social change they can bring to adulthood. For these to happen, civic affairs and advocacies must be easy and convenient to participate in. At 15 to 30 years old, it is either the individual is at school or at work, which limits their resources and time to be involved in advocacy work. Another more likely way to engage the youth in a cause is when they are recruited by their social networks, which include their peers, friends, and family. Additionally, a person who is involved in an advocacy is likely to influence youth's attitudes, beliefs, and behaviors.

Mohiuddin, Al Mamun, Ali Syed, Masud & Su (2018) considered the younger generation to be "ultimately in charge of ensuring the planet's survival" (p. 2). Their claim on providing environmental education and awareness to the future generation can

ensure conserving and sustaining the environment were supported by the study's results, which revealed that environmental knowledge and awareness have significant influence on business students' favorable attitudes toward green vehicles. In the study, business students were regarded to lead the society in eco-friendly production, distribution and consumption which are vital for earth's survival. Several authors pointed out how students in emerging countries were aware and have knowledge on local-environment-related problems but lack understanding in identifying these problems. The proponents utilized the Theory of Planned Behavior to examine and measure the effects of environmental knowledge and awareness on emerging country business students' attitudes toward the environment.

G. Synthesis and Research Gaps

Various micro, exo, meso, and macro factors affect an individual's behavior, as summarized by the Social Ecological Model by Ajzen and Fishbein. Kollmuss & Agyeman (2002) strengthened the influence of individual, interpersonal, community, and the media on an individual's pro-environmental behavior. Mohiuddin et. al (2018) recommended for future research to integrate more constructs into the study's model as well as implement it in different cultural or geographical setting to further understand how the future generation will utilize more eco-friendly and sustainable products.

The country produced limited knowledge on policy communication, more specifically in the case of environmental laws. Although there are existing laws that are being implemented through policies and ordinances, scholars fail to recognize the importance of making research into the communication process. Articles available abroad

gave relevant insights on public policy and communication, however, looking into its entirety may not be applicable in the Philippine context.

The researchers would like to focus on how communicated policies on pro-environmental activities motivate the Filipino youth in following the Zero Waste Movement forwarded by non-government organizations and netizens. They saw it necessary to look into what makes an individual adhere to pro-environmental engagement; how each level of one's environment lead them to act. And also how their local communities can contribute to their engagement. At this time and age, online movements are gaining traction and are mobilizing people to participate in a certain cause. However, it is the researchers' goal to understand the phenomenon through an individual's social networks, rather than the online movement alone, with the thinking that there are far more descriptives and interactions with people that may motivate their engagement and participation.

CHAPTER III. STUDY FRAMEWORK

The framework of the study was guided by the Social Ecological Model as proposed by McLeroy et al. (1988) and the Encoding/Decoding Model of Communication by Stuart Hall (1973). The integration of the concepts of these models helped the researchers in fulfilling the objectives in discovering how the ordinances, projects, and programs of Quezon City and Marikina youth concerning waste management and plastic use contributed to the Marikina and Quezon City youth's meaning making and engagement in the Zero Waste Movement.

A. Theoretical Framework

1. Encoding/Decoding Model of Communication

The Encoding/Decoding Model of Communication was pioneered by Stuart Hall in 1973 in his essay entitled "Encoding and Decoding in the Television Discourse". Through this model, he theorized the process of the production, dissemination, and interpretation of media messages and explained that media texts are interpreted differently by various individuals depending on their cultural background, and other environmental factors such as economic background and personal experiences.

According to Hall (1980), the process begins with the technical infrastructure, relations of production, and the frameworks of knowledge developing a meaning structure (1), and is then encoded into a meaningful discourse. Encoding is the production of the message according to the encoder's meaning structure, which usually follows the dominant ideology of the society. The encoder must send the message in such a way that the audience will be able to comprehend it. The process of encoding is

done through sending verbal and non-verbal symbols that the audience will be able to easily understand, such as through words, signs, and symbols.

In order for the message to have an impact or for it to be useful, the message must yield a meaningful discourse and be meaningfully decoded, in which meaning structures (2) are developed. In the process, decoding is how the receiver or audience is able to interpret and understand the message through their own sensemaking of the message as a whole. The intended encoded message may not matter, if the receiver will not be able to meaningfully decode the message. There are three (3) proposed reading positions in decoding media messages, namely dominant-hegemonic, negotiated, and oppositional. The dominant-hegemonic reading pertains to the acceptance of the message as it was encoded. It means that the receiver was able to comprehend the connotative meaning of the message accordingly to what the sender intended the message to be interpreted. On the other hand, negotiated reading position is the acceptance of a part of a message but there can also be rejection based on their own understanding. Simply, the audience recognizes the dominant reading of the message but cannot accept it in its entirety, so the audience alters or makes up their own rules which can be based from their experiences and interests. Lastly, the oppositional reading is the rejection of the message even if the receiver is able to understand both the denotative and connotative meaning of the message. Again, personal experiences contribute to the receiver's opposing position to the encoded message.

While the encoder intends their message to be interpreted by their audience the same way as they sent it, Hall explained that encoding and decoding messages may not be symmetrical thus, the decoder/receiver's reception and understanding of the message

may not be perfectly similar with the encoder/producer's intended meaning. After decoding the message, the meaning as interpreted by the recipient is then redefined in their own technical infrastructure, relations of production, and frameworks of knowledge, and will be translated into their own practices (Figure 1).

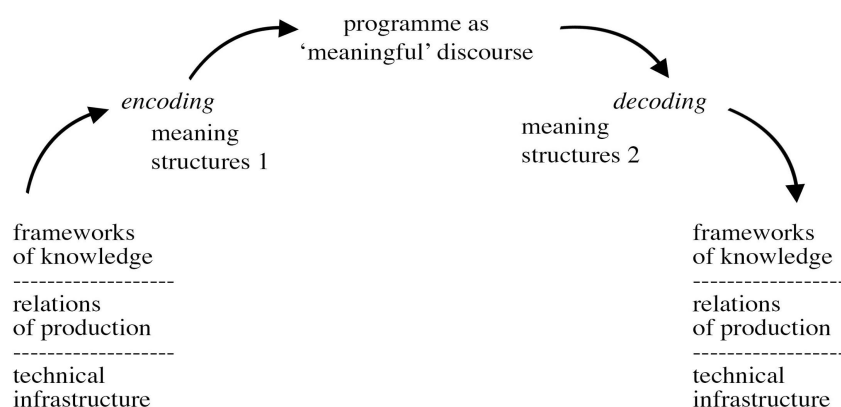


Figure 1. *Encoding/Decoding Model of Communication by Stuart Hall (1973)*

2. *Social Ecological Model*

The Social Ecological Model (SEM) is a “theory-based framework for understanding the multifaceted and interactive effects of personal and environmental factors that determine behaviors” (p. 1). “Ecological” is a term used commonly used in many disciplines which aims to target the “multiple levels” of a phenomenon. Multiple studies on behavior have identified that concentration the individual factors is insufficient to determine behavior change thus the need to also look into the many layers surrounding the person. The model has two key concepts: that behavior affects and is affected by multiple levels of influence, and that there is reciprocal causation which meant individual behaviors shape and are shaped by their social environment

(“Understanding the Social Ecological Model (SEM) and Communication for Development (C4D)”, n.d; McLeroy, Bibeau, Steckler & Glanz, 1988; Winch, 2012).

The roots of SEM started out in psychology and health behavior whereas Bronfenbrenner proposed the ecological systems theory to explain a child’s development through the multiple levels of influence: microsystem, mesosystem, exosystem, and macrosystem. He defines it that there are complex “layers” in the environment which have effects on children’s growth. Later on, the theory was renamed to “bioecological systems theory” because of how biology takes a big role in a child’s development (Winch, 2012; Paquette & Ryan, 2001; Oswalt, n.d.).

Adapted from the work of Bronfenbrenner and the borrowed concepts from Belksy & Steuart, McLeroy et. al. (1988) developed an ecological model for health promotion which then behavior is determined by the following—intrapersonal factors (individual characteristics that influence behavior: knowledge, attitudes, skills, and self-efficacy), interpersonal processes and primary groups (formal and informal social networks which includes family, friends, and peers), organizational factors (social institutions with organizational characteristics with formal and/or informal rules and regulations like churches, schools, and organizations), community factors (relationships among organizations, institutions and informal networks with defined boundaries), and public policy (local, state, and national laws and policies) (McLeroy et. al., 1988; Winch, 2012) (Figure 2).

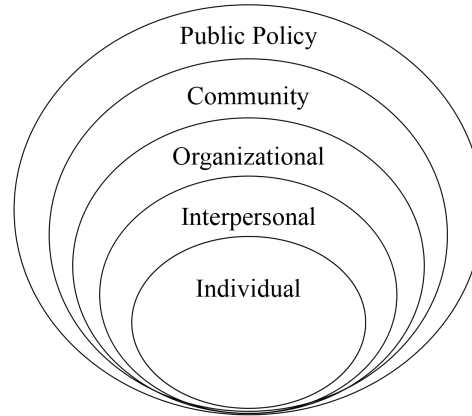


Figure 2. *Social Ecological Model by McLeroy et. al (1988)*

3. *Integrated Theoretical Framework*

The Social Ecological by McLeroy et al. (1988) and Stuart Hall's Encoding/Decoding Model of Communication (1973) were integrated in order to better inform this study. The Encoding/Decoding Model of Communication, in itself, already explains the process of the production, dissemination, and interpretation of media messages. However, in order to enrich the understanding of the recipient's decoding and interpretation of the messages communicated, the researchers deemed it necessary to integrate McLeroy et al.'s Social Ecological Model since it posits that there are multiple levels of influence on an individual's behavior and social ecological environment, which is said to be one of the determinants for an individual's decoding and interpretation of media messages. In doing so, there are more concepts that will provide a more holistic understanding of how media messages are decoded, and how an individual's social ecology contributes to his or her reproduction of the message as the recipient.

As shown on Figure 3, the whole process of encoding and decoding from the model was retained from the since these are integral in illustrating the process of the production, dissemination, and interpretation of media messages. The concepts of the Social Ecological Model, namely individual, interpersonal, organizational, community, and public policy were integrated into the decoding process, as these concepts will inform the study regarding the social ecology of an individual, and how each level of the model contributes to their engagement that is bound in the context of the study. Along with the decoding process are the three reading positions (dominant-hegemonic, negotiated, oppositional) that will emerge depending on how the individual will interpret the encoded message. This, in turn, will help in exploring how the message is communicated from the encoder to the audience and social ecology of an individual, and how it contributes to the Marikina and Quezon City youth's engagement in the Zero Waste movement (Figure 3).

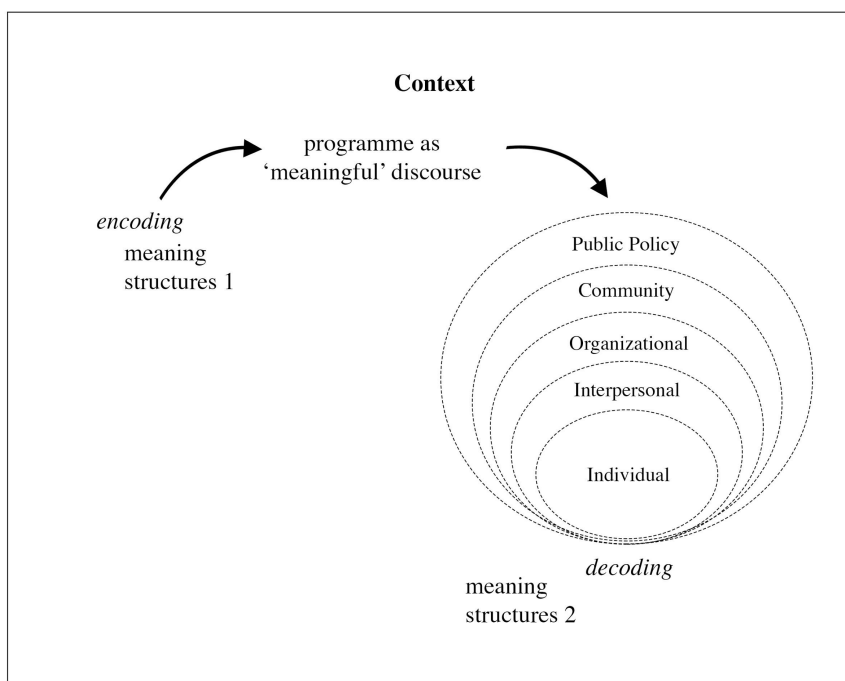


Figure 3. *Integrated Theoretical Framework*

B. Conceptual Framework

Given the nature of the study, the context was conceptualized as the Zero Waste Movement. Applying the concepts from the Encoding/Decoding Model of Stuart Hall (1973) in the study, the frameworks of knowledge, relations of production, and technical infrastructure were conceptualized as the production of messages because formerly, the concepts refer to production process of television networks in creating the media text. Encoding was then conceptualized as the local government units encoding of their communicated policies and ordinances. Embedded in this part are the meaning structures that the LGUs would like to pass on to their local communities. Programme as meaningful discourse was conceptualized as the online and offline messages disseminated by the LGU in circulating the policies and ordinances. Lastly, the decoding of the online and offline messages regarding the policies and ordinances by the individuals with their own beliefs and social environments is conceptualized based on the concepts and definitions derived from the Social Ecological Model by McLeroy et al. (1988).

The individual level focused on the intrapersonal factors, or the individual characteristics that influence one's behavior. Second, the interpersonal level is translated as the interpersonal processes and primary groups that an individual interacts with, as well as one's formal and informal social networks that contribute to an individual's behavior. Third, the organizational level was comprised of social institutions with organizational characteristics that have formal and/or informal rules and regulations that plays a role in shaping one's behavior. Fourth, the community level are relationships among organizations, institutions and informal networks with defined

boundaries that an individual may belong to. Fifth, the public policy level was translated to local, state, and national laws and policies that govern the individual.

The frameworks of knowledge, relations of production, and technical infrastructure under decoding was conceptualized into the reproduction of messages which is how the individual interpret the meanings through the online and offline messages and the five social environment levels conceptualized from SEM, in a way that they understand.

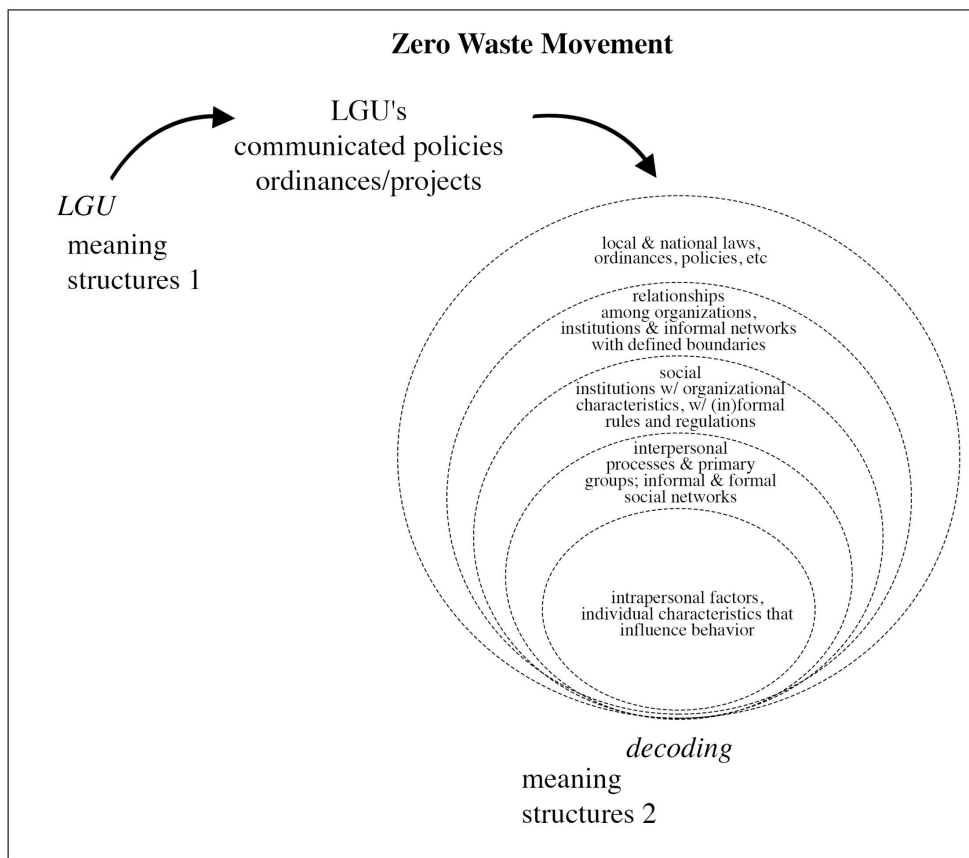


Figure 4. *Conceptual Framework*

C. Operational Framework

The context of the study was operationalized into the engagement of the youth in the Zero Waste Movement. The production of the messages was operationalized into

the policy making process and the implementation of these policies, while the local government units were translated into Quezon City and Marikina City which are defined by the researchers as the necessary cities to be studied. Additionally, the LGU's communicated policies, ordinances, and projects refers to the online and offline policy dissemination methods which includes, but are not limited to, any social media posts, posters, pamphlets, verbal and non-verbal communication, and publicity materials that were used in communicating the policies and ordinances on waste management and plastic use.

Furthermore, the individual level was translated into the youth's demographics (age, gender, etc), knowledge, attitudes, skills, and self-efficacy in the context of the Zero Waste movement. The interpersonal level was comprised of the family, friends, and peers of the youth that could motivate them in participating. Next, the organizational level was operationalized as the youth's church, school, workplace, organizations, other affiliations, as well as the organization's rule's and culture that all shape an individual's beliefs and participation. The community level was comprised of one's social and physical environment, which was operationalized as the youth's *barangay*, village, neighborhood; this level also included the values, traditions, and norms that are present in an individual's community. Lastly, public policy was considered as local and national policies, and other laws and regulations concerning waste management and plastic use that govern an individual which, in turn, can help motivate the youth in his/her engagement in the Zero Waste Movement (Figure 5).

Lastly, the reproduction of messages refers to how the youth interprets, understand, and make meanings out of the communicated policies and ordinances on

waste management and plastic that can either increase or decrease their participation in the Zero Waste Movement. The researchers would like to note that the operationalization of the theoretical and conceptual anchor of the study was not limited to the aforementioned concepts, given that the researchers aimed to surface new concepts and factors that contributed to the Marikina and Quezon City youth's participation in the Zero Waste movement.

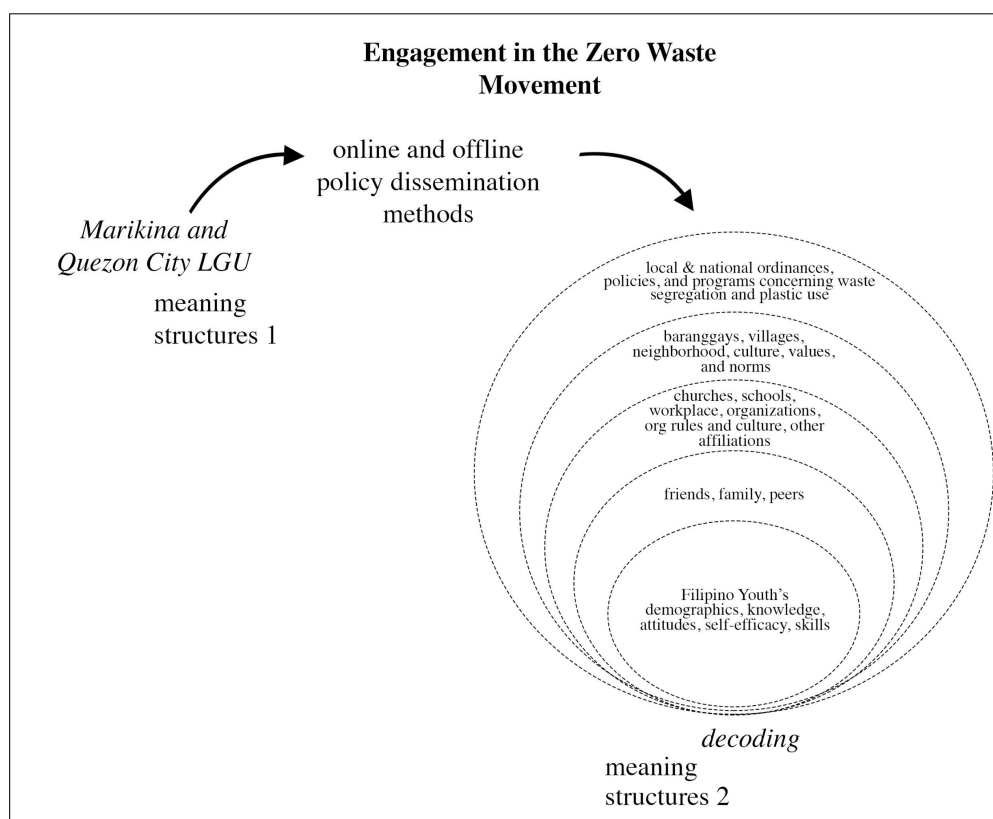


Figure 5. *Operational Framework*

D. Operational Definition of Terms

Attitude - In psychology, it refers to the set of emotions, belief, and behavior toward particular thing, event, or situation

Audience - Pertains to the listeners/receivers/recipients of the message

Barangay - It is the smallest administrative division in the Philippines

Behavior - Acts that are done as a way of participating in the Zero Waste movement

City ordinances - Authoritative law made by the city or municipality related to the Zero Waste movement such as plastic ban, waste disposal, recycling, among others

Decoding - The reproduction of message; how the receiver or audience is able to interpret and understand the message through their own sensemaking of the message as a whole

Demographics - The characteristics of an individual, such as gender, age, education, profession, religion, marital status

Dissemination methods - Refers to the concrete materials or strategies used to share content or information

Ecological - In the context of the study, this refers to the environment (physical or social setting) that an individual is exposed to or interacts with

Encoding - The production of message which the encoder must send the message in such a way that the audience will be able to understand

Engagement - Refers to the state in which individuals has an arrangement to do something

Knowledge - Facts, information, and skills acquired by a person through experience or education

Local Government Unit - Refers to the local government in the Philippines which includes: provinces, cities, municipalities, and barangay; for the purpose of this study, this specifically pertains to Quezon City and Marikina City

Offline messages - Pertains to the on-ground messages distributed to the audience, this includes, but are not limited to posters, brochures, flyers, tarpaulins, and seminars

Online messages - pertains to social media messages posted in Facebook, Twitter, Instagram, websites, etc.

Participation - involving oneself or taking part of something

Philippine constitution - The supreme law of the Philippines that governs its citizens

Self-efficacy - According to Albert Bandura, it refers to a person's belief in his or her ability to succeed in a particular situation

Values - An individual's principles and beliefs that contribute to their participation in the Zero Waste Movement

Waste Management - Activities and methods done to properly manage and regulate waste which includes the collection, transportation, segregation, treatment, and disposal of waste.

Waste Segregation - Process of manually or automatically separating waste into different types of categories ranging from wet or dry, biodegradable and non-biodegradable, hazardous, recyclable, landfill, among others to allow efficient and proper treatment of various types of waste.

Zero Waste Movement - focuses on reducing waste production through subtle changes in one's lifestyle, which includes composting, recycling, and using sustainable products

CHAPTER IV. METHODOLOGY

A. Research Design and Methods

The comparative case study approach was employed in exploring how the policies and ordinances of Quezon City and Marikina on waste management and plastic use contribute to the youth's engagement in the Zero Waste Movement. The researchers believed that this approach was suitable in fulfilling the study's objectives and allowed an in-depth analysis of the context of the study.

Qualitative methods, namely the focused interview method and the archival research method were utilized. Archives such as, but are not limited to, documents, records, social media content, and materials were gathered from the respective city government offices to compare the methods done in communicating their policies to their constituents. The in-depth focused interview method was selected in order to allow the researchers to gather vital insights and experiences that will inform the study. Key informant interviews with officers from the Marikina City Environmental Management Office (CEMO) and the Quezon City Environmental Protection & Waste Management Department (EPWMD) were conducted to gather first-hand information about their policies and to gain valuable insight regarding their management of plastic use and waste in their respective cities. In-depth interviews were conducted for the residents of Marikina and Quezon City who fulfill the criteria provided.

B. Concepts and Indicators

Table 1. *Concepts and Indicators for Objective 1*

| Objective 1: To gather and compare the policies and ordinances of Quezon City and Marikina on waste management and plastic use | | |
|--|---|--|
| Concept/s | Indicator/s | Method/s |
| Legislation | <ul style="list-style-type: none"> ● Nature of ordinances ● Number of ordinances ● Provisions of ordinances, programs, and/or projects concerning waste management and plastic use | Key informant interview, Archival Research |
| Community/LGU-based initiatives | <ul style="list-style-type: none"> ● Name, type, and nature of programs, and/or projects concerning waste management and plastic use | |

Table 2. *Concepts and Indicators for Objective 2*

| Objective 2: To determine the online and offline encoding methods of Quezon City and Marikina in communicating their policies and ordinances to their respective local communities | | |
|--|---|--|
| Concept/s | Indicator/s | Method/s |
| Encoding of Policies and Ordinances | <ul style="list-style-type: none"> ● Method of dissemination of ordinances, projects, and programs concerning waste management and plastic use <ul style="list-style-type: none"> ○ Online: social media page, groups, online promotional materials created by the LGU ○ Offline: flyers, posters, and other offline dissemination paraphernalia ○ Firsthand accounts of LGU's methods of dissemination from the respective key officials (PA system, megaphones, etc) | Key Informant Interview, Archival Research |

Table 3. *Concepts and Indicators for Objective 3*

| Objective 3: To discover the environmental facilitators and impediment barriers on Marikina and Quezon City youth's participation in the Zero Waste Movement in the following levels: a. Individual, b. Interpersonal, c. Organizational, d. Community; e. Public Policy | | |
|---|--|-------------------|
| Concept/s | Indicator/s | Method/s |
| Individual | <ul style="list-style-type: none"> ● Demographics (age, sex, education, occupation) ● Knowledge and beliefs of the individual about the Zero Waste Movement ● Self-efficacy/perceived ability of the individual to engage in the Zero Waste Movement ● Experiences of the individual that led him/her to engage in the Zero Waste Movement ● Attitudes or the concrete actions of the individual in relation to the Zero Waste Movement | Focused interview |
| Interpersonal | Family, friends, and peers contributing to the participation of the youth in relation to the Zero Waste Movement | |
| Organizational | <ul style="list-style-type: none"> ● Organizations, online and offline communities joined or followed by the individual ● Enabling factors within the community contributing to the participation of the youth in relation to the Zero Waste Movement <ul style="list-style-type: none"> ○ Opinion Leader ○ Inspirational People ○ Positive posts, comments, and messages about the Zero Waste Movement ● Disabling factors within the community contributing to the participation of the youth in relation to the Zero Waste Movement <ul style="list-style-type: none"> ○ Opinion Leader ○ Inspirational People ○ Negative posts, comments, and message about the Zero Waste Movement | |
| Community | Values, traditions, norms, neighborhood norms and | |

| | | |
|---------------|--|--|
| Public Policy | <p>policies that enable or disable participation in the Zero Waste Movement</p> <ul style="list-style-type: none"> ● Societal norms related to pro-environmental behavior ● Presence or absence of neighborhood policies regarding plastic use and waste management <p>International, national, and local laws (policies, ordinances, programs, and projects in Marikina and Quezon City) concerning waste management and plastic use that enable or disable participation of the youth in the Zero Waste Movement</p> | |
|---------------|--|--|

Table 4. *Concepts and Indicators for Objective 4*

| Objective 4: To understand how the youth decode the policies and ordinances communicated by Quezon City and Marikina City | | |
|---|--|-------------------|
| Concept/s | Indicators/ | Method/s |
| Decoding of Policies and Ordinances | <ul style="list-style-type: none"> ● Knowledge of the individual on policies and ordinances on waste management and plastic use in Quezon and Marikina City ● Position (dominant, negotiation, opposition) on their known policies and ordinances ● Perceived encoded meaning of policies communicated by their respective LGUs | Focused Interview |

Table 5. *Concepts and Indicators for Objective 5*

| Objective 5: To analyze the link between local environmental policies and ordinances and the Marikina and Quezon City youth's online and offline engagement with the Zero Waste Movement | | |
|--|---|-------------------|
| Concept/s | Indicators | Method/s |
| Offline engagement | <ul style="list-style-type: none"> ● Individual or group activities done in relation to the Zero Waste Movement | Focused Interview |
| Online engagement | <ul style="list-style-type: none"> ● Social media activities (liking, commenting, sharing, and creating content) done in relation to the Zero Waste Movement | |
| Intersection between local | <ul style="list-style-type: none"> ● Youth's knowledge or lack thereof on | |

| | | |
|--|--|--|
| policies and youth's engagement in the Zero Waste Movement | policies and ordinances prior to the his/her engagement in the Zero Waste Movement | |
|--|--|--|

C. Research Instruments

For the archival research, a checklist was utilized for the analysis of the documents, records, social media content, and materials kept by the cities on waste management. The checklist contained items such as the basic information of the document (date, name of project, type), the policies implemented, and the content of the policies. These were used in order to look into how the ordinances were enforced, the city's involvement and proactiveness in creating programs, and their means of communicating the policies to their respective communities (See Appendix A).

For the key informant interviews, a semi-structured interview guide was utilized in discussing the history of the ordinances, projects, and/or programs concerning waste management and plastic use in their respective cities, as well as how these are being communicated to their communities (See Appendix B).

A different semi-structured interview guide for the focused interviews with the youth residents of Marikina and Quezon City was utilized. The interview guide aimed to discuss the concepts of the Social Ecological Model, namely the individual, interpersonal, community, organizational, and public policy levels that contribute to their behavior in regard to the Zero Waste movement. The interview also delved into their engagement with the Zero Waste Movement, as well as their awareness and understanding of policies related to plastic use and waste management both in the national and local context (See Appendix C).

D. Units of Analysis and Sampling

The archival research made use of documents, records, and materials on projects and programs related to waste management and plastic use provided by the Marikina CEMO and the Quezon City EPWMD. All active ordinances concerning waste management and plastic use implemented by Marikina and Quezon City were included in the sample. In order to identify strategies employed by the respective LGUs to communicate and disseminate the ordinances, programs, and projects to their citizens, all materials found on their respective social media platforms and other dissemination paraphernalia in the past six (6) months related to their policies or projects on waste segregation and plastic use from the time of retrieval were also gathered.

For the focused interviews, the researchers utilized a purposeful and snowball sampling in selecting the informants. As stated by the RA 8044, individuals comprising the Filipino youth are between fifteen (15) to thirty (30) years old. Thus, the informants satisfied the following criteria: 1.) Between 15 to 30 years old; 2.) A follower of the Zero Waste Movement and; 3.) A resident of Marikina or Quezon City at the time the study was conducted. Informants were also asked to refer other possible informants that fulfill the aforementioned criteria. A total of 11 Quezon City residents and 7 Marikina residents were interviewed.

For the key informant interviews, any official of the department dedicated to environmental concerns, specifically waste management and plastic use served as the units of analysis. For Quezon City, the key informant came from the Environmental Protection and Waste Management Department (EPWMD). On the other hand, the key informant for Marikina City was a member of the City Environmental Management

Office (CEMO). Both offices were selected as they are most knowledgeable about information concerning waste management and plastic use in their respective cities.

E. Data Gathering

The researchers conducted the archival research and key informant interviews with the respective units of analysis in conjunction with the focused interviews with selected Marikina and Quezon City youth informants for 4 weeks. During this period, the researchers contacted the aforementioned government offices (CEMO and EPWMD) concerned with the needed documents, first through email and their official contact numbers. Upon approval, the researchers directly went to the offices and coordinated with the concerned departments. An interview with the representative of each office was conducted, and documents needed for the archival analysis were also gathered.

Informants were gathered through a publicity material posted in social media platforms (Facebook, Twitter, and Instagram). The researchers also shared the posts from time to time to boost audience reach. In order to reach the specific niche of informants, the researchers asked permission to post on major Zero Waste-related Facebook groups in the Philippines such as Buhay Zero Waste, Sustainable Manila, and Ayoko ng Plastik from their respective administrators. Interested individuals were asked to provide their contact information through a Google Form. Focused interviews were then scheduled according to the availability of both the informants and researchers. Informants were asked to complete an information sheet and sign a consent form containing vital information regarding the interview, as well as their rights as

informants. Audio recordings were transcribed immediately after the accomplishment of each interview.

F. Data Analysis

For the first and second objective using the documents retrieved, pertinent data from the checklist was encoded in Microsoft Excel for better organization and collection. The given dataset was checked and rechecked for any missed part or any incongruencies with the accomplished checklist. Excel functions were utilized as a tool in analyzing and comparing the available data for Quezon City and Marikina City.

The remaining objectives utilized all the verbatim transcriptions of the focused interviews. Data coding was done through highlighting integral concepts and quotes from the interviews and categorizing similar ones in a theme. The analysis started with the first reading of the transcriptions per objective. All throughout the reading, the researchers wrote down notable and important lines from the transcriptions that was then gathered and thematized after each reading.

Lastly, with the given data from the archiving and the themes from the focused interviews, the researchers derived discussions on the study per objective, and how these objectives interrelate with each other to answer the research problem.

G. Scope and Limitations

The study aimed to explore how the ordinances, projects, and programs of Quezon City and Marikina youth concerning waste management and plastic use

contribute to the Marikina and Quezon City youth's engagement in the Zero Waste Movement thus, limiting the context of the study to the abovementioned movement. Given that this research is a comparative case study, only the selected cases, specifically the city of Marikina and Quezon City were explored. Moreover, only ordinances, programs, projects, etc. concerning waste management and plastic use in the aforementioned cities were included in the study.

The study is limited to active ordinances, meaning the ones that are still being implemented at the time the study was conducted, programs and projects done in the past three (3) years from the time the study was conducted, and materials and other dissemination paraphernalia of such ordinances, programs, and projects concerning management and plastic use in the past six (6) months from the time the study was conducted.

Only the insights of the informants for the interviews and the documents provided by the cities were included in this research.

H. Ethical Considerations

The identity and data gathered from the informants were secured confidentially. Informants were asked to sign consent forms with full knowledge on the risks, benefits, and the purpose of the study. Furthermore, they were informed that they can voluntarily terminate the interview should they ever feel the need to do so. None of the informants were coerced into participating in the study, as the study calls for volunteers first and foremost. Tokens of appreciation for the informants were given in kind to express gratitude for their time. Pseudonyms were used and any content that will reveal the

identity of the informant was redacted should there be mentioning of names presented in the discussion of the results.

I. The Researchers

The researchers behind this study, namely Rovina B. Dinapo and Steffi Arantxa R. Gianan are BA Communication Research undergraduates from the College of Mass Communication at the University of the Philippines Diliman. They have taken courses on both quantitative and qualitative research, as well as electives in market research, communication planning, among others.

As an alumna of Miriam College, the concept of caring for the environment has been ingrained in Rovina, as it is one of the core values of her alma mater. Segregation, recycling, and proper waste disposal have been a part of her daily practice. Though unaware of the Zero Waste Movement back then, she has started taking little steps in following the tenets of the movement, such as using reusable containers and using eco-bags. She has been interested in studying any aspect of social media, including online movements.

Steffi's interest in pro-environmental activities sparked when one of her organizations asked her what her personal advocacy was. She has been practicing segregating waste on her own personal time and bringing reusable bags everywhere, until it led to encouraging other people to do it as well. Prior to attending the university, her school in Legazpi City organized multiple clean up drives, tree planting, and mangrove planting to instill care for the environment.

Both researchers have a common interest in the Zero Waste Movement and are inquisitive about the contribution of implemented policies on the citizens under its jurisdiction. At the time where the law of the land is neglected (extra judicial killings, weak justice system, and corruption), the researchers would like to emphasize that no one is above the law, and citizens must abide by the rules especially if it will be for the common good.

CHAPTER V. RESULTS AND DISCUSSION

This chapter discussed relevant findings and insights gathered from Quezon City and Marikina City's department representatives, archived documents on waste management and plastic use, and the Filipino youth engaging in the Zero Waste Movement. First, a profile of the informants were presented as a point of reference. The first and second objective discussed how the government encodes the environmental local policies to the residents, and how these residents decode the received message. Objective 3 was able to explore the lifestyle of the youth together with their environmental facilitators and barriers as guided by the Social Ecological Model. Lastly, the fifth objective analyzed the link between the government's environmental policies and the youth's engagement in the Zero Waste Movement.

A. Profile of Informants

1. The Protectors of the Environment

a. Dane

Dane is a 28-year old interior designer who resides in Quezon City. She decided to start living a Zero Waste lifestyle in 2016, a year after she was exposed to a video about trash jars on Facebook. She is also one of the administrators of one of the major zero waste groups on Facebook, and would usually meet up with some of its members to engage in discourse about the movement. The individualistic approach of living a zero waste lifestyle made it more personal and feasible for her, which led her to support the movement all the more. For her, highlighting the importance of living a more sustainable lifestyle to the younger generations and encouraging them to participate in the movement

is integral given that they will be the ones responsible for the environment in the future. Through her Instagram account, she is able to share her zero waste journey to the younger generations in hopes of inspiring them to do the same. However, she wishes that corporations would take the lead in ensuring that the infrastructure will make living a zero waste lifestyle more feasible, since “if the blueprint is already laid out by the business and by government, then [people] won’t have to think.”

b. Paula

Paula is a 24-year old first time expecting mother residing in Quezon City. She just recently finished her Master’s Degree in Public Administration. For her, living a zero waste lifestyle means constantly choosing a better alternative for their everyday essentials, as it is a significant contribution in saving the environment if done by more individuals. Paula and her husband decided to have an environmentally conscious wedding by limiting the invitations, not having flowers that will wither, and buying an off-white dress that she will also use for her graduation. Moreover, as expecting parents, she shared how they will opt for cloth diapers instead of disposable ones. Paula believes that “those little decisions show that [she] is caring for the environment,” and it is her main goal to be able to “sustain the advocacy and to keep doing it knowing that she stays true to what she believes is a contribution to make the world better.”

c. Ivy

Ivy is a 22-year old mental health advocate who resides in Quezon City. Her first encounter with zero waste was through social media, which sparked a sense of urgency in her to slowly change her ways to help the environment as part of social responsibility. Her advocacy deepened when she took a job in Humble Market-- a zero waste packaging

grocery store. For Ivy, living a zero waste lifestyle means minimizing the amount of waste she produces, given that she believes that “zero waste is not literally zero waste since [it is really] impossible... if there is waste, there is life, and the other way around.” She encourages other people to slowly partake in the movement through showing them that it’s not impossible, and that it “doesn’t have to be expensive” because there are different ways of going zero waste.

d. Meann

Meann is a 25-year old freelance strategist for advertising companies who lives in Quezon City. She is passionate about reducing plastic waste, which sparked her drive to pursue a zero waste lifestyle in 2018 after a friend told her about the amount of trash found along hiking trails. She shared how finding alternatives to single-use plastic and avoiding it as much as possible can be quite expensive and inconvenient, but she thinks that it would be more “inconvenient if [humans] live in a world filled with trash,” which makes everything worth it if it meant that the environment will be more habitable even for future generations. To combat the possible expenses, Meann explained that zero waste alternatives such as tupperwares, utensils, etc. are already present at the homes of many individuals, which makes it more accessible to any social class without money being a hindrance in living a zero waste lifestyle.

e. Frances

Frances is a 24-year old conservation journalist who lives in Quezon City. She is passionate about environmental conservation, which led her to pursue a career path that will enable her to forward her advocacy. Her love for diving fueled her drive to dedicate herself to live a zero waste lifestyle in 2015 due to her desire to preserve the beauty and

diversity of marine life. She shared how heartbreaking it was to see trash underwater firsthand, so she decided to dedicate herself more into living zero waste as much as possible. She tries to live a more sustainable lifestyle through avoiding the use of plastic, recycling, and composting. However, she also shared her sentiments about how people are using green marketing to make a profit in bazaars due to the movement being trendy, even without full knowledge of the tenets of the movement. Frances calls for people to be more critical of the things they buy and the brands they support, especially when there are other ways of expressing support for the movement.

f. Mara

Mara is a 23-year old advertising student who lives in Quezon City. She began her zero waste journey back in high school, way before she knew about the term. Her love for nature and the ocean led to her desire to preserve it for the future generations to be able to experience what she witnessed firsthand. She discovered the term ‘zero waste’ through a video on Facebook showing a girl explaining what a trash jar was. For her, zero waste is minimizing waste, which led her to lessen eating out, do more DIY projects, refuse products in packaging, avoid fast fashion, among others. She shared her concern about people have “[wrong conceptualizations] about what zero waste really is” since she observed some people who buy metal straws for the sake of being on trend and aesthetic purposes. Moreover, she thinks that this leads to people losing sight of the true purpose and meaning of these alternatives, and what it truly means for the environment. For her, educating people about zero waste as a concept is integral in order for more people to fully understand what the movement truly stands for, as well as the steps they can do in support of it.

g. Clara

Clara is a 29-year old professional dancer residing in Quezon City. She's also into the arts, specifically calligraphy, editing, drawing, and knitting. She has been living a minimalist lifestyle before discovering zero waste, which conveniently tied up with her already existing lifestyle, making it easy for her to follow the tenets of the movement. For her, living a zero waste lifestyle is closely related to minimalism since living a minimalist lifestyle means only having the things she really needs, which translated into her belief that *"mas kaunti yung kailangan ko, mas kaunti rin yung [yung kalat ko] (the less things I need, the less trash I produce)." She also believes that living a zero waste lifestyle means putting in "conscious and voluntary effort" to refuse single-use plastic and to always bring reusable materials, which requires patience and discipline.*

h. Remi

Remi is a 24-year old copywriter who lives in Quezon City. Her zero waste journey stemmed from her interest in the No Straw Movement, which was recommended by an old schoolmate in college. For her, living a zero waste lifestyle means choosing the lesser evil in the decisions that she makes every single day, given that there are always advantages and consequences in every available option. She illustrated this through citing an example: "so, do we produce plastic [that] takes millions of years to decompose? Do we choose paper and wood [that will] sacrifice our forest, do we choose metal which would sacrifice forest and rivers and communities?" Moreover, being in the community for a while allowed her to deduce that the movement can be accessible to everyone. She shared how she noticed that initially, majority of the group were from the upper to middle

classes. After some time, she started seeing more people from the middle to lower classes who post about how they incorporated the movement into their daily lives.

i. Karol

Karol is a 26-year old licensed physician who currently resides in Quezon City. She gradually started living a zero waste lifestyle when she was exposed to a documentary on plastic in 2017. She found living a zero waste practical, since “there is a lot of excess in [her] life, that [she] needs to let go of.” Living zero waste also means “only buying things that [an individual] knows will be disposed of properly.” One of her motivations in pursuing a zero waste lifestyle are the babies in their house, since she worries about how the world would be like when they grow up. However, she shared her sentiments on the greenwashing of brands and how people fall into the trap that these brands have created. She explained that while individual efforts are a great contribution in helping the environment, the power lies on the corporations to make a change that will make a greater change on a massive scale. Karol is doing research on eco-friendly packaging in hopes of creating 100% plastic-free packaging in the near future.

j. Stella

Stella is a 27-year old registered nurse in Quezon City. Her minimalist lifestyle was inspired by Lauren Zinger, mastermind behind a package free store in New York City. She does her best to live sustainably in order to help the environment, and has recently started trying to be a vegan since animal welfare is also one of the things she is passionate about. Together with her friend, she sells package-free soap in their shop located in Novaliches. However, she mentioned that she is not “completely zero waste yet” since it is “very unsustainable especially in the Philippines. She further added that

according to Lauren, “the responsibility of waste should not fall upon the shoulders of the consumers, it should be on the manufacturer, the producer, the businesses.” Stella tries to be conscious about her purchases and ensures that she chooses a better alternative for her needs.

k. Maxi

Maxi is a 21-year old broadcast communication student living in Quezon City. She was exposed to the idea of zero waste through the employees of her internship last year. She started trying to live a more sustainable lifestyle after realizing how different the state of the environment was back then, as well as how people have become less mindful about the things they do that may harm the environment. Despite being discouraged by some of her family members, Maxi continues to do her part in trying to save the animals and the seas through making it a point to bring her kit which includes a tumbler, utensils, and a food container wherever she goes and refusing plastic. However, as a student, she recognizes how living a zero waste lifestyle can be challenging in terms of expenses, so she tries to do whatever she can within her means and not let money hinder being zero waste.

l. Jas

Jas is a 27-year old information officer at an agency based in Quezon City who lives in Marikina City. Born and raised in Pampanga, growing up seeing a lot of nature made her want to start living a zero waste lifestyle upon knowing the amount of plastic waste that goes in the ocean. She has been passionate about caring the environment ever since and has been interested in trying to help out the environment through doing what she can. However, she shared how living zero waste may be less feasible for the lower

income classes due to the lack of cheaper alternatives to pre-packaged products. She further added that one of the challenges for most zero waste advocates is avoiding plastic through refusing products that have plastic packaging. Jas stressed that making better choices that are geared towards the movement is easier if only corporations make a change to their packaging.

m. Mila

Mila is a 23-year old community nutrition graduate who resides in Marikina City. Her curiosity for minimalism and her friend living a zero waste lifestyle began her zero waste journey in 2018. For her, living zero waste begins from distancing oneself from things that are not needed in life. She further explained how she found living a zero waste practical, since “there is a lot of excess in [her] life, that [she] needs to let go of.” Echoing the sentiments of most of the informants, she also believes that the urban poor still faces the inaccessibility of cheaper alternatives to pre-packaged goods, so she expressed her hopes of the movement being brought down and communicated to the masses, as they can also benefit from it. Moreover, given the traction that the movement is gaining online, she observed how it is becoming a trend and that people fail to fully understand what the movement truly stands for. However, she sees the silver lining on the Zero Waste Movement becoming a trend, as it gains more attention from people, but she recognizes the need to educate people on what zero waste really is.

n. Cherry

Cherry is a 21-year old student taking up BS Mathematics and is residing in Marikina City. It was through her hometown that she started her zero waste journey and her exposure to the zero waste movement mainly came from her city. Marikina City was

very active in giving them out flyers at home and it made her want to segregate more and lessen the trash she consumes. Zero waste practices have been ingrained in her ever since, and it has been a common instinct for her to continue these practices outside of her home.

o. Ella

Ella is a 29-year old finance analyst who now resides in Marikina City. Her advocacy in zero plastic waste drove her to join World Wide Fund for Nature (WWF) Philippines. Experiencing the negative effects of plastic to the environment became enough of a reason for Ella to start making a change to help minimize waste. Her experience of the flood in Marikina during Ondoy, one of the most devastating tropical cyclones, made her realize how plastic could bring about destruction to both the environment and humankind. She began reading more about the effects of plastic online, and later on, decided to participate in the Zero Waste Movement. After being immersed in the zero waste community for some time, she decided to sell package free soap and shampoo and ensures that her brand is fully zero waste, from the acquisition of raw materials, to its packaging. For Ella, following the tenets of the Zero Waste Movement is considered as a step towards preserving the environment for future generations, and she hopes that through living a zero waste lifestyle, the next generations to come would still be able to witness the beauty of the environment.

p. Joan

Joan is a 22-year old graduating broadcast student who lives in Marikina City. She slowly made changes to her lifestyle last year after encountering a post on social media about the effects of waste to the environment. Her city's ordinances were one of the greatest influences for her to live a zero waste lifestyle, and the eco-friendly practices

in her city were able to provide her the building blocks she needed in sustaining it. She has been trying to live a zero waste lifestyle through bringing reusable containers and tumblers, as well as refusing single-use plastic. Joan also shared how seeing Marikina being flooded and witnessing the impacts of plastic firsthand on her city, along with her own preference of keeping her area clean made her want to try and make a difference in her lifestyle.

q. Zeus

Zeus is a 23-year old gym manager who lives in Marikina. He has unconsciously done things that the Zero Waste Movement advocates for since he was young due to his school and city's policies. He discovered the term zero waste in 2015, along with rise of metal straws. He shared that he thinks a big part of why the movement is recently gaining traction is the "emotional reaction just from the pictures of waste and forests being cut down," which "affected so many people that they wanted to make a change in their lifestyle." This led to more small businesses capitalizing on the trend, in which he mentioned that he "hopes that those small businesses are actually zero waste, and they are not just in it for the business opportunity."

r. Chelsea

Chelsea is a 24-year old Mechanical Engineering masteral student who originally lived in Quezon City her whole life, until she got married and now resides in Marikina City. She learned about the zero waste lifestyle during the hype of metal straws. By learning more about the movement, she realized that how much waste she generates and since then has found alternatives to her lifestyle. She acknowledged that contrary to the belief that zero waste means having no waste at all, lessening waste is at the core of what

the movement is trying to put forward since it's impossible to have no waste at all.

Packaging is present in almost all industries, making it harder for consumers to deter from using single-use plastics, as well as businesses to create alternatives to plastic. She further explained how plastic cannot be avoided, given that the “ecosystem was developed where packaging is essential.”

2. *The Overseers of Environmental Policies*

a. Victor

Victor is the administrative officer and pollution control officer from the Marikina City Environmental Management Office. He oversees all operations in the garbage collection, cleaning, and implementation of ordinances, projects and programs related to the environment.

b. Richard

Richard is the acting chief of the pollution control division of the Quezon City Environmental Protection and Waste Management Department. The pollution control division is in charge of all operations concerning the enforcement of the city's ordinances related to the environment.

Table 6. *Summary of Informants*

| QUEZON CITY | | | |
|-------------|-----|--|--------------------------------|
| Name | Age | Occupation | Year started living zero waste |
| Dane | 28 | Interior Designer | 2016 |
| Paula | 24 | Graduate Student (Public Administration) | 2017 |
| Ivy | 22 | Mental Health Advocate | - |

| Meann | 25 | Freelance Strategist | 2018 |
|-----------------------|---------------|---------------------------------|-----------------------------------|
| Frances | 24 | Conservation Journalist | 2015 |
| Mara | 23 | Advertising Student | 2014 |
| Clara | 29 | Professional Dancer | 2018; Minimalism - 2015 |
| Remi | 24 | Copywriter | 2016 |
| Karol | 26 | Licensed Physician | 2017 |
| Stella | 27 | Nurse | 2018 |
| Maxi | 21 | Broadcast Communication Student | 2018 |
| MARIKINA CITY | | | |
| Name | Age | Occupation | Year started living zero waste |
| Jas | 27 | Information Officer | 2017 |
| Mila | 23 | Public Health Worker | 2018 |
| Cherry | 21 | Mathematics Student | - |
| Ella | 29 | Finance Analyst | 2018 |
| Joan | 22 | Broadcast Student | 2018 |
| Zeus | 23 | Gym Manager | 2015 |
| Chelsea | 24 | Graduate Student | 2017 |
| MEMBERS OF LGU | | | |
| Name | City | | Position |
| Victor | Marikina City | | Administrative Officer, CEMO |
| Richard | Quezon City | | Chief, Pollution Control Division |

B. The LGUs' Policies and Ordinances on Waste Management and Plastic Use

This section discussed and compared the policies and ordinances of the local government units of Quezon City and Marikina City on waste management and plastic use. The data presented was derived from the key interviews with the representatives of the Quezon City Environmental Protection and Waste Management Department (EPWMD) and the Marikina City Environmental Management Office (CEMO), and from the city documents (see Table 7) and online archives done by the researchers.

Table 7. Archived Documents from Quezon City and Marikina City.

| LGU | Document Type | Description |
|---------------|----------------------------|--|
| Quezon City | Environmental Code | A 97-page booklet that contains all the ordinances, regulations, and penalties implemented in Quezon City. |
| Marikina City | CEMO Booklet | A 10-page booklet distributed by the City Environmental Management Office to the residents which contains the garbage collection map, schedule of collection, types of garbage, and the ordinances with the corresponding penalties. |
| | CEMO Bookmark | Bookmark contains the popular initiatives done (Materials Recovery Facility, Rainwater Harvesting, etc.), and the ordinances with the corresponding penalties by CEMO. |
| | Infographics Fan | Fan designed to contain: (1) <i>Tipid Kuryente Tips</i> and (2) <i>Tipid-Tubig Tips</i> . The text and graphics are readable and colorful that attracts the residents to read how they can save water and electricity at home. |
| | Leaflets of (5) ordinances | <p>Leaflets that contain the title, description, and penalties of the following ordinances:</p> <ul style="list-style-type: none"> ● Ordinance no. 18: Regulating the use of plastic packaging on wet goods and banning the use of plastic packaging on dry goods. ● Ordinance no. 46: Requiring the segregation at the source of all household, institutional, industrial, and commercial waste and/or garbage into wet or biodegradable and dry or non-biodegradable, pursuant to Republic Act No. 9003. ● Ordinance no. 32: Proper garbage waste disposal within the municipality of Marikina. ● Ordinance no. 73: Adopting the anti-littering code of Marikina 2002. ● Ordinance no. 210: Prohibiting scavengers, with or without push carts, from interfering with the garbage |

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| | | collection of the municipal garbage trucks, or to follow said garbage trucks for the purpose of taking any item or material therefrom, and imposing penalties for violation thereof. |
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The first subsection focused on Quezon City’s policies and ordinances followed by Marikina City, as well as the comparison of the ordinances implemented.

1. Quezon City

Quezon City is the biggest city, not only in Metro Manila, but also in the Philippines in terms of its population with over 2.9 million residents (Sawe, 2018). However, the city suffered from producing the largest volume of garbage due to the increasing growth of people living and migrating to the city (Badilla, 2017). The local government of Quezon City aimed to forward these environmental concerns through the Environmental Protection and Waste Management Department (EPWMD). According to Richard, the chief of the Pollution Control Division, the department made sure that their policies were “an adaptation of all the national laws because that’s the hierarchy of laws” as mandated by the constitution. Specifically for waste management and plastic use, their policies were anchored on the Republic Act No. 9003, more commonly known as the Ecological Solid Waste Management given that it should be the case in all other local government units in the country.

In order to concretize the adaptation of these local policies “for easier implementation and enforcement,” EPWMD “codified it into one,” which turned into the environmental code of Quezon City which comes as a printed booklet of all the environmental policies. Richard proudly shared:

...for your information, Quezon City has the most environmental ordinances among the cities and municipalities in the Philippines...So yung plastic regulation, kasama lahat yan dun nakapaloob lahat. Lahat sa solid waste collection, hazardous waste even water, kasama lahat dun isang ordinansa lang. *[for your information, Quezon City has the most environmental ordinances among the cities and municipalities in the Philippines. So the plastic regulation is part of it, all is included. All the solid waste collection, hazardous waste even water, is all part of that ordinance.]*

Accordingly, Chapter I of the Environmental Code contains “An Ordinance Providing for the Environmental Protection and Waste Management Code of Quezon City” which directly addressed the “protection and promotion of the health, and the right to a clean environment.” Under this provision, it enumerated the general provisions, operative principles, and definition of terms that were used in the ordinances included in the code. The environmental code aimed to codify all other environmental policies into one booklet available for the city and residents’ consumption

In response to the research objectives, Chapter IV of the Environmental Code entitled Solid Waste Management contained all the policies on waste management and plastic use ranging from garbage collection schemes, waste segregation, and the proper use of plastic. Divided into 16 sections, the ordinance mandated all residents, households, commercial and business establishments, industries, institutions, subdivisions, and condominium owners and developers to obey the policies and to maintain the cleanliness and orderliness of the city.

Aside from the implementation of garbage segregation and collection that was mostly mentioned by Richard, the discussion tend to focus on the business establishments with the use of plastic. He answered:

Are you familiar [with] the signage? Dapat lahat ng malls may signage na “bring your own reusable plastics”, bawal ang plastic sa mga government institutions...that’s I think that’s the most important discussion, yung sa...

regulation of plastic use kasi some are allowed, some are not. *[Are you familiar with the signage? All malls should have signages “bring your own reusable plastics,” plastic is not allowed in government institutions...that’s I think the most important discussion, with the regulation of plastic use because some are allowed, some are not.]*

Consequently, Chapter IV Section 14 supported this claim which stated:

Section 14a: All business establishments using plastic and paper bags in their business transactions should display conspicuously in their stores, especially in the transaction counter, the environment friendly notice “SAVE THE ENVIRONMENT, BRING YOUR OWN RECYCLABLE/ REUSABLE BAGS.”

If consumers failed to bring reusable bags to these stores, they were charged for every plastic bag that they will use. The collected payment was also known as the green fund which will be used for the environmental programs and programs approved by the department. Before approval, the projects should be “in accordance with the existing programs, trust, and priorities of the city.” As Richard mentioned:

Are you familiar with the green fund? All malls shall charge 2 pesos for the use of plastics. Now we have 240 million pesos for that.

Subsections from the Solid Waste Management ordinance also supported

Richard’s claim on the plastic bag fee and the use of the green fund which provided:

Section 14f: All shopping malls, supermarkets, department stores, grocery stores, fastfood chains, drug stores, pharmacy shall charge and collect a fixed amount of two pesos (P2.00) per plastic bag regardless of size.

Section 14h: The “green fund” shall be utilized for the sole purpose of maintaining, developing, promoting, and protecting the environment by means of programs and/or projects to be determined in the Implementing Rules and Regulations of this Code. The Department shall closely coordinate with the stores and barangays where such projects or programs may be implemented.

When asked whether they were able to regulate the use of plastic in wet markets, he continued:

Yes. Ang allowed lang dun yung plastic labo. For wet goods only. It should be used as a primary packaging material, ganun lang dapat ang gamit niya. *[Yes. Only the thin plastics is allowed. For wet goods only. It should be used as the primary packaging material, that should only be its use.]*

Aside from the banning of other types of plastic in stores, Styro is also prohibited as packaging material. This was in conjunction to the city's ordinance on plastic use which stated:

Section 15a: The use of plastic bags and polystyrene materials, commonly known as Styro, in all government institutions in Quezon City, including all City-owned facilities, is prohibited.

Section 15c: Concessionaires and vendors in all government institutions in Quezon City, including all City-owned facilities, who are selling wet goods are allowed to use plastic "labo" only as primary packaging for hygienic purposes.

As the population in the city grows rapidly, it became disproportionate to the projects and programs being implemented. The problem in monitoring and inspection of the violators came up, and Richard explained that they have regular schedules for inspection:

Kaya nga dineputize namin yung mga barangay, all BPSOs are deputized environmental enforcers. They are the ones who would monitor and they [would] submit a monthly report for us who complied, sino yung mga naissuehan ng ticket, mga violations, may mga ganun. *[That is why we deputize the barangays, all BPSOs are deputized environmental enforcers. They are the ones who would monitor and they would submit a monthly report for us who complied, who were issued a ticket, the violations, like that.]*

The monitoring and inspection of EPWMD is part of their responsibilities under Chapter II of the Environmental Code that clearly stated:

Section 2c: Institute a standard monitoring system in the delivery of garbage collection services in the City.

Section 2k: Monitoring and reporting system to collate data or records of penalized residents, commercial, industrial, etc.

They also went to sites where most violations happened, may it be the residential areas or business establishments. Based on the database that they collated, they were able to track what area had the most violators with the demographics: “lalaki o babae, age bracket” in which they will anchor the specific programs and projects targeted towards the specific demographic.

With regards to waste segregation in households, commercial and business establishments, the sanction imposed on violators were as follows: first offense - P1,000 or community service for one day, second offense - P3,000 or community service for three days, and third offense - P5,000 or community service for five days.

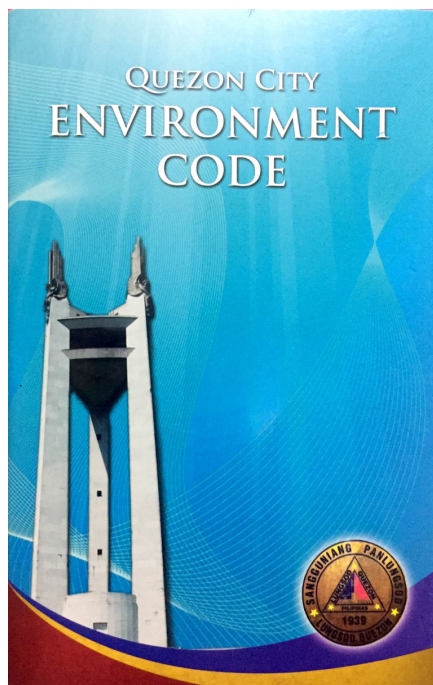


Figure 6. *Booklet on Quezon City Environment Code*

2. Marikina City

Located in the eastern part of Metro Manila, Marikina City is popularly known as the “Shoe Capital of the Philippines” because it houses the biggest manufacturers of shoes in the country. Marikeños are known to proud of their city because of the city’s cleanliness, peace and order, and strict enforcement of the law. The counterpart of EPWMD in Marikina City is the City Environmental Management Office (CEMO) which maintains and enforces environmental policies in the area. Victor is the administrative officer of the department whose responsibility was to oversee all the operations in the administration and to implement the projects and programs of CEMO. Similar to Quezon City, Victor mentioned that it is their duty to localize the provisions under the RA 9003.

For instance:

...yung provisions on waste segregation and source, ordinance number 46 yan na mandated sa buong Marikina na bawat bahay, establisyimento is dapat binubukod nila yung basura nila sa wet or nabubulok, or dry, or sa recyclable. [...the provisions on waste segregation and source, ordinance number 46 is mandated that each household in all of Marikina, establishments should segregate their garbage into wet, or biodegradable, or dry, or the recyclable.]

Congruent to the leaflet that Victor gave to the researchers, under Ordinance no. 46 Marikina City “requires the segregation at the source of all household, institutional, industrial, and commercial waste, and/or garbage into wet or biodegradable and dry or non-biodegradable, pursuant to Republic Act No. 9003.” Section 2 of the ordinance defines segregation, segregation at source, waste and garbage, and the differences of wet or dry garbage.

The biggest program that they have done for the environment is their garbage collection system where they employed 21 mini dump trucks that conduct door-to-door collection around every house in Marikina:

Ayaw namin na sa isang kalsada nasa isang kanto lang, apektado kasi yung lugar na yun. Saka hindi namin mamonitor kung nagsesegregate ba sya ng basura. So halimbawa sa iyong barangay, so kami may labing anim na barangay kami, so yung barangay apat na beses ka naming makokolektahan. Dalawang beses sa nabubulok, walang pakinabang at bumabaho. Kasi ganun yung segregation namin eh. Isang beses sa di nabubulok o recyclable o may pakinabang na basura. At another isang beses naman dun sa kuyagot o yung mga extra bulky waste. Gaya halimbawa may sirang furniture ka, may sirang appliances ka, nag trim ka ng mga puno, nag repair ka ng kisame mo. Yun yung araw na pwede mo syang i-dispose, every Sunday naman yun. *[We don't like in one street it's (placed) in one corner, the place will be affected. And then we won't be able to monitor whether the resident is really segregating his trash. So for example in your barangay, so we have 16 barangays, so for each barangay trash will be collected for four times. Two times for biodegradable, no use and trash that stinks. Because that is how segregation works for us. One time for non-biodegradable or recyclable or trash with use. And another time for kuyagot or the extra bulky wastes. For example if you have a broken furniture, broken appliances, you trimmed down trees, you repaired your ceiling. That's the day that you can dispose, that's every Sunday.]*

Victor further explained that residents should only put out their segregated trash whenever the truck strikes their bells -- a signal of their arrival. He added that when there was a problem on their part, they will make sure to still collect the trash on the assigned day even if it meant getting the garbage late at night. Moreover, the garbage personnel were strict whenever they see trash lying outside houses when it was not yet the right time, and they have the right to issue the violator a ticket with a fine of P2,000, community service or blood donation. They added the blood donation as a form of payment because they recognized that not all residents were able to afford the fine:

...nakita namin yung kahalagahan ng dugo. Ang dami na namin syang naililigtas, so napakalaking pakinabang nyan na talagang everyday, every

minute merong mga disgrasya lalo na meron kaming nandito yung Amang Rodriguez Hospital diba? Napapakinabangan namin yun. [...we saw the importance of blood. We were able to save many lives, so it was very beneficial that everyday, every minute there are accidents especially we have it here at Amang Rodriguez Hospital, right?]

The community service and blood donation as penalties were also effective in other violations of the policies of CEMO. After collecting the garbage from houses and business establishments, trash is transported to the Materials Recovery Facility (MRF) which according to the bookmark Victor presented to us, the MRF was defined as a “place where domestic type of solid waste collected from households and business establishments are delivered to be further sorted, processed, and stores temporarily.” The MRF will decide and identify whether the garbage will be placed in sanitary landfills, recycled again, or placed in a bioreactor to turn into compost or fertilizer. On the other hand, used cooking oil is separated from the collection of trash, and there is a roving vehicle that collects it once a month. The used oil is then handed to the MRF to be mixed with other materials to melt Styrofoam, which is banned in the city.

The department also regulated the use of plastic in supermarkets, wet goods and dry goods. Plastic sando bags were not allowed in the city and Styrofoam packaging was totally banned. This provision is aligned with Ordinance no. 18 which regulates “the use of plastic packaging on wet goods and banning the use of plastic packaging on dry goods.” Specifically for the regulation of plastic and the ban on Styrofoam, the ordinance stated:

Section 3: Prohibition on the use of plastic bags in dry goods. No business establishment shall use plastic bags as packaging material for dry goods and as secondary packaging for wet goods.

Section 4: Prohibition on the use of Styrofoam.

1. No supplier, retailer, fast food, restaurant, and any other business establishment shall use Styrofoam packaging and other similar materials as container for their food and other products.

2. The use of disposable utensils made of Styrofoam like plates, cups, and containers for commercial and personal purposes within the city is prohibited.

However, in wet markets they only allow:

...thin film, polyethylene, yung manipis lang? Yun lang yung plastic labo na tawag. Yun lang allow namin. One lang, isang package lang, pero kapag dinoble mo yung halimbawa bumili ka ng karne, dinoble mo siya ng plastic...bawal na yun maticketan ka na. [*thin film, polyethylene, the thin one? We call them plastic labo. That's what we only allow. Just one, one package only, but if you double it for example you bought meat, you doubled the plastic...that's not allowed, you will receive a ticket.*]

Next to garbage collection, CEMO's priority was to maintain the cleanliness of the city's surroundings. Victor shared that they not only target cleaning the major roads, but also the in betweens and residential roads. It does not matter whether:

...mayaman ka or mahirap lalo na ngayon halimbawa sa mga settlement area. Maski yung ano daang tao lang, dapat ano lilinisan namin sya ibig sabihin para bang sa buong Marikina ang paglilinis, ang mindset namin ang advocacy namin, walang naiiwan na mga lugar na marumi dapat bawat lugar ay malinis. [*...may you be rich or poor especially for example in the settlement areas. Even if it's only a walkway, we should clean it which means cleaning is for the whole of Marikina, our mindset and advocacy is that no place is left dirty, every place should be clean.*]

They have a decentralized system that they follow when cleaning the city. All the street sweepers were employed under the government, unlike in Quezon City where the cleaners are employed through private institutions. To monitor all the operations of CEMO, they have designated area managers who lead the cleaners in each barangay:

...yung labing anim na barangay, hinati namin ito sa limang service area na yung pang-limang service area kasi yung Marikina River Park along the

river yun. Ibig sabihin nun may mga area manager kami dun, area supervisor na kung saan may hawak sila na mga street cleaners na talaga nagmemaintain ng bawat barangay na yun, yun yung kagandahan. So ang sistema namin araw araw lumalabas yun na kagandahan nun hundred percent nakikita nya yun buong kapaligiran. Kaya yun yung aming ano, namonitor namin kung marumi, o malinis yung isang lugar. So kami na nandito sa admin, nakikita namin yung nangyayari sa kanila. [...the 16 barangays, we divided them into five service area and the fifth service area is the Marikina River Park which is along the river. It means we have area managers there, area supervisors who handles the street cleaners who maintains each barangay there, that's the beauty about it. So our system is that every day, the beauty of it, 100% they will be able to see all the surroundings, That is why we are able to monitor if the area is dirty or clean. So here in the admin, we can see what is happening to them.]

Victor showed the Facebook chat of the area managers and the administrators

where each manager sent photos of the area to report back to the administrator about their current situation. He explained that it helped them in monitoring the area and in commanding the cleaners instantly about what they can do when problems arise.

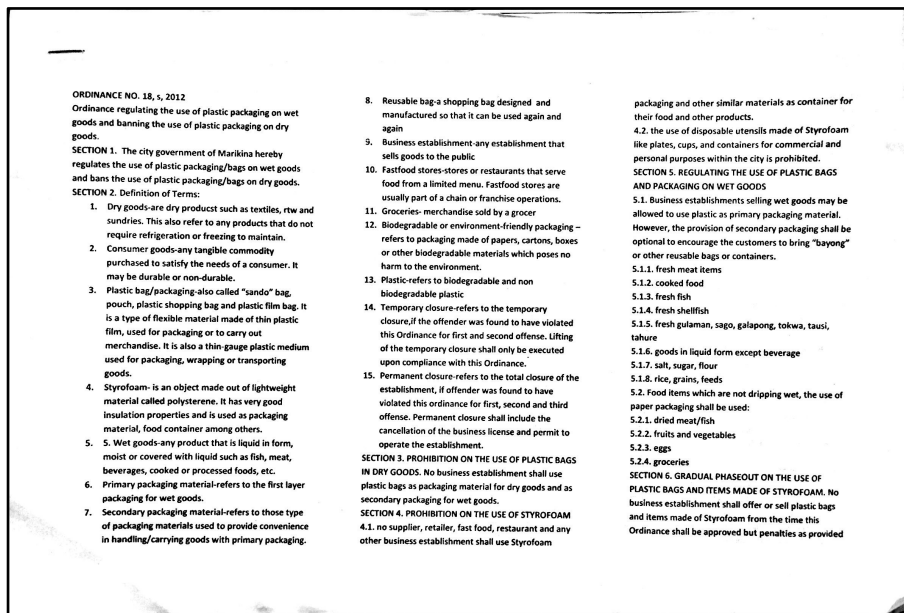


Figure 7. Flyer on Marikina City's Ordinance no. 18

ORDINANCE NO. 32, SERIES OF 1990

AN ORDINANCE ON THE PROPER GARBAGE DISPOSAL WITHIN THE MUNICIPALITY OF MARIKINA

WHEREAS, proper disposal of garbage affects the cleanliness, health and sanitary condition of the community:

WHEREAS, It has been observed that improper and indiscriminate throw, dumping and disposal of garbage along sidewalks, streets, esteros, creeks, rivers, vacant lots, parks and private and public places have caused garbage accumulation and unsanitary and unhealthy conditions; and

WHEREAS, It is imperative to protect the health and well-being of community by inculcating proper attitude and instilling discipline in the disposition of waste and garbage.

NOW THEREFORE, be it ordained by the Municipal Council in session that:

Section 1. Garbage shall be properly disposed of only in assigned and designated places. Garbage shall not be thrown, dumped and disposed of left along sidewalks, streets, creeks, esteros, rivers, vacant lots, parks and public places:

SECTION 2. Garbage for disposal shall be kept inside the premises and shall only be brought outside sealed or tied, and properly placed in sacks or bags upon collection by the waste/garbage haulers. In case garbage could not be collected, it should be brought inside to await for collection:

SECTION 3. Any violator found guilty shall be penalized with a fine in the minimum of One Hundred Pesos (100.00) and not more than Two Thousand (2,000.00), or imprisonment of not less than five (5) days nor more than one (1) year or both, at the discretion of the court, without prejudice to the imposition of a higher penalty under any other law.

SECTION 4. All other ordinances concerning garbage disposal are hereby deemed amended or repealed.

APPROVED: NOVEMBER 23, 1990.

Figure 8. Flyer on Marikina City's Ordinance no. 32

ORDINANCE NO. 046, Series of 2002

ORDINANCE REQUIRING THE SEGREGATION AT THE SOURCE OF ALL HOUSEHOLD, INSTITUTIONAL, INDUSTRIAL, AND COMMERCIAL WASTE AND/OR GARBAGE INTO WET OR BIODEGRADABLE AND DRY OR NON BIODEGRADABLE, PURSUANT TO REPUBLIC ACT NO. 9003

WHEREAS, Republic Act No. 9003 provides for an ecological solid waste management program, creates the necessary institutional mechanisms and incentives, declares certain acts prohibited and provides for penalties and appropriates funds therefore;

WHEREAS, Section 10 of the above-cited Republic Act provides that, "Pursuant to the relevant provisions of R.A. No. 7160, otherwise known as the Local Government Code, the LGUs shall be primarily responsible for the implementation and enforcement of the provisions of this act within their respective jurisdiction.,"

WHEREAS, Section 21 (Mandatory Segregation of Solid Waste) of R.A. 9003 has likewise provided that, "x x x LGUs shall evaluate alternative roles for the public and private sectors in providing collection services, type of collection system, or combination of systems, that best meet their needs; *Provided*, that segregation of wastes shall primarily be conducted at the source, to include household, institutional, industrial, commercial and agricultural source; x x x ", and Section 22 of the same Act has likewise called for the standards and requirements for segregation and storage of solid waste;

NOW THEREFORE, BE IT ORDAINED, AS IT IS HEREBY ORDAINED by the CITY COUNCIL OF MARIKINA, in session duly assembled, that:

SECTION 1. The City Government of Marikina hereby requires the segregation at the source of all household, institutional and commercial waste and/or garbage into wet or biodegradable and dry or non-biodegradable, pursuant to Republic Act No. 9003.

SECTION 2. For purposes of this Ordinance, the following terms are hereby defined as follows:

a) **SEGREGATION** shall refer to a solid waste management practice of separating different materials found in solid waste in order to promote recycling and re-use of resources and to reduce the volume of waste for collection and disposal.

b) **SEGREGATION AT SOURCE** shall refer to a solid waste management practice of separating at the point of origin different materials found in solid waste in order to promote recycling and re-use of sources and to reduce the volume of waste for collection and disposal.

c) **HOUSEHOLD, INSTITUTIONAL, INDUSTRIAL AND COMMERCIAL WASTE OR GARBAGE** shall refer to all discarded wet or dry waste in households, business establishments, commercial waste, non-hazardous institutional and industrial waste, construction debris and other non-hazardous/non-toxic solid waste.

d) **WET OR BIODEGRADABLE GARBAGE or WASTE** shall refer to post-consumer materials which would undergo decomposition and/or can be transformed into some other forms of raw material of beneficial use, such as soil fertilizer.

e) **DRY or NON-BIODEGRADABLE GARBAGE or WASTE** shall refer to post-consumer materials which could be transformed into new product or to another usable material or processed and used as a raw material in the manufacture of a recycled product.

SECTION 3. Each household, institutional, industrial or commercial garbage or waste shall be put in separate receptacles or containers properly marked, i.e., one for the wet or biodegradable and one for dry or non-biodegradable, secured and protected from insects and pests and place in the customary or usual place where garbage collectors from the Waste Management Office shall collect them.

SECTION 4. The Waste Management Office is hereby tasked to prepare and promulgate the necessary rules and regulations for the effective and efficient implementation of this Ordinance.

SECTION 5 Penalty Clause. Any household, business or commercial establishment, institution, industrial, and manufacturing plant that will be found or apprehended not to be complying with this Ordinance shall be penalized with a fine of TWO THOUSAND (P2,000.00) PESOS and non-collection of their garbage or waste until such time that the fine is paid.

Figure 9. Flyer on Marikina City's Ordinance no. 46

| <u>ORDINANCE NO. 073, SERIES OF 2002</u> | |
|--|---|
| <p>ORDINANCE ADOPTING THE ANTI-LITTERING CODE OF MARIKINA 2002</p> <p>WHEREAS, the City Council of Marikina enacted Ordinance No. 213, Series of 1998, otherwise known as the Anti-Littering Code of Marikina;</p> <p>WHEREAS, the said Code has been subsequently amended by Ordinance No. 78, Series of 1999, providing for an increase in penalty for littering as well as designating and deputizing officers in the local government with specific tasks in the implementation of the anti-littering law;</p> <p>WHEREAS, it has been found based on record that littering in public places has not been completely contained despite the increase in fine to One Hundred Pesos (Php 1,000.00);</p> <p>WHEREAS, the enforcement strategy must further be defined and clearly delineated among agencies of the local government;</p> <p>NOW THEREFORE, BE IT ORDAINED, AS IT IS HEREBY ORDAINED BY THE CITY COUNCIL OF MARIKINA IN SESSION DULY ASSEMBLED:</p> <p>SECTION 1. This Ordinance shall hereafter be called "The Anti-Littering Code of Marikina 2002"</p> <p>SECTION 2. It shall be unlawful for any person to throw small litter materials on streets, sidewalks or other public places, including government building and offices and public utility vehicles within the City of Marikina.</p> <p>SECTION 3. Definition of Terms:</p> <p style="padding-left: 20px;">a. "Small litter materials - shall include, but not limited to cigarette butts, cigarette packs, candy/food wrappers, carton/paper/plastic bags, masticated chewing gum, fruit seeds and remains, among others.</p> | <p>SECTION 4. Any individual caught littering in violation of Section 2 hereof shall pay a fine of Five Hundred Pesos (Php 500.00) upon issuance of the pertinent Sanitation Citation Ticket.</p> <p>If after seventy-two (72) hours from his receipt of the Citation Ticket the violator fails to appear or refuses to pay the corresponding fine, the City Mayor shall direct the City Legal Officer to initiate within twenty-four (24) hours prosecution proceedings against the violator with the City Fiscal Office.</p> <p>SECTION 5. Any person who is convicted by the court for refusing to pay the fine for littering shall be imposed a fine of not more than Five Thousand Pesos (Php 5,000.00) or imprisonment of not more than one (1) year, or both at the discretion of the court.</p> <p>SECTION 6. The barangay Council of this city shall actively participate and are tasked with the implementation of this ordinance in their respective barangays. They shall deputize the necessary personnel as Sanitation Officers for this purpose. Each personnel so deputized must have sufficient identification and authority to apprehend violators and shall be provided with the necessary Sanitation Citation Ticket.</p> <p>SECTION 7. The City Waste Management Office is tasked to supervise the implementation of this ordinance citywide and to issue the corresponding Implementing Rules and Regulation (IRR) for effective implementation. It shall coordinate the efforts of all barangays concerned with those of its office to avoid duplication and conflict in enforcement.</p> <p>SECTION 8. The Waste Management Office is authorized to issue the Sanitation Citation Ticket for the apprehensions pursuant to this Ordinance.</p> <p>All tickets issued, whether used or unused, must be reported to the Waste Management Office. Any cancellation of the fine herein imposed without issuance of the official Sanitation Citation Ticket shall render the collector liable to criminal prosecution and if convicted to a fine of Five Thousand Pesos (Php 5,000.00)</p> |

Figure 10. Flyer on Marikina City's Ordinance no. 73

| <u>ORDINANCE NO. 210, SERIES OF 1996</u> | |
|--|---|
| <p>ORDINANCE PROHIBITING SCAVENGERS, WITH OR WITHOUT PUSH CARTS, FROM INTERFERING WITH THE GARBAGE COLLECTION OF THE MUNICIPAL GARBAGE TRUCKS, OR TO FOLLOW SAID GARBAGE TRUCKS FOR THE PURPOSE OF TAKING ANY ITEM OR MATERIAL THEREFROM, AND IMPOSING PENALTIES FOR VIOLATION THEREOF</p> | |
| <p>WHEREAS, there were numerous reports that during garbage collection of municipal garbage trucks, scavengers with push carts are often seen following them for the sell to junk dealers;</p> <p>WHEREAS, while in the process of obtaining junk materials from garbage trucks, these stalking scavengers have unavoidably caused small litters to be strewn on the streets;</p> <p>WHEREAS, this malpractice has likewise caused interruption on the work of garbage collectors as they are being hampered by the activities of the scavengers;</p> <p>WHEREAS, while the municipal government is cognizant of the fact that scavenging may provide some income to needy individuals, nevertheless, collected garbage are already considered waste and should be disposed off as required</p> <p>WHEREAS, as it is also the declared policy of the municipal government of Marikina to preserve the cleanliness and sanitary condition of all the streets of this town, the activities of these garbage truck scavengers should then be discouraged;</p> | <p>NOW THEREFORE, BE IT ORDAINED, AS IT IS HEREBY ORDAINED by the SANGGUNIAN BAYAN OF MARIKINA, in session duly assembled, that:</p> <p>SECTION 1. DEFINITION OF TERMS. For purposes of this Ordinance, the following terms are hereby defined as:</p> <p>"SCAVENGERS" shall refer to persons or individuals, who for profit or for personal use, shall gather any item or material considered garbage from garbage trucks owned and operate by the municipality.</p> <p>"GARBAGE TRUCKS" shall refer to all trucks, Jeeps or motor vehicles being utilized by the municipal for collecting of garbage, including those owned or utilized by all barangays of Marikina for garbage collection.</p> <p>"PUSH CARTS" shall refer to two, three or four-wheeled carts, irrespective of make or size, that are utilized by scavengers to load and transport junks or waste materials they have collected.</p> |

Figure 11. Flyer on Marikina City's Ordinance no. 210

3. *Comparison of Quezon City and Marikina City's Ordinances*

One defining factor in comparing Quezon City and Marikina City is their land area (See Figure 12), given that the latter is relatively smaller in area and lesser in population making it much more manageable in terms of policy implementation. It is true that laws will be more effective when it is applied to few; even if Quezon City employs more cleaners for every area, if there are more people littering, then the cycle continues. However, both local government units made sure that they hire collectors and cleaners without forgetting about people who will monitor who were penalized and if the area was cleaned.



Figure 12. *Land Area Comparison of Quezon City and Marikina City*

Quezon City and Marikina both recognize the importance of localizing Republic Act No. 9003 or the Ecological Solid Waste Management under their jurisdiction. They might have differences in details, but the ordinances under it were generally the same especially when it came to waste management and plastic use. For instance, the two cities

regulated the use of plastic in supermarkets and wet markets. They only allow plastic *labo* as primary packaging material, but still encouraged people to bring their own reusable bags even in wet markets. They also banned styrofoam in all packaging materials because it contains toxic and hazardous substances that can leach into food and drinks which is very harmful to the skin and the environment.

When it came to garbage collection and segregation, Marikina City presented a more day to day example of the implementation of their scheme. Collectors went to every household to collect the scheduled type of trash for the day. They were very strict with cleanliness and made sure that the residents' trash were kept inside their houses until they came to pick it up. Area managers were assigned to every barangay to oversee the progress of collecting and cleaning of the surroundings, which were reported in real time to CEMO through their group chats. Although Quezon City apparently practices strict garbage collection and segregation, Richard only shared the ordinances by what is written by the book, unlike Victor who mentioned concrete examples of activities and the progress of their work.

C. The LGU's Dissemination Methods on Waste Management and Plastic Use

This section laid out the dissemination methods done by EPWMD of Quezon City and CEMO of Marikina City in informing its residents about the policies and ordinances of the local government units on waste management and plastic use. The first subsection started with analyzing Quezon City, followed by Marikina City, and a comparison of the cities' dissemination methods. Overall, this section described and compared the

communication tools and efforts done by the cities to get their message across its constituents.

1. Quezon City

Despite the well laid out programs and projects on waste management and plastic use, Quezon City ensured that these were properly communicated to their constituents.

Richard added that “without enforcement, the people will not recognize all your programs and projects.” It is true that they may have all these laws, but if people are not aware that these exist, they will not be able to follow them properly:

Although in the creation of the law, it was enacted by the city council, there are public consultations but there are also components of information education campaign for a period of 3 months but I don't think that's enough to cover all of Quezon City. So, there are IEC programs to educate others and we conduct dialogs, symposiums, on site dialogs, school based projects and many other things, fun run just like that.

As part of the responsibilities of EPWMD, Chapter II Section 3B of the Code, the Ecological Solid Waste Division is tasked to “conduct Information, Education, and Communication (IEC) Campaign on proper solid waste management.” Quezon City admits that they have to be “innovative” and not just rely on the fact that there is a law that exists. For the department to “compel compliance” from the people, they cannot “just enforce the law; education must be incorporated.” The first option is to communicate the law through dialogues with the community in order to identify the problems such as the low compliance, given that “simple lang yung batas.” Enforcers must also be educated and should understand:

...papaano ipatupad ang batas, alamin bakit nahihirapan silang mag-comply dun sa batas. Ano ba yung mga nagiging problema? [...how to implement the law, know why people find it hard to comply with the law. What turns out to be the problem?]

Other than the on ground communication methods that the department employed, Quezon City also have their own website (<https://www.quezoncity.gov.ph>) with all the basic information needed about the different departments, reports, laws and ordinances, projects and programs; even the Environmental Code is uploaded on their website. EPWMD's Facebook page (<https://www.facebook.com/qc.epwmd/>) with 3,800+ page likes is also active in posting photos of the projects and events that the department spearheaded. Richard uses online sites as a monitoring tool:

to evaluate how effective the programs and projects because one of the best way to gauge *what is the* effectivity *of your* programs and projects *is the* feedback from the public. So it provide opportunity for them.

Some informants from Quezon City supported that they indeed see posts online about the department. Additionally, one mentioned that Quezon City also distributes flyers and posters stating the schedule of the collection of trash.

In the end, Richard emphasized that they are not doing this for themselves:

...we are doing this for the next generation. We owe this to the next generation really. Ang lagi nga naming sinasabi kapag nandoon kami sa mga eskwelahan, sa mga GPTA sa parents, sinasabi namin 'even [if] you can afford to send your students to good schools, finish their studies, kung wala na yung environment nilang dapat tamasahan, useless ang lahat.' So I think yun ang pinaka-message naman na gusto namin [iparating.] [*...we are doing this for the next generation. We owe this to the next generation really. What we always say whenever we are at the schools, to the GPTA with the parents, we say 'even if you can afford to send your students to good schools, finish their studies, if there is no environment to look out for, everything is useless.'* So I think that is the main message that we wanted to send out.]

2. Marikina City

The mentioned policies of the department are disseminated to the public because it is important for Marikina to explain these programs to their constituents. Some of their dissemination materials included bookmarks stating all the ordinances and the corresponding penalties of CEMO, a booklet that contained the garbage collection scheme, schedule, map, and types of garbage which can be easily understandable because of the graphics, a fan designed to have *Tipid-Tubig Tips* and *Tipid Kuryente Tips* instructing the residents how to save water and electricity at home, and refrigerator magnets. It is part of their objective that every household has a copy of the materials because they believe that:

...napakahalaga na dapat bawat bahay o establisyimento sa Marikina, properly informed sila. Talagang gagastos ka ng milyon para sa ganyan oo. Kasi halimbawa Marikina, meron kaming nasa 100,000 na household dapat bawat bahay na yun meron sila. [...it is very important that every household or establishment in Marikina is properly informed. So you really have to spend a million for that. Because for example in Marikina, we have 100,000 households, each of them should have that.]

He acknowledged the fact that not all residents will read the Information, Education, and Communication (IEC) materials sent out to the households, which is why they also utilize Facebook, their website, the newspapers, and the Public Address (PA) System for disseminating information and announcements.

Currently, they have an active website (<https://www.marikina.gov.ph>) which contains news and announcements, the city, their ordinances, their programs, etc. However, ordinances on solid waste management were not available. Unlike EPWMD in QC, the CEMO did not have any Facebook page set up, they cleared that they use either the Marikina News or the Marikina PIO page for information dissemination.

They coordinated with the organized community associations and homeowners' associations whenever they want to call for general assemblies and meetings regarding the projects and programs of the city. Business establishments were also educated about the ordinances through orientations and seminars conducted by the department. It is mandatory to attend the seminars for the renewal of business licenses. In this way, both residents and businesses cannot escape not being knowledgeable about the available ordinances and programs in relation to the environment.

When Marikina City informants were asked about what communication materials they are aware of or had direct experience with, they supported the department that they indeed received the materials distributed in every household:

They give away pamphlets *just recently we were given* bookmarks and I think a paper fan about the schedule of trash collection and also used oil and also the rules about disposing of the trash that's why I was able to say it *because that is where I saw it...* They have a Facebook page I think it's either of the Mayor or of the Office of Marikina and then they have a lot of reminders there about waste management, also about traffic, also about floods so they are really on that. - Zeus

Yung sa flyers na dinistribute nila to the houses saka meron din kasi sila ngayong campaign eh. Parang pinupush yung parang "basura mo ibulsa mo" yung may jingle. *[They distribute flyers to the houses and then now they also have a campaign. They're pushing for the "Basura mo, Ibulsa mo" (Your trash, Pocket it) the one with the jingle.]* – Chelsea



Figure 13. Booklet which contains information on garbage collection.

CITY ENVIRONMENTAL MANAGEMENT OFFICE
MARIKINA CITY

POPULAR INITIATIVES

Materials Recovery Facility
The City's central MRF is a place where domestic type of solid waste collected from households and business establishments are delivered to be further sorted, processed, and stored temporarily.

RAINWATER HARVESTING
A ULTIMATE RESOURCE UTILIZATION AND MANAGEMENT INITIATIVE

PLASTIC TO BRICKS: STYRO / PLASTIC Densifier
FROM WASTE TO LANDSCAPE

COMPOSTING: BIOREACTOR
FROM GARBAGE TO COMPOST
SSCO

STREET AND SIDEWALK CLEANING OPERATION

ALWAYS REMEMBER

| ORDINANCE | PENALTY |
|---|--|
| # 046 - REQUIRING WASTE SEGREGATION AT SOURCE | • Php 2,000.00 • COMMUNITY SERVICE • BLOOD DONATION |
| # 136 - IMPROPER DISPOSAL | • Php 2,000.00 • COMMUNITY SERVICE • BLOOD DONATION |
| # 073 - ANTI - LITTERING | • Php 500.00 / PIECE |
| # 201 - PROHIBITING THE BURNING OF GARBAGE | • Php 2,000.00 • COMMUNITY SERVICE • BLOOD DONATION |
| # 120 - SCAVENGING | • Php 500.00 • COMMUNITY SERVICE • BLOOD DONATION |
| # 210 - UNTIDY SURROUNDING | • Php 2,000.00 • COMMUNITY SERVICE • BLOOD DONATION |
| # 69 - SEPTAGE AND SEWAGE MANAGEMENT | • Php 5,000.00 |
| # 18 - REGULATING THE USE OF PLASTIC AND TOTAL BANNING OF STYROFOAM | • Php 10K.00 — 1ST OFFENSE (TEMPORARY CLOSURE) • Php 20K.00 — 2ND OFFENSE (PERMANENT CLOSURE) • Php 50K.00 — 3RD OFFENSE (PERMANENT CLOSURE) |
| # 110 - CARWASH WITHOUT SEWER SYSTEM | • Php 5,000.00 |
| # 150 - ILLEGAL POSTING OF SIGNAGES | • Php 5,000.00 |

I ♥ MARIKINA

TEL. 948 1204/05

Figure 14. Bookmark which contains CEMO's facilities, ordinances, and penalties.



Figure 15. Fan which includes tips on how to save water and electricity.

Additionally, because of the current mayor's initiative, the campaign *Munting Basura, Ibulsa Muna* dance craze is popular among the children and residents which also gained popularity on Facebook. It was launched in January 2019 with the goal of educating the children as well as the adults about the importance of proper waste disposal, while listening to a catchy song. CEMO went around public and private schools to disseminate the information. Along with the campaign, they also distributed biscuits to the students:

...dati kasi candy, eh ngayon bawal na sa DepEd ang candy, dapat healthy naman kaya biscuit naman kami. So yun talagang [tinuro] namin sa kanila na hangga't maaari nga yun yung advocacy namin na kung merong munting basura, hangga't maaari ibulsa muna natin. Kung walang makitang basurahan tapos kung may makita nang basurahan sa bahay, dun nalang siya itapon. [before it was candy, but now DEPED does not allow candies anymore, it should be healthy so we opt for biscuits. So that's what we really teach to them as much as possible, that's our advocacy that if you have a small trash, as much as possible place it in your pockets. If you can't see any garbage bins, and then if you saw a bin at your house, that's where you should throw it.] - Victor

He summed it all up by stating that the efforts made by the department would not be possible if it weren't for the collaborative efforts that the team continuously gives in order to maintain the cleanliness of the city. It was also necessary that the actions for the environment should start from the government and for the seated city officials to support the projects.

3. Comparison of Quezon City and Marikina City's Dissemination Methods

Quezon City had more leverage than Marikina City in terms of having a codified set of ordinances for the government and residents' consumption. The Environmental Code allowed the researchers to fully analyze and crosscheck the interview with the ordinances on waste management and plastic use. It provided specific details on every policy that QC had that are handled by EPWMD from the definition of terms, prohibitions, and penalties while Marikina City was only able to give samples of the materials and leaflets of the ordinances.

However, it was not indicated whether Quezon City actively distributed copies of the Code to its residents. The department was only able to give the researchers vague examples of their communication materials for the dissemination of the ordinances, aside from the dialogues with the communities. This is where Marikina City stood out in providing concrete examples of their campaign materials. As mentioned earlier, each household received flyers and brochures containing rules on waste management and plastic, which was also verified by the informants residing in Marikina. This claim was supported by Mila, who shared that:

Umiikot eh yung mga barangay officials ata. Basta umaabot sa bahay na may ano, may material, promotional material or notice...yung collectors

mismo like nakakausap kami tapos may homeowners association din, so minsan dumadaan sa homeowners association. *[I think the barangay officials are making rounds. When they reach the house, they have a material, promotional material or notice...the collectors themselves like talk to us, and then there's also the homeowners association, so sometimes they go through the homeowners association.]* - Mila

What made CEMO effective in sending their message across their residents was their effort and persistence in handing out materials and personally engaging with the people. The second factor of effectiveness was the city's size and population; comparing Marikina City to other cities in the National Capital Region, it is more of a residential city than a mix of different establishments. The City Hall was able to communicate well since the key locations and communities were very close by. There were enough garbage trucks provided by the government, and collectors do not find it hard to roam around the area. This is very unlikely in Quezon City because there were even narrow alleys and streets that large trucks cannot get through.

Lastly, it was Victor who mentioned at the end of the interview that the policy implementation overall would not be possible if it were not for the high officials, especially the Mayor. Although every department has their own duties, the implementation of rules come from the top down to its members, thus pushing them to do it. Since the 1990s, there was a progressive shift to change the city through the efforts of the current Mayor at the time. Richard also mentioned that the good thing with the city was that even if the mayor was replaced by another person, the projects still remained:

Nandito parin kami, natuloy tuloy namin na...ang kagandahan ng aming bagong mayor talaga, lahat ng projects and programs before, pinagpatuloy niya talaga and inintensify niya, ganun talaga. [We are still here, we were still able to continue... the good thing about our new mayor is that all the projects and programs before, he still continued it and really intensified it.]

In summary, although Quezon City was able to provide a comprehensive list of ordinances and had more policies compared to Marikina City based on the archived documents, the latter was more effective in encoding messages about the environment to the residents through the CEMO interview and the residents' testimonies.

D. Facilitators and Barriers to the Youth's Engagement in the Zero Waste Movement

The study aimed to explore the factors behind their decision to engage in the movement. Thus, this section discussed the driving factors and barriers to the youth's engagement in the Zero Waste Movement as derived from the insights of the informants.

1. *The Driving Forces: Influences of the Youth in Pursuing a Zero Waste Lifestyle*

The youth is driven to support the Zero Waste Movement for a lot of different reasons that stem from their own experiences and beliefs, as well as their interaction with different environments and their peers. In examining the responses of the informants when asked about what led them to start their own zero waste journey, the researchers were able to derive five themes that are greatly parallel to the study's theoretical anchor, the Social Ecological Model. This section will discuss the five different factors that influenced the youth zero waste participants, which are: a.) The Self: a personal choice; b.) The Institutions: as influenced by organizations; c.) The Influencers: as influenced by interpersonal relationships; d.) The Communities: as influenced by the media and community and; e.) The Authority: as influenced by public policy.

a. The Self: A Personal Choice

Given that the Zero Waste Movement calls for creating subtle lifestyle changes and sustaining them on an individual level, most of the informants made a conscious choice of supporting the movement on their own. There needs to be a conscious decision of committing to sustaining the lifestyle despite any contradictions, based on Dane's experience:

I researched on it, asked... talked to people like 'i'm thinking about doing this because I heard about this girl...' and they are like 'Oh that's impossible,' so like a lot of people weren't supportive. I guess the term, its overwhelming. When I decided, I'll just do it, because it's what I can, I want to do, in terms of like helping the environment in my own way. In 2016, it became like a lifestyle switch.

Others decided to begin their zero waste journey simply because they wanted to do it. Zeus thought of starting a zero waste lifestyle since he "didn't want to waste any stuff" and felt like he has the self-efficacy to follow the tenets of the movement. Being newly married, he wanted to minimize the waste in his household and be "efficient with the use of [their] resources." In the case of Mila, living a zero waste just "feels right" whenever she does something to reduce her waste and make less of an impact to the environment.

Moreover, the desire to engage in the Zero Waste Movement also stemmed from their own interest in preserving and caring for the environment due to their own experiences and beliefs. For instance, Karol shared that she shifted to a zero waste lifestyle due to her "love for the environment and the knowledge that we are all stewards of God's creation." For Stella who has been pro-environment since she was in high school, the environment is something she "cares about naturally," which led to her starting her own zero waste journey. She also explained how the negative impacts to the

environment are caused by humans as well, and yet, nothing has been done to help alleviate them.

A sense of social responsibility is one of the factors that urged Ivy to support the movement. She shared how she panicked about how scary climate change and global warming is that made her reflect on what she can do on her own:

Social responsibility talaga na parang I think it really starts there. Na parang, ngayon kasi it's scary eh. I don't know a lot about climate change, global warming, the thing that's happening in Antarctica, I don't know a lot about it pero it's scary. So parang panic mode ako, what can I do. So in my own way, like... kasi I can't really control the waste of others. [*I think it really starts with social responsibility. Now, it's scary. I don't know a lot about climate change, global warming, the thing that's happening in Antarctica, I don't know a lot about it but it's scary. So it's like I'm in panic mode, what can I do. So in my own way, because I can't really control the waste of others.*]

Moreover, their experiences with nature while growing up was a big factor in their decision to pursue their engagement in the movement. Mara shared how her love for nature and her desire to preserve the beauty of the seas is what pushed her to live a zero waste lifestyle:

I love nature, and there was this one time when I was a kid, [we did a] free dive and then I loved what I saw underwater... I just really loved seeing what's down there. And then I become so unhappy seeing trash, I pick it up and I realized [that] this beauty cannot be preserved if people will try to keep destroying it.

Experiencing the negative effects of plastic to the environment became enough of a reason for Ella to start making a change to help minimize waste. Her experience of the flood in Marikina during Ondoy, one of the most devastating tropical cyclones, made her realize how plastic could bring about destruction to both the environment and

humankind. She began reading more about the effects of plastic online, and later on, decided to participate in the Zero Waste Movement:

Nung nagbasa ko mas lalo pa ako na inform na kung ano dun yung epekto like yung mga turtles na nakakakain ng mga plastic straw, namamatay nalang sila saka yung mga isda. Sa news, kunwari nalang... yung malalaking isda, natatagpuan sa tabi ng dagat na nakakakain ng mga plastic waste or kung ano mang basura. [*When I read, I was informed more about the effect, such as the turtles ingesting plastic straws, they die, and the fishes. In the news, for example, the big fishes that ate plastic waste or trash are found by the shore.*]

Joan shares the same sentiment as Ella, given that they both reside in the same city. She shared how seeing Marikina being flooded and witnessing the impacts of plastic firsthand on her city, along with her own preference of keeping her area clean made her want to try and make a difference in her lifestyle:

Personally ayoko nung ganun. Yung iiwan mo lang diyan dahil mas convenient sayo na iwan diyan. At the same time pag nakatira ka kasi sa Marikina, malaking impact kasi na makita mo na yung paligid mo binabaha lagi sobrang hirap at sobrang hassle. [*Personally I don't like that. Just leaving [trash] there because it's more convenient for you. At the same time, if you live in Marikina, seeing your surroundings always experiencing floods leaves a big impact, it's hard and a hassle.*]

In the case of Jas, joining the movement inspired to do more than she has already been doing for the environment, since she mentioned that she has been “passionate about really caring for the environment” even before she discovered the Zero Waste Movement:

Before I joined the Zero-Waste online group, I was already interested in clean up drives, and that sort of stuff. But when I joined the group, I was really inspired to do more like I bought my first metal straw, I bought my collapsible cups and stuff and I started bringing utensils everywhere, like ecobags. But even then, I was already interested in trying to help out to the environment in doing what I can.

She further added how seeing the impacts of the climate change especially on social media made her think that with “just little effort, [she] can help out a lot. Why not try to keep this place clean.”

There are various individual factors such as their preconceived beliefs and experiences that influence their decision to engage in the Zero Waste Movement. The belief of stewardship, or the individual responsibility of caring for the environment is strong among these informants. Consequently, negative experiences with the environment becomes a factor in beginning a zero waste journey, given that firsthand experiences have more impact in comparison with mere exposure to information online. Previous interactions with the environment also brings about a sense of stewardship among the informants. Accordingly, the burden of deciding to make changes to one’s lifestyle begins when the individual makes a conscious decision to do so.

b. The Institutions: As Influenced by Organizations

The youth zero waste participants’ organizational environment also has a factor in their transition to a zero waste lifestyle. This includes their school, workplace, affiliations such as school organizations, and online communities. Supportive environments facilitate their desire to live a zero waste lifestyle.

At the onset of a child’s life, schools have a great influence on their system of beliefs and ideologies. The values taught by the school including policies are easily ingrained into the system of individuals. Most informants shared how their previous schools were one of the greatest influences behind their participation in the movement. For one, Dane shared how her high school taught her the value of social justice, which

later on reignited her passion to help the environment as it has been instilled in her since then:

I think it had a lot to do with my disposition as a person. I studied in Miriam in High School, and Miriam is for social justice. I didn't realize until I think, after college it reignited something, [because] I always cared about the environment, but it was always like big issues that I couldn't really do anything about, like what am I gonna do about climate change on a whole scale coz people talk about it like a big scale with I guess, people don't break it down that you can do something about it. So I think, Miriam helped me a lot.

Environmental practices in schools also bear an influence on their zero waste behavior. Most respondents shared how they have been doing pro-environmental practices such as segregation, recycling, etc. As told by Frances and Mara, their schools were both strict on making them segregate their trash, a practice that they were able to bring with them even after they already graduated. Moreover, policies such as CLAYGO (Clean As You Go) and projects such as newspaper drives, recycling drives, among others also contributed to their zero waste behaviors. Zeus mentioned how a mascot in his grade school was advocating for recycling, which made a great impact on him up until the present:

I think the most concrete example is probably nung grade school in Ateneo, we had this mascot. His name was Kapitan Linis and then his advocacy is to mainly recycle, it was to recycle if you have recyclables stuff like bottles and stuff, and then it's also to dispose your trash properly. I think from the start, I think ever since grade school talagang tumatak si Kapitan Linis sakin. I think it started by not using straws because I don't really like them in general and then for myself also personally, I don't like it when I produce trash...

College organizations are also a key influence for some of the informants, given that they are usually joined by students voluntarily out of their own interests. Moreover,

individuals in organizations are more likely to share similar values and beliefs, making it a source of support for people who want to forward a specific advocacy such as the Zero Waste Movement. Such is true for Frances since her diving organization back in college ignited her passion for marine life and consequently, protecting marine life in her own ways:

Like I guess the moment I decided to dedicate talaga my stuff to it was when I started to dive. I joined our diving organization ISDA. And then when I was exposed to diving, I was like it's so nice underwater. I want to preserve it as much as possible because I guess, before I started diving I don't really know like what was happening. I mean I knew that people don't really know where the waste goes but then when you actually see it for yourself, like heartbreaking. That's when I really decided to dedicate myself to it... when I joined ISDA, I felt like 'wow, I can be so free' thinking of those people share the same insights as you.

Being a part of a college organization was also able to instill some values for Ivy. She explained how her organization made her “feel the responsibility as part of the youth to make the future better” which led to her being the change that she wanted to see and become responsible of her actions towards the environment through living a zero waste lifestyle.

Apart from on-ground affiliations such as college organizations, many of the youth zero waste participants have created a community of like-minded individuals online, specifically on Facebook. Sharing experiences and struggles and relating to one another creates a different kind of support system which online groups are said to fulfill. As narrated by Karol, being a part of the online zero waste community made her feel like she was not alone, and gave her a sense of comfort when dealing with challenges in her everyday life as a participant of the movement:

Yung sa Buhay Zero Waste na Facebook, yung iba dun nagpopost na parang, ‘oh I went to this coffee shop pero nilagay parin nila sa plastic bago nila nilagay sa tumbler’ tapos parang nagrarant lang siya dun, tapos sobrang natuwa ako kasi akala ko ako lang yun. Akala ko may issues ako in life kasi ganun yung problems ko. Tapos di pala. [*The Buhay Zero Waste on Facebook, some people post things like ‘oh I went to this coffee shop but they put it in a plastic cup before putting it in the tumbler’ then they just rant there, and I was happy because I thought it was just me. I thought I had issues in life because my problems were like that. And it turns out, I’m not the only one.*]

Moreover, the online zero waste communities also help in terms of finding people who share the same interests and views on what they are advocating for. Dane shared how her online group’s meet ups help her since they “agree on a lot of things that a lot of other people don’t agree on,” which implies a sense of community and relatability between the members of the said group. In the case of Clara, joining an online zero waste community was greatly helpful due to the initial lack of support from her own family and friends.

Online zero waste communities are also a place for education and inspiration when it comes to incorporating the tenets of the movement in their own lifestyle. Jas shared how being a part of the online community widened her horizons and made her realize how much more she can do to help the environment:

Yes, because before I was just on my own trying to say no, trying to refuse plastics and eco bricking, but when I joined the group, it really hit home that I could do so much more. But basically the group just drilled in to me like the importance of what this is and why we should do more about it, because I’ve always been interested in caring for the environment and I think I just didn’t know or I didn’t really have the means or the resources to really find out how. So when I joined the group and there were a lot of knowledge and info and resources posted on there, and there is a lot of support from the other members of the group that they commensurate with you if know, if you are feeling guilty about something or failures about getting trash.

Next to schools, the workplace is also a common environment for learning values and practices. Workplaces that do environment friendly practices are considered a facilitator of zero waste behavior. Remi shared how her work environment supports her advocacy and how some of her workmates also share the same values when it comes to preserving the environment:

Tapos what's nice din there is that yung operations manager namin, she is also into zero waste and protecting the environment. Siya actually yung nag start ng Planet Your Program before I got there. When I was applying ah this is a good place to work in kasi it's not just yung dream job ko, it's also yung mga ideals ko na I get people na parang support group ko in that way. *[What's also nice is that our operations manager is also into zero waste and protecting the environment. She was actually the one who started the Planet Your Program before I got there. When I was applying I thought 'this is a good place to work in' because it's not just my dream job, it's also my ideas that I get people who are my support group in a way.]*

Moreover, policies in the office such as prohibiting single use plastic, providing reusable dinnerware, and encouraging employees to bring their own utensils also helps in sustaining a zero waste lifestyle, according to Ella.

Different types of institutions have spheres of influence over the beliefs, ideals, and values of individuals that interact with the environment that they created. Being the primary source of information and values, schools are considered to have an integral role in shaping an individual's behavior and beliefs, as well as in ingraining practices that they can take with them as they grow up. Furthermore, schools are also venues for creating communities of like-minded people through different organizations that students can join. Through these organizations, individuals are able to gain more learnings and form a deeper sense of appreciation for their interests which, in this context, are geared towards the protection of the environment.

Shifting from the primary learning environment, the workplace also proves to be a conducive environment for establishing and forming beliefs. Finding a support system for the advocacy that they are trying to pursue in their own working environment is important as it makes them easier to sustain their zero waste lifestyle, especially since they spend more time in their workplace than anywhere else.

Online zero waste communities are home to those who seek for support from other people who are trying to live zero waste. It is considered by many as a safe haven due to finding people they can resonate and identify with in terms of their experiences and beliefs. Consequently, such online communities are able to provide information based on the experiences shared by people within the community which allows newer members to learn more from those who have the expertise when it comes to living a zero waste lifestyle.

The importance of creating a conducive environment for individuals to learn about pro-environmental behavior and ideals were highlighted. It is evident how such values and practices related to the preservation of the environment are instilled by the major institutions that an individual typically interact with, such as schools and the workplace. As such, communities where like-minded people could organize also makes living a zero waste lifestyle a bit more bearable despite the challenges that they continuously face each day.

c. The Influencers: As Influenced by Interpersonal Relationships

Given that most humans are social creatures, most individuals are greatly influenced by their family and peers. Immediate family members, which includes an individual's parents and siblings, are considered to have the most influence on an

individual as they are commonly present starting from the onset of an individual's life. Pro-environmental behavior in the household such as segregation and recycling are key practices that serve as a foundation for some of the youth who currently live a zero waste lifestyle. This is the case for Cherry, who grew up in a household that practice zero waste, which became a "part of [her]." Another informant, Mila, shared that they practice segregation at home, and that she gets surprised whenever people do not practice segregation whenever they go out.

The values taught by parents are also one of the factors that contribute to one's inclination to live a zero waste lifestyle. Mara shared how her parents were the ones who brought her to the ocean which made her appreciate the beauty of the environment, making her want to preserve it. Her parents also taught her integral values and practices such as the proper disposal of trash:

My family, because it was my parents who actually brought me to those places. And then they would always tell me throw the trash properly, make sure you read where you are throwing. So as a kid I grew up in a clean place. The simple things [that my parents taught me], it gets stuck in my heart.

Considered as a second family, friends also have an influence on an individual's behavior and beliefs. In the case of Remi, she learned about the Zero Waste Movement through a friend in college who first introduced her to the No Straw Movement, which resulted to her starting her own zero waste journey.

Having similar interests and advocacies with friends is also integral in sustaining a zero waste lifestyle. Clara shared how she and her friends are all conscious about their waste, and how they do various practices in support of the movement together:

Yung mga friends ko kasi mga conscious din. Mga tipong bumili ako ng buritto set, so yung isa bili din siya, dala na din siya. Tapos kunware magsishare share kami na parang ‘uy ang kalat dito,’ tapos kunwari nagbibeach yung isang friend, ‘uy ang galing dito kasi magbabayad ka ng 100 tapos may ibibigay sila plastic bottle sayo, dapat lahat ng trash mo dapat nandun.’ Marerefund mo yung 100 mo kapag binalik mo yung bottle with trash sa kanila. Tapos parang kami, ‘woah amazing.’... Siguro mas madali kasi nakikita mo din sila na mas madaling mag adjust. *[My friends are also conscious. I bought a buritto set, so my other friend also bought and brought. Then for example, we’ll share things like ‘it’s dirty here,’ then for example my other friend would go to the beach, ‘it’s good here because you’ll pay 100 then they’ll give you a plastic bottle, and all your trash should be there.’ Your 100 will be refunded if you give them back the plastic with trash. Then we’re like, ‘woah, amazing.’ I think it’s easier since you see them, it’s easier to adjust.]*

For Paula, it was encouraging to have friends who support what she is trying to do through practicing it on their own:

Parang encouraging din na parang alam mo na other people within your circle, like specifically friends, yung friends namin also try to practice minimal waste as much as they can. So it was those things that we consider. *[It’s also encouraging to know that other people within your circle, specifically friends, our friends also try to practice minimal waste as much as they can. So it was those things that we consider.]*

Keeping each other accountable is also a good way to ensure that her circle sustains their zero waste practices, according to Joan. Policing and constantly reminding one another to choose the lesser evils in terms of waste is how their circle stays focused on their common goal:

Sa mga friends ko naman pag kunyare kukuha sila ng straws, masasama na agad tingin niya. Masama agad tingin na oh kala ko ba zero waste tayo balik natin yan or wag na tayo mag straw meron akong straw dito, ganyan. Hindi ka nila jinajudge pero nireremind ka nila na dapat hindi ganyan kasi minsan dun tayo sa convenient eh, hindi dun sa tama. *[With my friends, for example if they get straws, my friend will stare at her badly. She’ll say ‘I thought we’re zero waste, let’s return that or don’t use a straw because I have one.’ They won’t judge you but they remind you not to be like that because sometimes we go for what’s convenient, not what’s right.]*

Aside from family and friends, bosses and coworkers may also have an influence on an individual, as they can sometimes be people they look up to. In the case of Ivy, her old boss from a previous job for a zero waste store was the one who opened her eyes about the concept of zero waste through teaching her about it. Similarly, Maxi encountered supervisors who really practice zero waste in her previous internship, which sparked her curiosity regarding the movement. She observed how her supervisors led by example through showing them how they wrapped gifts in old leaves, and through bringing their own reusable utensils.

Family and peers have an influence in an individual's zero waste lifestyle since they are mostly who they interact with more often. At the onset of their lives, it is their family who expose them to the environment and teach them the basic values on stewardship and practices that are geared towards the segregation of trash, among others. The practices in the household also become ingrained in an individual's behavior as they grow up, and they are able to bring these practices along with them to other places. At different stages of an individual's life, they encounter different kinds of people which can have an impact in their beliefs as well. Their peers are included in their activities thus, having friends who are supportive of their advocacy makes it easier for them to sustain it. Figures of authority in the workplace also have an influence on their curiosity regarding the movement, as these people lead by example and share their knowledge on the way they practice a zero waste lifestyle.

d. The Communities: As Influenced by the Media and Communities

The media has been influential since the beginning of time. In this day and age, people turn to social media when seeking entertainment, information, or communication. The Zero Waste Movement is seen on over social media and the nature of dissemination of the movement is mainly online as evident in the posts and pages regarding the movement. Consequently, a lot of the informants encountered the movement through their exposure to a post about it online, which led to their interest in participating in the movement. For instance, Karol began her zero waste journey when she saw a video about the ocean being filled with plastic waste, which made her hate the concept of plastic. Similarly, Meann watched documentaries on Youtube and Facebook about the negative impact of plastic on turtles. Seeing the turtle in pain led her to live a zero waste lifestyle.

Seeing posts online about where waste goes and how it impacts the environment elicits an emotional reaction from the audience. Zeus shared how such posts “affected so many people that they wanted to make a change in their lifestyle,” which is the case for some of the youth zero waste participants. According to Joan, seeing posts about the negative impact of waste that are shared by people on her timeline makes her sad, which led her to start acting on it through lessening the waste she produces:

Maraming nagsishare sa social media ng mga ganun na kung ano yung effects nung mga waste na ginagamit natin sa ibang tao and at the same time sa ibang living na nandito. So pag nakikita mo kasi siya parang nakakalungkot na bakit kung may option naman tayo bakit naman kailangan natin gawin yun. [*A lot of people share on social media about the effects of the waste from the things we use on humans and other living things, So when you see it, it's saddening because if we have an option why do we have to do it.*]

The state of an individual's surroundings, specifically in the area they live also becomes a factor in pursuing the movement. For Cherry and Joan who both reside in the city of Marikina, they believe in preserving the cleanliness of their neighborhood since they realized how much cleaner it is compared to other areas. According to Cherry, living a zero waste lifestyle became an "instinct" for them since they have been accustomed to it. For Joan, the fact that their city is prone to flooding is enough of a reason for her to make a change in her lifestyle, since she does not want to see anyone suffer from the consequences of plastic waste:

Since sa Marikina kasi ako bahain kasi kami. Ang hirap na makakita ka lagi ng baha, pag nakikita mo na ang daming tao na nahihirapan tuwing uulan, parang nakakalungkot lang na swerte kami oo pero paano naman sila. Eh kasalanan din naman natin kung bat sila binabaha eh. [*Since I live in Marikina we are prone to flooding. It's hard to always see flood, whenever you see that there are a lot of people having a hard time everytime it rains, it's saddening that we're lucky but what about them? It's our fault why they're experiencing floods.*]

Social media proves to be a source of information on zero waste especially since the movement is mainly promoted through online posts and pages. As a result, the youth encounter the movement through videos, posts, and documentaries about the negative impact of plastic waste on the environment, which elicit an emotional response that may lead them to have a sense of urgency to make changes in their lifestyle, specifically in terms of their production of waste. Aside from media, the kind of the environment they live in also became a factor in their zero waste behavior.

e. The Authority: As Influenced by Public Policy

Considered as the most powerful way put people under control, public policies and laws specifically on plastic use and waste management have a significant

contribution on the proper disposal and possibly the reduction of waste in the country. Some informants who reside in the city of Marikina mentioned how policies and projects by their local government unit are what led them to adapt the practices that support tenets of the movement. They have grown accustomed to practices geared towards zero waste, which made it easier for them to engage in the movement. Moreover, Joan explains how she adapted practices geared towards the movement since her family consciously did it given that it is mandated by the city they live in:

Sa family, sa tingin ko na adapt na lang din kasi namin since buong buhay namin nasa Marikina kami. Na adapt nalang namin yung mga ginagawa din mismo ng government, na adapt na namin na dapat ganito nalang kasi ganito yung inuutos. So naging parte na namin siya eh. *[In the family, I think we adapted it since we lived in Marikina our whole lives. We adapted the things that the government does, we adapted it because it was what they ordered us to do. So it became a part of us.]*

Moreover, the projects that are geared towards the environment and the local government unit's efforts to disseminate information about the environmental policies also made an impact in Mila's life, specifically in living zero waste:

Tingin ko parang, noon palang kasi tumatak na samin yung Basura Mo Ibulsa Mo Muna ng Marikina. So parang from there palang, environmentalist na, parang ganun may vibe na kahit sa bahay, nagsesegregate. *[I think back then, the Basura Mo Ibulsa Mo Muna by Marikina made a great impact on us. So from there, it's environmentalist already, it's like there's a vibe that at home, we segregate.]*

She further added that witnessing the cleanliness of their area made her want to bring the cleanliness with her everywhere she goes. Similarly, though policies were not a direct factor to her engagement in the movement, Jas shared how she has "always felt that Marikina is cleaner than other Manila cities" because of their "effective trash collecting scheme" which helped her in living a zero waste lifestyle.

Their city's dissemination of the policies that revolve around waste management was how Cherry learned more about the concept of zero waste:

Kasi recently nagbigay sila ng flyers about that. Ayun, kailangan isort yung biodegradable and non-biodegradable. Tapos may certain days na ipipick up yung certain categories ng trash... Tapos ayun very strict sila with that kasi if you get caught na mali yung nailagay mo, you either pay a fine or community service if di mo kaya. [Recently they gave flyers about that. You need to sort biodegradable and non-biodegradable. Then there are certain days when they'll pick up certain categories of trash. They're very strict with that because if you get caught putting trash in the wrong category, you either pay a fine or do community service.]

Accordingly, properly implemented and disseminated policies have an influence in an individual's inclination to participate in the Zero Waste Movement based on the experiences of these informants. Being accustomed to practices on waste disposal and segregation as implemented by their local governments led them to transition to a zero waste lifestyle easier.

2. The Great Wall: Hindrances of the Youth from Pursuing a Zero Waste Lifestyle

In understanding the motivations of the youth in having the desire of living a minimalist or zero waste lifestyle, the researchers also examined the barriers that affected them in continuing their journey. The informants were either able to solve these problems, while some cannot help but give in and ignore it. However, what makes the Zero Waste Movement unique is that it leaves people room for mistakes, and that these mistakes help them become better for the environment. The following themes are discussed in this order: 1.) The Convenience Brick; 2.) The Money Brick; 3.) The Family Brick and; 4.) The Employment Brick.

a. The Convenience Brick

The bulk of hindrances of the youth is when they are in an environment outside of their homes where every purchase is already packaged and ready to go. Food is a major concern for the youth as they need to think beforehand whether they will be eating outside or not, since for the most part, if they are in a hurry, restaurants are likely to place their orders in paper boxes with plastic utensils by default. Some even named a fastfood chain who serves food in a disposable container and utensils even if they requested to dine-in. Admittedly, food is essential for them, but situations like these requires them to think before going out of the house in order to reduce the single use plastic that they use for packaging food:

I think... when you really just have to buy food. Kuniyare for whatever reason you have to buy it take out and then it comes with a box, it comes with the utensils and then you have to eat it somewhere not at home. Mainly these are my difficulties kasi sometimes we just can't avoid...I make it a point to prepare my baon early or I just make sure I have something to bring at least utensils just to minimize the trash that are produced if ever I have to buy. *[I think... when you really just have to buy food. For example for whatever reason you have to buy it take out and then it comes with a box, it comes with the utensils and then you have to eat it somewhere not at home. Mainly these are my difficulties because sometimes we just can't avoid...I make it a point to prepare my baon early or I just make sure I have something to bring at least utensils just to minimize the trash that are produced if ever I have to buy. - Zeus*

Just like Zeus, Maxi prepares her food before going out. Since she started living a zero waste lifestyle, she shared that she tries to decide in advance on whether or not she will be eating out so she can prepare to bring her kit with her and reduce waste.

Many times, these people feel that they make mistakes whenever convenience takes over them, even if both Chelsea and Meann were aware that they really need to buy

a water bottle to quench their thirst. They shared that sometimes they really cannot help from buying single use plastic especially when the need arises:

Minsan may purchase ka na impromptu yung parang biglaan lang. May time na nanood kami ng sine nakalimutan ko water bottle ko tapos uhaw na ako, ayoko naman mamatay from dehydration parang may mga unavoidable talaga na ano. *[Sometimes you have impromptu purchases that are sudden. There was a time when we were watching a movie, I forgot my water bottle and I was thirsty, I didn't want to die from dehydration like there are unavoidable (situations).]* – Chelsea

Chelsea's experience made her lean more towards minimalism because zero waste, for her, meant having no trash completely since “parang wala siyang leeway for like error” (*like it has no leeway for like error*). On the other hand, minimalism did not force her to specifically do certain things; instead, it encouraged her to be more mindful and exercise a more environment-friendly lifestyle.

For Meann, even if there was a time when she really needed to buy water because she had no water bottle and saw no drinking fountains, she was dedicated enough not to give in to the temptation of convenience and held on to find a way to solve her problem.

Hindi madali eh kasi mas minsan, pipiliin natin. Minsan mas pipiliin natin yung convenience natin na uminom sa bottled water as in uhaw na uhaw na uhaw ako tapos nalimutan ko yung bottle ko, yung tumbler ko. Hindi, ginawa ko parin yung best ko para itry siya na hindi hindi hindi hindi. As in yung mga times na we're really inconvenient pero hindi like, pinigilan ko padin siya. *[It's not easy because sometimes, we choose. Sometimes we'd rather choose convenience on drinking in a bottle water as in I was really really thirsty and I forgot my bottle, my tumbler. No, I still did my best to try that no no no no. As in there are times that we're inconvenient but no like, i restrained it.]* - Meann

Aside from food packaging, Mara problematized that it is “hard not to buy stuff in plastic” because “everything is in plastic.” Her simple need to buy milk has to be changed to soy milk because it is the only one in a glass bottle. She further added that every

vegetable in the grocery near her was wrapped in plastic even if they can do away with it. Among the pool of informants, someone explained that these supermarkets are just following sanitary protocols in handling food. However, just recently, a supplier of vegetables was able to eliminate plastic wrapping in their goods. In the end, Mara ended up buying from the wet market even if means travelling farther and spending more. Similarly, when Karol travelled abroad, she felt frustrated and helpless because “there is no way [she was able to] buy something that is not packaged,” so in the end, she had to give in and purchase it because she had no other choice in the foreign land.

Lastly, opportunities to live the kind of lifestyle is not accessible in the country. Looking at the situation better, zero waste stores are very limited and are located in just some parts of Metro Manila. Cherry mentioned:

Tapos parang yung layo din nung stores kasi alam ko wala ata sa Marikina, yung nearest is sa may bandang malayong Quezon City and Makati. Parang realistically hindi ako magtatravel that far. *[And then like the stores are so far away because I know there isn't one in Marikina, the nearest one is far Quezon City and Makati. Like realistically, I won't travel that far.]*

Dane shares that the country lacks the availability of things and that “it’s not as accessible as like the States.” Education about the lifestyle should also be widespread so that more people will be able to understand and know the benefits. Because she encountered multiple stores questions the things she requests for. Maybe in the future, if more people are aware about reducing their waste, then Filipinos will benefit from it in the long run.

b. The Money Brick

Another major obstacle that the informants identified is the issue with having to buy zero waste alternatives. As a beginner, zero wasters and social media would encourage people to buy different things to substitute single use plastics that are readily provided by malls, food stalls, and groceries. For Joan, purchasing things is a problem for her since she is living with her school allowance. She has to factor in the food and school materials that she needs to prioritize more. It also takes her to plan everything out and put effort in deciding what alternatives could be done.

Kasi syempre, yan saka yung personal kasi sa financial, for example kailangan mong gumastos talaga para lang mag less yung waste. For example yung sa metal straws, kailangan mong bumili para dun. Then kailangan mong maghanap ng alternatives para sa mga ginagamit niyo for example sa plastics, kailangan maghanap kayo ng hindi plastic or plastic pero yung lagi mong magagamit hindi yung itatapon mo lang kaagad after isang gamitin. *[Of course, that and personal because in financial, for example you need to really spend to lessen your waste. For example with the metal straws, you need to buy for that. Then you need to find alternatives for your use, for example the plastics, you need to find things that are not plastic or plastic that you can reuse again not something you will just throw away after one use.]*

Similarly, Cherry is also hindered of being fully zero waste “kasi mahal so like parang restricted yung zero waste to a certain parang socio economic class” *[because it’s expensive, like zero waste is restricted to a certain socio economic class]*. She feels that zero waste is only for those who can afford it because they are able to buy in bulk and are able to buy from specialty zero waste stores, whereas in her situation as a student, she has to limit the amount of things that she spends on.

However, for Maxi, she acknowledged that the products for zero waste are expensive, but there are ways that one does not have to spend so much for it. People just

need to be educated on what alternatives they can opt for. They just need to make do of the things that are already available in their homes. For example, people can just bring the utensils they have at home to school or work without needing to buy a new set. They do not have to buy a cute eco bag just for groceries when they know that they already have one. Maxi added, “so [we just have to] really try our best to not let money hinder our zero waste, you know.” Ivy is not set back by money issues because she plans when to buy things that she needs.

I think wala naman kasi like, with the whole zero waste thing, I think one of the biggest things that can, parang you need money talaga. Personally, I don't feel hindrance kasi I don't like buy everything sabay sabay na 'oh this is zero waste', pero I buy things of my own pace na if I feel like I'm ready for this zero waste things, yun. Yun palang. [I think none because like, with the whole zero waste thing, I think one of the biggest things that can, like you really need money. Personally, I don't feel hindrance because I don't like buy everything simultaneously that 'oh this is zero waste' but I buy things of my own pace that if I feel like I'm ready for this zero waste things, there. That's it for now.]

On the contrary, Remi thought that her income enabled her to sustain her zero waste lifestyle because she had the resources to purchase zero waste alternatives and “it allow[ed her] to choose better options such as cruelty free packaging *that is* not plastic or *not in* plastic, or to eat in places *that is not* fastfood *to avoid using* plastic utensils.”

c. The Family Brick

Families will always have a say in the decisions that an individual intends to make, especially when they are still under their roofs. In Maxi's situation, even if she tries to tell her mother about bringing an eco bag when buying groceries, her mother

would just shrug it off and opt to place it in a box or plastic. Since she is not so close with her sister, instead of ranting whenever her sister just throws trash, she would rather say it in a nice tone and explain that it is for the environment. Additionally, Maxi is limited in purchasing power because it is her parents' who decide what to buy or not. On the other hand, Karol pinpointed that there is a “generation gap in terms of their perception of waste.”

I think there is a big gap, well ewan ko siguro sa house ko lang yun. Pero yung mga older generations, mas hindi nila nagigets yung urgency of this matter. I don't know why, maybe because they have been around longer and they are just, sobrang engrained lang ng practice sa kanila na hindi na nila nakikita yung difference... Kasi usually ang nakikita kong nagpapractice nun yung mga ka age natin, not really the 50 year olds... like my brother, he is 40. And he knows like he is an environmental guy but he doesn't practice it. He is aware of it but he doesn't practice it, so di ko gets yung congruence nun bat ganun yung... bat may dissonance. *[I think there is a big gap, well I don't know if that's just in my house. But the older generations, they don't get the urgency of this matter. I don't know why, maybe because they been around longer and they are just really engrained to their practice that they don't see the difference... Because I see that the people our age are the ones who usually practice it, not really the 50 year olds...like my brother, he is 40. And he knows like he is an environmental guy but he doesn't practice it. He is aware of it but he doesn't practice it, so I don't get the congruence why it's like that... why is there dissonance.]* - Karol

Paula, who recently moved in with her husband, had to adjust on decision-making for their household:

So that was one thing especially when you live with somebody *and then* you aren't on the same page on how to move forward with practices for the advocacy in the household level. - Paula

She wanted to buy materials that would produce minimal waste, such as buying hand towels instead of paper towels. She felt “slightly discouraged” when she found out

her husband “isn’t as committed” as she was with the lifestyle. These are considerations that they needed to work on because they will have to live together.

d. The Employment Brick

The working youth found that the companies that they work is also a factor in hindering them from the lifestyle. As a professional dancer, Clara is exposed to different events and locations so their clients automatically give them packaged food and water which she has no say on since it is already there, so she shared that she has no choice but to accept the offering. The industry she is in is really for disposables because it is convenient for the clients. To combat the use of plastic, she constantly reminds her personal assistant not to bring her plastic utensils anymore, and brings her tumbler everywhere so she can use it whenever a water dispenser is available.

As for a job in real estate, Frances describes the work as very fast paced and continuous when it comes to projects. Generally, she said the “real estate is not always sustainable.” The advocacy she is pursuing clashes with the culture of the people working there as well. Since real estate companies are usually big, people do not really care or believe about saving the environment. “Everything is the *paper* it can be online naman.” Paper is produced and thrown away instantly because they know that there is janitor to clean it up. Frances described it to have a toxic culture because the workers are always on the go and almost have no time to pause for a while.

E. Youth's Decoding on Local Environmental Policies

The previous sections discussed the environmental policies and ordinances implemented and disseminated by the two cities in their point of view. This section discussed the residents' knowledge, position, and understanding of the local policies communicated by the government through 1.) I know this: Awareness of the Youth on the Environmental Local Policies, 2.) This is where I stand: Position of the Youth on the Government's Communicated Local Policies, and 3.) The Translation: Youth's Understanding on the Communicated Environmental Local Policies.

1. I know this: Awareness of the Youth on the Environmental Local Policies

Comparing the informants based on their home location, it was more evident that those who live in Marikina were more aware about the environmental policies set in place by the local government unit. Most, if not all, were quick to cite an example of the practices that the residents and the government do to maintain the surroundings of the city:

May city ordinance kasi ang Marikina na no plastic, plastic straws, plastic, bawal na talaga. Tapos yun nga yung waste segregation na dapat bawal ka maglabas ng basura kung hindi Mondays or Wednesdays. Dapat yung araw lang na yun kung hindi, aanuhin ka talaga nila pagsasabihan. Tapos meron nga silang umiikot na waste management truck para mismo sa mga food waste. *[Marikina has a city ordinance that Marikina has no plastic, plastic straw, plastic is really not allowed. And then the waste segregation that you are not allowed to put out your trash when it's not a Monday or Wednesday. It should be on that day if not, they will really scold you. And then they also have waste management trucks tha do rounds for food waste.]* – Joan

Joan also mentioned how Marikina City encouraged public schools to recycle by educating them on proper ways to recycle. She also noticed how “bawal kasi talaga magkalat sa Marikina” *[littering is really not allowed in Marikina]*, especially throwing

cigarette butts and candy wrappers. She knows that there were people cleaning the streets because the dirty river near her has been cleaned.

Mila also recalled that CEMO collects oil from the households, which is scheduled monthly. She shared that they facilities for the different types of waste to be converted to useful things. This was seen in the bookmark distributed by CEMO which contained that they have the Materials Recovery Facility (MRF) for densifying styro and composting garbage. Other than the mentioned initiatives:

Tapos ano, meron din silang Hakot Kuyagot ang tawag, ibig sabihin magcollect ng mga hindi siya nalalagay sa basura like sa ano, hindi siya napapackage as basura kasi malaki siya like logs, or construction, ano. Like yung pagkademolish ng mga tiles, ganun kinocollect nila yun. *[They also have "Hakot Kuyagot" is the name, it means they will collect those trash that can't be placed in garbage bin, it's not packaged as garbage because it's big like logs or construction. Like when tiles are demolished, they collect it.]* - Mila

Other transcripts would expound on the waste segregation scheme, strict garbage collection schedule, anti-littering, plastic ban, and the *Munting Basura, Ibulsa Muna* campaign. Across all the Marikina informants, they knew a policy or two that would support the CEMO's claim that the ordinances were well enforced to their residents. These informants were well aware of the policies because of the materials handed out to them directly to their houses. Second, the garbage collectors struck their bells, making the neighborhood aware about their presence. Lastly, it became a habit for the residents to properly throw their garbage and avoid littering because the laws had been going around since 1992. Since then, the seated officials continued the policies and further strengthened them.

On the other hand, the informants from Quezon City took longer to share environmental policies that they knew of. Even with constant probing for some, they

would bluntly say “no” and would apologize for not knowing. While Paula is knowledgeable about national laws (Pasig River Rehab, Bill on the Plastic Ban), when asked about local policies, she answered “Quezon City, no. Not unless you have some that I would appreciate.” However, for those who were able to share some, they would either stop at laws regarding segregation or the banning of plastic, such as Clara:

Siguro yung collection lang na parang may araw lang for nabubulok. Yun lang. Yun lang yung alam ko other than that, wala na. Parang wala akong nararamdaman. *[Maybe only the collection that have schedule for biodegradable. That's it. That's what I know other than that, none. I don't feel anything else.]*

Dane admitted she was not knowledgeable about the specific ordinances in Quezon City, but she knows that “there are laws set on place” such as some of the cities having a plastic bag ban. However, in her opinion, “*there [are] so much loopholes*” present in these laws.

In the case of Mara who follows the Facebook page of Quezon City, she knew about the dredging or clearing up of the canals. Due to her lack of awareness about the policies, Maxi commented that she feels bad:

Because they don't make society aware about it. I don't hear much about zero waste, I don't hear much about environmental issues... I feel like they should engage more about it. They should... put more - not advertisements - but put more PSA's or... if people are using social media they should put a poster.

However, for Meann, she thought that Quezon City should at the least send out flyers, make posters, and the collectors would also directly remind them of the collection schedule. Dane’s problem with Quezon City is that:

I know they have a pretty good waste management system, it’s just that I know [if] it’s *like* per barangay, I don’t know if all barangays are adhering to it. I guess it’s just *really* depending on the strength of the barangay level LGU.

It was evident that across the interviews, Quezon City informants had nothing or had very minimal knowledge to share about the waste management system of the city. They were also not sure if proper segregation before collection was strictly followed by the residents. Communication materials were not well distributed to the entirety of the city, and updates from Facebook would only work if the residents followed the page. This was where Marikina City was comparable and had advantages over Quezon City. The informants were very much aware of the waste management system in their day to day activities; they have the conscious mind to put out the trash for the scheduled day. They also offered that generally, Marikinos receive collection schedules and brochures distributed by CEMO.

2. *This is where I stand: Position of the Youth on the Government's Communicated Local Policies*

All informants from Quezon City and Marikina City who were able to cite practices on waste management and plastic use agreed to the laid out policies. For them, it was a good thing that there were laws that care for the environment alongside other priorities such as health care and education. However, Dane wished that the policies were more “laganap” [*widespread*] because “if people really don't know about it,” once they are called out for littering, people might fire back that there were no laws about it because it was not publicized. Cherry added that the ordinances could also be a way to discipline the residents to properly segregate their trash. Stella agreed that the policies were a good thing, but emphasized that “implementation lang yung medyo will have to look into” [*it*

is only implementation that they will have to look into]. Similarly, Meann also supported the policies but stated that there should be stronger implementation and that there policies that were not enough. She, however, cannot help but compare the Quezon City to Marikina:

Ako sobrang, I agree. I mean sobrang supported ko yun kasi dun nag i-start yung discipline pero dahil walang strong implementation, ang implementation lang kasi hindi namin icollect yung basura mo... Mas disiplinado sa Marikina...Yung palengke ng Marikina akala mo mall na eh... I mean sana lahat diba kasi may strong implementation yung LGU. Siguro kung lahat ng LGUs magiging kagaya ng Marikina, mas magiging close to zero waste, and hindi lang LGUs, yung buong country. *[I totally agree. I mean, I truly support it because it is where discipline starts but because there is no strong implementation, the only implementation is that they will not collect your trash...(People) are more disciplined in Marikina as in... You'd think Marikina's wet market is a mall. I mean I wish all LGUs are like that because of the LGU's strong implementation. If only all LGUs will be like Marikina, it will be closer to zero waste, and not only LGUs but also the whole country.]* - Meann

For Ella, she thought that everything that the government was doing for the environment was useful and would benefit the people in the long run. The simple acts of segregating trash and putting it out at the right schedule were just a minor inconveniences on their part. It was also a way to help Marikina garbage collectors ease their work of separating the trash one by one. She noticed that the residents also coordinated well with the proper scheme. Chelsea shared that to make the laws work, it should be a two-way effort among all the residents:

I agree naman kasi feeling ko dapat community effort naman talaga siya. I mean hindi naman porket trabaho yan ng gobyerno, sila na bahala pero parang dapat mindful ka din sa consumption mo in the first place. *[I agree that it should be a community effort. I mean just because it is the government's work, they should do it alone, you should also be mindful on your consumption in the first place.]*

Only the informants who were aware of the ordinances were able to take a stand on whether they agree or disagree with their respective cities' implementation of policies. Since Marikina City informants were more knowledgeable, they had more insights to express their opinions. However, even if the zero waste informants from Marikina were proud and satisfied with the policies, they added that more can be done for improvement. Specifically, the system would be better if people were more involved and disciplined in taking care of the environment. The same goes with Quezon City informants; all agreed with the policies but then again, more work and effort can be done in order to strengthen the implementation of the policies.

3. *The Translation: Youth's Understanding on the Communicated Environmental Local Policies*

The constant reminder on the environmental policies in Marikina City was received by the informants as a way to discipline the residents to obey the law. They learn to be conscious about the waste that they consume and also have the initiative to do these things even when no one is looking. Moreover, since it became a routine among the residents, Joan was able to make it a habit everywhere she went:

Ako kasi since sa Marikina bawal magkalat, nadadala ko siya sa ibang lugar...Natututo kaming sumunod sa ganto at kami na mismo nagkukusa, ayun nga since pag na adapt mo na siya madadala mo na rin. *[Since littering is not allowed, I bring the habit in other places. We learn to follow this, and we have the initiative, and since we have adapted it, we bring (the habit anywhere).]*

For Zeus, it is about instilling to the people the value of discipline in taking responsibility of the actions that they made; if one buys multiple water bottles, he needs

to properly dispose them on the day that they are supposed to be picked up, and not get mixed with biodegradable trash. He also added that as adults, they will not be constantly reminded by someone older to do things for them:

I think it just wants to communicate na we should, na we all live in Marikina and since we live there we have the responsibility to keep it clean kasi no one else is gonna do it for us. It's kind of like that "tapat ko, linis ko" thing na we are just responsible for keeping it clean and if not, there are corresponding sanctions for it. So I think that's a good measure also kasi its fair naman especially if it's your own garbage, if you don't dispose it properly, there should be some sanctions.

Similarly, Richard agreed that the burden of taking care of the environment should not only fall on the government's shoulders,

There are, in the grassroot, some still thinks that it's only the responsibility the government to provide a cleaner environment. Hindi nila nakikita pa na its a shared responsibility really. Its a two way responsibility. Hindi puwedeng government lang ang may responsibilidad nun. *[It's not possible that it's only the government's responsibility.]*

Aside from dealing with one's responsibilities, Stella thinks that in order for the policies to work with the residents, each stakeholder should realize that they each have their own roles in society. The government itself will not be able to fully fulfill its duties for the environment if the remaining parts of the body are not functioning well. This generally includes the residents, enforcers, and even the private institutions to work on their part of the system:

When it comes to zero waste, it's not just the consumer role 'di ba. If you are business owner, you have a role. If you are a manufacturer, you have a role. If you are a CEO you have a role. If you are, *even if you're poor* or you are a politician, *especially* politicians because you know *your* scope of influence *is much larger*. You are being heard because you are being seated there to be heard, to be listened to. And that speaks a lot like. On a national level, *if we're not doing anything*, what else. - Stella

Additionally, for Stella, the reason why environmental advocacy is not as prominent among people is because “it is not something that affects us directly unlike for example you are fighting for cancer” as it is not more personal, and the effects are not that immediate compared to having an experience with a relative who is diagnosed with a terminal disease. She did not imply that one advocacy should be superior than the other, but wanted to share that there are advocacies that are more prominent because of popularity and that it is close to so many people. This was where environmental advocacies lacked in appeal and understanding for most people -- once trash is thrown and collected, people do not encounter them anymore; meanwhile, people living in dumpsites and bodies of water suffer from these consequences.

When it came to the dissemination efforts done by Quezon City, Clara suggested that they should veer away from the use of traditional media or the “old school” spreading of news. She recalls that even if they have a television set, it was rare that they turned it on. The information age caused people to turn their heads to social media, and in turn, Quezon City should maximize using their Facebook page to reach their target audience. Instead of the usual infographics, Quezon City should find a “better way to disseminate the information in a very engaging and entertaining way” by hiring video editors or designing infographics that were appealing. In this way, Stella thought that once the post is “cute,” people will be more intrigued to read about it and learn more.

Cherry applauded the way Marikina communicated its policies to the residents. She described it to have a “friendly” tone because of the use of Filipino for a more conversational language that more people will be able to understand. This was evident in the materials handed out by the CEMO to the researchers.

Since Marikina City was prone to flooding because it is situated in the low lying area of Rizal province, Ella received the message of the government that their city's environmental policies were for the sake of the environment. The residents knew that they cannot avoid the flooding, so they might as well lessen the trash that they produce. For Joan, it is a joy and it is pleasant to see that the city is organized and has no mess.

Makikiisa sila sa paglilinis lalo na sa Marikina bahain. Parang konting ulan lang mabilis tumaas yung tubig dun sa riverbanks so yung mga tao naman dun... alam na nila yung kahalagahan nun kasi naexperience nila. Neexperience nila tuwing bumabaha na... na ganun yung nagiging epekto. So well informed naman sila, parang maganda naman yung pamamalakad sa Marikina na well informed na yung mga tao. *[Residents are cleaning as one, especially since Marikina is prone to flooding. Like little rain causes waters to rise up in the riverbanks so the people there knows the importance because they have experienced it. They experience it every time there's flood... that it has that effect. So they are well informed, Marikina's regulation is good that they inform the people.]* - Ella

Looking through a macro perspective, Dane saw that the poor implementation of policies can be traced back to corruption and conflict of interest. She expounded that the people in power, may it be the senators and policy makers, have big networks of people that could influence them to actually do their work. Her first example would be the plastic manufacturing owners being friends with policymakers that could persuade them not to totally ban plastic in the area. She also mentioned the good work that Gina Lopez has created that were not materialized because there were people who hindered them from pursuing it. Moreover, for Frances, big corporations are another factor for the successful implementation of environmental policies. It is either these businesses have a hold of the government or that the government themselves are not doing something about it.

Normal composting of biodegradable waste takes about three to four weeks according to Stella. In her knowledge, she knows that there are “equipment and machines specialized to get rid of plastic, glass, paper, water waste, organic waste” that could compost for 24 hours only. This was pitched to the LGUs, and they got interested but cost is always the problem.

So syempre uunahin nila yung trabaho sa mga tao, more of their ****, mga Christmas parties, I don't know pero alam mo yun, uunahin talaga nila yun compared dun because again that's part of the problem, the environment not being something that affects you personally agad agad. *[So of course we will prioritize jobs for the people, more of their ****, the Christmas parties, I don't know but you know, they will prioritize it compared to that because again that's part of the problem, the environment not being something that affects you personally immediately.]* - Stella

These were just some examples of what the informants shared when it comes to the lack of awareness and strong reinforcement from Quezon City.

It all boiled down to how important it was to have politicians who also had the concern to preserve the environment and not just focus on other projects; or worse, how to illegally get funds from the people. The informants kept on reiterating that they never heard running officials presenting a green campaign because the solution was not as immediate and would possibly not be seen during their term.

There are *still* many areas who need improvement really. Systems, policies... I think although, politics is always there but it will depend on the prioritization of any local government. If they deemed proper to enforce, *the law is by the letter*, I think. - Richard

Although the transcripts came out to be more positive to Marikina City's implementation and a little negative on Quezon City's side, both informants recognized

that it was much harder to manage Quezon City because of its land area and population size.

I think *they are more* aggressive compared to other LGUs. Pero I think also its because Marikina is pretty small compared to like Quezon City. Quezon City is super complicated, *there should even be a Quezon City 1, 2, 3. It should have been divided because it's too large here...* The size is *really* abig problem. *And then* Quezon City is more dense than Marikina like the population density setting is *much higher* that's harder also plus *Marikina is only 1/3 of the size of Quezon City.*

Similarly, Chelsea added that if Marikina was indeed smaller, then “mas maliit yung resources niya compared sa Quezon City” [*their resources are fewer compared to Quezon City*]. For her, it meant that Quezon City’s check and balance and their waste management system were lacking and needed improvement considering the amount of resources that they have. She also mentioned that the implementation should also be inherent up to the garbage collectors in which she compared Quezon City to Marikina:

So yung sa Marikina strikto talaga like parang yung mga basurero mismo parang di sila lenient like yung sa Quezon City parang “bahala kayo diyan”. [*So in Marikina, it's very strict, like the collector himself are not lenient unlike in Quezon City where they're like “that's up to you.”*] – Chelsea

Marikina City had the perks of being relatively smaller, thus, fewer collectors are needed to roam around the whole city. To add, Marikina City was blessed to have a dedicated mayor who initiated change in the 90s and whose goal was greatly about the cleanliness of the city. Since then, Victor shared that the succeeding mayors and officials kept on continuing and making the policies better for the residents.

Beyond the literal meaning of segregating trash and reducing plastic, the residents understood that what the government was doing was also for the benefit of the environment and the future. The responsibility of making these decisions should not only

come from the city hall because they believe that people will not always have someone to look after them. As Richard mentioned, this is a “shared responsibility” where residents had more impact if they would obey these regulations, because all the ordinances both in Quezon and Marikina City will be useless if the people concerned do not care.

F. Intersection Between Public Policy and Engagement

As previously mentioned, public policies were considered to be one of the most efficient ways in managing citizens of a given jurisdiction provided that they are being implemented properly. In the context of the Zero Waste Movement, this research looked into the intersection between public policies related to plastic use and waste management and the youth’s engagement in the movement. This section discussed two main themes that emerged regarding the relationship between policies and their decision to live a zero waste lifestyle, namely: a.) The Catalyst: Policies as a facilitator of engagement in the movement, and b.) The Ghost: Policies as insignificant in the youth’s engagement in the movement.

1. The Catalyst: Policies as a Facilitator of Engagement in the Movement

Majority of the informants who reside in Marikina shared how policies implemented by their city regarding plastic use and waste management made transitioning to a zero waste lifestyle easier since they were already accustomed to the practices. The proper implementation of policies also help in instilling a sense of discipline in the citizens of the city of Marikina, as shared by Cherry. The provisions of

the ordinances are also not that hard to follow, and she explains how it benefits the citizens of the city as well since they would not be flooded as much as they used to:

So sa tingin ko ang laking tulong talaga nung mga ganung ordinances tapos hindi naman siya mahirap. Kailangan mo lang siyang intindihin at iadopt mabuti. Tapos magagawa mo naman siya ng maayos saka hindi naman siya for the benefit of other people eh. For the benefit din namin yun para hindi na kami masyadong bahain. So ayun ang laking tulong niya rin. [*I think ordinances like that are a big help, they're not that hard to do. You just need to understand and adopt it well. You can do them well and in order, and it's not for the benefit of other people. It's for the benefit of us as well so we don't get flooded as much.*]

She further added how the presence of properly implemented ordinances in relation to zero waste is a step for anyone who is interested in engaging in the Zero Waste Movement. Complying with the provisions of the said ordinances will make people more inclined to transition to a zero waste lifestyle compared to people who live in cities without implemented ordinances given that they are already used to the practices that are being promoted by the movement:

Parang kasing ano siya eh, small step toward initial phase for anyone who is interested dun sa Zero Waste Movement. So like, kung sinusunod mo na yun in the first place, feel ko mas inclined yung person na yun to like talagang mag dive in to the Zero Waste Movement kaysa sa taong hindi, wala namang ganung ordinance sa city nila. Parang mas exposed na sila sa kagawian na yun. [*It's like a small step for anyone who is interested in the Zero Waste Movement. If you follow it in the first place, I feel that the person is more inclined to dive into the Zero Waste Movement compared to those who don't have such ordinances in their city. They're more exposed to those practices.*]

This is true for Chelsea, since the system of segregation and waste disposal that is being implemented by the city made her mindful of their consumption in their household, which led them to reduce their production of waste as well:

I think oo kasi mas naging mindful ako sa consumption. I think dahil sa Quezon City kasi yung struggle ko I didn't know the disposal system of things. So like even though, parang mas natitense ako like parang di ko alam kung saan mapupunta yung waste ko. At least sa Marikina I know where it's going, parang klarado na. Dahil may system, it's more convenient for you on the individual level of transition to a system parang minimal waste. *[I think yes, because I became mindful about consumption. I think because in Quezon City, my struggle is I didn't know the disposal system of things. So I get more tense like I don't know where my waste goes. At least in Marikina, I know where it's going, it's already clear. Because there's a system, it's more convenient for you on the individual level of transition to a system that's minimal waste.]*

Moreover, the city's policies on waste segregation and plastic use help in making the residents aware of the proper disposal of waste, as well as how they can be of help to the environment. According to Mila, the policies in her city made her "feel the urgency" and the need of proper waste disposal, segregation, and recycling. The ordinances also validated that living a zero waste lifestyle is right since they work hand in hand:

I think may part siguro na parang I will not be aware ganun na parang, I won't feel the urgency or the need for that. I think yun, parang hindi ako mabuburden in a way kasi wala naman akong alam na ordinance. So in a way dahil may ordinance, it makes me feel na tama lang din yung ginagawa ko kasi may ordinance. *[I think there's a part where I will not be aware, I won't feel the urgency or the need for that. I think I won't be burdened in a way because I don't know any ordinance. So in a way, because of the ordinance, it makes me feel like what I'm doing is right.]*

She further added how ordinances help in encouraging the discussion on how to improve on the way people deal with the environment. The presence of ordinances also allow people in the city to become aware of how to be responsible stewards of the environment:

Nakakahelp siya sobra. Tapos yun nga it encourages din nga yung discussion nga kung paano tayo makakaimprove ganun saka yung awareness talaga kasi hindi lang naman ako yun nga kasi, yun parang everyone has to know din. Parang I think helpful siya na I don't have to tell

people every time because the government does their job. *[It helps a lot. It encourages the discussion on how we can improve, and helps in making everyone aware, I think it's helpful because I don't have to tell people every time because the government does their job.]*

Even more so, having policies strongly encourages people to practice proper waste disposal and avoid single use plastic without having to force them, as there are consequences laid out once they fail to comply with the provisions of the ordinances. The presence of such ordinances makes it easier to spread awareness and to educate people about the importance of doing such practices and on what should be done to help the environment, according to Ella:

Kasi yung parang lahat ng bawat residente, so dahil pinagbabawal yun, hinihigpitan or mapepenalize, sumusunod naman yung mga tao. So ngayon, madaling pasunurin yung mga tao, pero parang nakikita ko naman na hindi nalang din madaling pasunurin yung tao, naiinform na din sila. Hindi na sila masyadong nagcocomplain or masyadong disagree dun sa iniimplement ng Marikina. At least, naiintindihan na nila yung kahalagahan. *[Each resident, since it's prohibited, stricter, or have penalties, they follow. So now, it's easier to make people follow, but I see that it's not just that it's easier to make them follow, they also get informed. They don't complain as much or disagree on what is being implemented by Marikina. At least, they understand the importance.]*

Ordinances also serve as a reinforcement in doing zero waste practices. For Zeus, while the policies did not really influence him to transition to a zero waste lifestyle since he has been unconsciously practicing it for a long time, he shared how the ordinances reinforce his actions since he is now more aware of the consequences if they do not comply with the provisions of the ordinances related to plastic use and waste management:

I think not really [cause] since sa start I've been following it. I wasn't aware of it but I was following it more so now kasi I know how much the fee is if ever we don't dispose of it properly so its now, it's not the same but its just

more on a schedule na we know that on this day, we have to take out this trash, on this day we have to take out this trash. [It's like] they just provide us a structure.

Strictly implemented policies and ordinances on plastic use and waste management are integral as they are able to strongly encourage their citizens to avoid the use of plastic and to segregate and reduce their waste. Well-disseminated policies enabled these informants to know more about the provisions of the ordinances and how to practice them. Moreover, the Marikina City's waste disposal system laid out the necessary foundation needed by some of the youth zero waste participants which in turn, facilitated their transition to living a zero waste lifestyle.

2. *The Ghost: Policies as Insignificant in the Youth's Engagement in the Movement*

On the other hand, majority of the youth zero waste participants residing in Quezon City think that policies are not that significant in their decision to live a zero waste lifestyle, or even in trying to sustain their lifestyle. For some, ordinances are "just there," and continuing to live zero waste is a personal and conscious choice that they make every day, which is the case for both Dane and Stella.

Sharing the same sentiment, Frances further commented how policies banning plastic could be a hassle for those who do not do zero waste practices normally:

For me personally, it didn't really affect me so much because I practice it [already]. But I can imagine, if I don't practice it, it would be a hassle cause for plastics, especially for the grocery, that's something that I still need to work on for myself cause if its banned here, I don't know how i'm going to... aside from my tote bag but its like, if it's wet, I don't know how to transport it.

As mentioned, ordinances need to be strictly implemented for people to comply with what is being mandated. Residents of the city are less likely to follow and would likely turn a blind eye to the law if the local government unit lacks strong enforcement and strict regulations on plastic use and waste management, as explained by Mara:

Cause people don't strictly follow the laws. Because the officials are not even strict about it so like ano, for example pag nasa palengke ako and then hindi maririnig na sinabi ko wag plastic wag plastic, ipaplastic nila kasi hindi naman strict yung law regarding the plastic ban. So ignorance din sa law until someone will come and then yung parang fine them and then they will stop. That's what I noticed yung parang they will keep doing it until no one is gonna discipline them. So it's like a hindrance if they dont strictly manage it. [*Cause people don't strictly follow the laws. Because the officials are not even strict about it so for example, if i'm in the market and they don't hear that I said not to put it in plastic, they'll still put it in plastic because the law regarding the plastic ban isn't strict. So ignorance of the law until someone will come and fine them, then they will stop. That's what I noticed, they will keep doing it until no one is going to discipline them.*]

The lack of awareness of policies make it less likely for such ordinances to be a factor in deciding to pursue living a zero waste lifestyle. Informants who reside in Quezon City are not as knowledgeable of the ordinances as compared with those who live in Marikina City. Dane commented how the local government could possibly reach more people if they used social media in communicating their ordinances and projects to their residents:

I feel like they need to work on their social media presence. Because a lot of the young people are there online. Eh, it's not reaching me, or like I dont think is it reaching you? So I think they need to work on a social media campaign maybe on awareness and education about waste management.

Sharing the same sentiment, Frances further added that the message gets lost somewhere in the process of dissemination policies, which can be solved through

strengthening their online presence and through possibly reevaluating their communication structure:

Well, they are really trying their best to reach the grassroots level. Okay fine. But like, the organizational structure is fine also. I don't know its just really somewhere along the way na it gets lost eh. So in terms of improvement, I think their online presence will be a good help....They really need to broaden their reach, not really like implement [because] I think they are able to implement it but it's just selected. So I think it's really the reach that needs to be improved... I don't actually know where the gap is if it's in the garbage collectors level or if its the government level, but somewhere there, it gets lost. The message gets lost.

The local government unit also bears the power to encourage its residents to transition into a more sustainable lifestyle through the reinforcement of policies. Paula shares how the local government could come up with ways to specify practices that can be mandated to its constituents in order to open their minds on the idea of living a zero waste lifestyle:

That's when the city government could come in where they could encourage minimal waste practices in a way that already specifies what people can do and then tell them afterward na ito yung dapat nating iwasan or to do less of as much as possible. There are information campaigns but there should also be efforts to parang to concretize those kinds of... to really identify kung ano yung pwedeng gawin ng bawat residente or certain things. *[That's when the city government could come in, where they could encourage minimal waste practices in a way that already specifies what people can do and then tell them afterward that this is what we should avoid or to do less of as much as possible. There are information campaigns but there should also be efforts to concretize, to really identify what every resident could do.]*

Educating the citizens is also a good step in trying to encourage them to transition to a zero waste lifestyle. Karol suggested that the local government could create educational workshops on how residents could do zero waste practices in their own homes, such as composting or recycling:

They are a good start and... I don't know, I don't think it will really push forward unless people actually... [there should also be] educating workshops. Like workshops on how to compost or what to do with your waste. [I want] to get somebody to workshop in our village on how to compost.

Education regarding the environment could also be reinforced in schools, as it is where learning truly begins. Starting to educate an individual when they are young is a good way to instill values and practices in their life. Moreover, according to Stella, it would be relatively easier to gather people for educational workshops if it is initiated by the LGU.

So it starts with children and then communities. You have to, it's not enough to just say *bawal*. You have to ask and tell people why, educate people why and it's hard to collect people... Educate mo lang sila how to *sabihin natin, papa...* yung mga barangay forums... Yung parang you are gonna collect all the representatives in each household participate in like a discussion.. it's easy to collect people and tell them na for example, hey if the LGU is very dedicated to undergo a change in their community, they have to discuss it that way. Na parang here's how to live with less waste. [*So it starts with children and then communities. You have to, it's not enough to just say it's prohibited. You have to ask and tell people why, educate people why, and it's hard to collect people... Educate them, like do barangay forums... Like you're going to collect all the representatives in each household to participate in a discussion. It's easy to collect people and tell them for example, hey if the LGU is very dedicated to undergo a change in their community, they have to discuss it that way. Like here's how to live with less waste.*]

The power of ordinances on plastic use and waste management in shaping its residents' behavior needs to be properly utilized towards encouraging them to comply with the what is being mandated. This can be done through proper implementation until the grassroots, widening the reach of campaigns and information, educating the citizens, and creating more programs geared towards promoting a zero waste lifestyle and its benefits to both people and the environment. It is important to note, however, that there is

a stark difference in the size and geography of both Marikina and Quezon City. As previously mentioned, Quezon City is bigger and more populated than Marikina, which may have an implication on the compliance and implementation of policies on plastic use and waste management. This poses a big challenge to the local government of Quezon City in the regulation of plastic and trash in the entire city. While there are a lot of aspects the city can improve on, the foundation already lies in the ordinances that they have already created; the change will begin upon the reinforcement and strict implementation of the policies.

CHAPTER VI. SUMMARY AND CONCLUSION

A. Summary

Using the Encoding/Decoding Model of Communication by Stuart Hall (1973) and the Social Ecological Model by McLeroy et al. (1988), this study looked into how the ordinances, projects, and programs of Quezon City and Marikina concerning waste management and plastic use, along with the youth's environmental facilitators and barriers, contribute to the youth's meaning making and engagement in the Zero Waste Movement. The study utilized purposive and snowball sampling in gathering youth zero waste participants who shared their insights that informed the study. Moreover, an archival analysis of the policies of Quezon City and Marikina City, and a key informant interview with a member of each local government unit office in charge of environmental concerns, namely the Quezon City Environmental Protection and Waste Management Department and the Marikina City Environment Management Office were conducted in order to gather information from the perspective of the local government units themselves.

Quezon City and Marikina City were two local government units that were very comparable when it came to size, population, and implementation. Both cities gave importance to the environment through the departments that worked hard to maintain the cleanliness of the surroundings and to conserve nature. Mandated by the constitution, they are successful in the adaptation and localization of Republic Act No. 9003 or the Ecological Solid Waste Management which aims to utilize valuable resources, and encourage resource conservation and recovery. Quezon City has released an environmental code booklet that contains the comprehensive details about the ordinance

that they employ in the city. On the other hand, Marikina City is very active in informing the residents about the policies on ground and through communication materials.

In relation to the study's focus on waste management and plastic use, these cities highlighted the main programs that they do for the environment. It was vital for them to be keen on proper waste segregation, garbage collection, and the regulation of plastic. Quezon City initiated public discussions, dialogues with the community, and the use of social media in making sure that their residents are aware of what should be done and avoided for the benefit of environment. Marikina City enumerated that they also did discussions with the community associations and homeowners associations, sent out brochures, flyers, fans, bookmarks, and refrigerator magnets about the policies, utilized social media for updates, use the public address system, and continued the campaign *Munting Basura, Ibulsa Muna* which targeted schools.

It was evident that Marikina City had more communication tools to constantly remind the community about the collection schedule and policies in the city. These were supported by most of the informants of the study who resided there. They validated that the policies are well-implemented by the government, that they received the informative materials at their doorstep, and that the enforcement of policies is really strict. Residents can vouch for the fact that the people do follow the laws because they are aware of it and that the penalties are effective.

When people living in Quezon City were probed about the local policies they generally know of, they could think about garbage collection and plastic ban, sometimes they would comment that they were not sure if it was being implemented. However, other factors should also be considered. For one, they were not so close with the barangay

officials, and second, they do not follow any of Quezon City's social media accounts, and they come and go from work/school to their homes. Both the city representative and the informants recognized that Quezon City is so large to manage and monitor. So, if they will be handing out flyers for each household, they would have to remember that there were 2.9 million people in Quezon City alone.

Objective 3 tackled the facilitators and barriers behind the youth's engagement in the Zero Waste Movement. As guided by the Social Ecological Model, informants shared the individual, interpersonal, organizational, community, and public policy factors that influenced them to engage in the movement. The study found that the decision was in the hands of the individual when it came to switching to a zero waste lifestyle. Most informants did it out of their own interest and passion in preserving the environment. In addition, their firsthand experiences with nature were their driving force in being a steward of the environment. Social institutions such as schools, organizations, work, and online communities were also considered to be a significant influence in their engagement in their movement. The values and practices related to the environment had been ingrained to them in school growing up, which led them to take it with them even after they have graduated. Organizations and online communities, being more close-knit groups with like minded people, also reinforced their desire to engage in the movement. These organizations and online communities became their support system, encouragement, and safe haven when it came to both the joys and challenges of living a zero waste lifestyle. The workplace, being the second most frequented place by some of the informants also became a sphere of influence and a facilitator of the zero waste practices, as eco-friendly offices made it easier for them to sustain their lifestyle.

Interpersonal relationships were also spheres of influence for these informants. Environmental practices done in their household as well as experiences and values shared by their family that they have become accustomed to made it easier for them to transition to a zero waste lifestyle later on in life. Moreover, having shared activities with friends that are following the tenets of the movement as well as receiving support from their peers help them in sustaining their lifestyle. Role models in the workplace also had an influence over their decision and interest in engaging in the movement, as these people were who they look up to.

Social media has been established as influential over the last few years. In the context of the Zero Waste Movement, it was a venue for information and awareness regarding the movement and the impacts of plastic to the environment, considering that it was where the movement was thriving given its online nature. Lastly, well-implemented policies on plastic use and waste management encouraged them to take it a step further through engaging in the movement.

Despite the discussed motivations of the Filipino youth, identified situations like convenience, money, family or living situations, and their work environment hinder them to live more sustainably. For the most part, the informants mentioned about the convenience that most businesses and locations offer to them. Food deliveries, convenience stores, wet markets, and supermarkets offer a great selection of products at the expense of buying more things in plastic. Even if there were signages on using eco-bags, these markets would opt to sell 2-peso plastic automatically. While some find it expensive to live sustainably because of having to buy alternatives, some disagree and suggested to use things that were readily available. When it came to family and work

environment, the frustrations were about how the individuals have no control of the people they are with day to day. Buying groceries, cleaning agents, and personal care were still upper hand to the head of the family. Unlike with other informants who live on their own or with their partners, they were able to make conscious purchases because they have a say. Although these were some barriers to their lifestyle, they were able to find solutions and be better for the sake of the environment. The Filipino youth were so dedicated that they would think creatively to combat these problems. For instance, one informant would bring her own utensils to the office even it would take her more time to wash them and even if her officemate would poke fun of her.

The government reiterated the policies to the residents through the communication tools they utilized. Encoded messages sent to the audience were focused more on the content, information, and the what to do's on the environmental policies. Simply put, they update the residents constantly through their social media pages by posting photos of the event, clean ups, and infographics. The informants understood the policies communicated at the basic level, that it is the law and that is for the government. However, because of the environmental factors that surround the individuals, they are able to derive other meanings on the information provided.

Beyond imposing rules on garbage collection, the informants saw it as the government's way of disciplining the citizens. Once the habit is sustained among the households, the residents will get used to the routine of properly disposing their waste. For some, although the policies are properly laid out in paper, implementation is barred because of corruption and conflict of interest with other stakeholders. Their knowledge and experiences has allowed them not to accept the message in its entirety, but to think

critically instead. Finally, even if the government has the main responsibility of making sure of the proper enforcement of laws, the informants recognize that the consumers and private businesses have a role to fulfill to make the policies successful.

The last objective examined the intersection between local public policies and the youth's engagement in the movement. The study found that most of the informants who reside in Marikina City believed that the ordinances served as a catalyst in transitioning to a zero waste lifestyle, as they perceived these policies to be helpful and well-implemented. On the other hand, policies were insignificant in the zero waste journey of most of the informants who reside in Quezon City, as they perceive that they were either not strictly implemented or disseminated well. Engaging in the Zero Waste Movement was fully at their own discretion, and was not influenced by the policies of their own city.

B. Conclusion

Quezon City and Marikina City were active in communicating the environmental policies to their residents through online and offline methods of dissemination. Both cities targeted citizens that were constantly online through their official websites and through the use of Facebook where most users are active. Moreover, aside from their online means, the local government units were constantly sending out brochures and conducting dialogues with the communities to further educate them about the policies that were created. Enforcers of the law, such as the garbage collectors, street cleaners, and area managers performed a great role in connecting the residents to the city ordinances.

However, the study found out that most individuals were majorly motivated by their environmental facilitators in starting and continuing their zero waste journey. Often, their advocacy in preserving the environment came from their knowledge, their experiences, and their social networks. Regardless of the existence and implementation of environmental policies in their cities, they still chose to live a zero waste lifestyle because they understood its importance and benefits. In turn, the policies only served as a minor motivation in starting their journey. However, it was a delight for them to see that the government is doing their best to help the environment.

In response to better policy implementation, Quezon City must establish having a stronger connection and communication with the communities so that the residents will follow the law, and will be made aware of the corresponding sanctions. Comparatively, informants from Marikina City shared how successful their local government is in communicating their policies on waste segregation, garbage collection, and plastic use. They could vouch for the fact that the residents of Marikina were aware and knowledgeable which resulted to residents complying with the policies of the government.

Moreover, the study validated its theoretical anchors' utilization in a comparative paradigm, and the results and discussion strengthened the fact that people's schema and the way that they decode information supplied by the government is influenced by their environmental factors as explained by the Social Ecological Model. Through the theoretical grounding of the study, the researchers were able to understand the link between the youth's zero waste lifestyle and their city's political climate, specifically the existing policies on plastic use and waste management.

Thus, the study highlighted the importance of having well-implemented policies on plastic use and waste management in the encouragement of their residents to reduce their waste and possibly, transition to a zero waste lifestyle. The current state of the environment and its continuous depletion was enough of a reason for the government to take initiative in instilling discipline among its residents and in regulating businesses through ensuring that their policies related to the preservation of the environment were strictly implemented and disseminated properly. The government officials could take steps to the preservation of the environment in their list of priorities when running for office despite its benefits not manifesting immediately. People should be stewards of the environment that they benefit from, as the impact of their actions will likely be harmful to everyone in the long run. Hence, there is a big importance in the structural institutional ecology complementing one's personal ecology in creating an environment where an advocacy can thrive and make a difference.

The Zero Waste Movement is just one of the ways to help the environment with tenets that are more feasible for every individual. However, awareness and education about the environment is important in order to encourage more people to engage in the movement. The movement's traction online has greatly helped in raising the awareness on the advocacy, and the existence of Zero Waste communities allows the movement to encourage more people through creating systems of support for those who are willing to make a change. If the movement's online presence will be tied with the government's support through the proper implementation of policies geared towards the preservation of the environment, the possibility of people being inclined to transition to a zero waste lifestyle increases. With the whole system working hand in hand to preserve the

environment, the country becomes a better place to live in for current and future generations.

CHAPTER VII. IMPLICATIONS AND RECOMMENDATIONS

A. Theoretical Issues

The study was anchored in the integration of two theories, namely the Encoding/Decoding Model of Communication by Stuart Hall and the Social Ecological Model by McLeroy et al. The Encoding/Decoding Model of Communication was utilized in understanding how the local government units communicate their policies to their citizens, and how the citizens understand and interpret these policies based on their own ideals. On the other hand, the Social Ecological Model was used in examining the facilitators and barriers behind the youth's engagement in the Zero Waste Movement in each of the levels.

The researchers recommend exploring other theories that directly examine the influences behind an individual's decision to participate in movements. Moreover, a theory that best explains the interaction between policies and the people under its jurisdiction can be looked into further, as the Encoding/Decoding Model of Communication was built for the purpose of understanding the encoding and decoding of messages in the context of television and broadcast.

B. Methodological Issues

The data gathering was implemented in a span of two (2) months. For the purpose of the study, the researchers employed a focused interview because the study wanted to explore on the facilitators and barriers of each individual in their participation in the Zero Waste Movement. However, if another framework is used by future researchers, other methods could also contribute to the richness of the experience of the zero wasters. The

diary method could unearth more emerging themes by observing the day to day life of the individual. Focused group discussions could unravel more on how these individuals come to agree or disagree with their stance and opinions about the movement.

The researchers would also like to note that since the study is a comparison of two cities on the communicated local policies to its residents, future research could touch on the other cities that have the most zero waste participants or even in provinces where zero package stores are also established. Through the discussions, the informants volunteered to share that Pasig City is also into environmental policies and that there are more zero waste stores located in Makati City.

Lastly, because of the snowball and referral methods use in gathering informants, the demographics of the informants were mainly female. But then, most zero waste Facebook groups are composed of female members. The researchers recommend to find more male informants to compare where they differ in terms their lifestyle or beliefs about the movement. Moreover, quantitative methods such as a survey may also be used in order to widen the scope of the study and make it more generalizable. A textual analysis of the laws in each city may also be conducted to provide deeper analysis on local policies. Other cities may also be explored in order to gain a wider grasp of the youth's engagement in the Zero Waste Movement.

C. Practical Issues

The study was created to fill the gap on the issue of plastic waste in the country, as well as to acquire knowledge on the power of policies as a catalyst to the youth's inclination to support the Zero Waste Movement. However, the researchers recommend

more studies to be conducted in related fields, namely the topic of movements and policies, as there are more areas that need to be explored that need to be contextualized in the Philippine setting.

While the study focused on the facilitators and barriers of the Filipino youth in engaging in the Zero Waste Movement, it also highlighted the importance of the government in materializing the policies on the environment. Based on the findings of the study, it is recommended for the city environmental departments to revamping their communication strategies in order to reach more of their citizens, and for them to fully be educated and knowledgeable about the policies that are being implemented. This can be done through strengthening their online presence, doing educational talks related to the environment in schools and barangays, among others. Furthermore, there should be a stricter implementation of policies as well as well-communicated consequences to offenders in order to instill a sense of discipline in the residents, especially in Quezon City.

While the informants and the all the people who are practicing a zero waste lifestyle are only a portion of the whole population, everyone continues to benefit from the environment. The researchers recognize that not everyone will be inclined to change their lifestyle due to their own reasons. Given that interpersonal and organizational factors have a bearing in influencing an individual to pursue the lifestyle, it is recommended for those who live zero waste to share their experiences and reasons as to why they decided to sustain living a zero waste lifestyle. Moreover, educating the public about the movement and debunking the misconceptions on the Zero Waste Movement

can be done in order to encourage more people to engage in the movement and slowly transition into a zero waste lifestyle.

It is acknowledged that individual work can only do so much; thus, the burden should be shared by the government given that they have the power to regulate businesses and companies, who are considered as the biggest producers of plastic waste. There is a call to demand accountability from big companies, which can be more feasible with the help of the government, since they have the right to impose laws to its constituents, as well as the small and large scale producers and businesses. Echoing the sentiments of the informants, the study found that through the system laying down the necessary resources such as building designated recycling centers, strictly banning plastic, or cooperating with companies and manufacturers to create more sustainable packaging, people are more likely to live a sustainable lifestyle especially since the ecology already supports it. Creating an ecology where living zero waste is more accessible and possible will enable people to transition to the living the lifestyle more smoother and easier, which in turn will help the environment and the country as a whole.

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doi:10.1177/016344378300500205

APPENDIX A. CHECKLIST FOR ARCHIVAL RESEARCH

| | | |
|----------------------------|-----------------------------------|--------------------------------------|
| Date | | |
| City | <input type="checkbox"/> Marikina | <input type="checkbox"/> Quezon City |
| Officer/s in charge | | |

| I. Type of Public Record | | | | |
|---------------------------------|--|--------------|-------------------|---------------------|
| | | <i>Print</i> | <i>Electronic</i> | <i>Audio-visual</i> |
| <input type="checkbox"/> | Project Agreement | | | |
| <input type="checkbox"/> | Memorandum of Agreement | | | |
| <input type="checkbox"/> | Signed Contract | | | |
| <input type="checkbox"/> | Minutes of a Project | | | |
| <input type="checkbox"/> | Project Proposal | | | |
| <input type="checkbox"/> | Event Program | | | |
| <input type="checkbox"/> | Participant Information | | | |
| <input type="checkbox"/> | Instructional Material | | | |
| <input type="checkbox"/> | Informative Material (e.g. brochures, pamphlets, leaflets) | | | |
| <input type="checkbox"/> | Certification and/or Accreditation | | | |
| <input type="checkbox"/> | Awards and/or Special Recognition | | | |
| <input type="checkbox"/> | Photo Documentation | | | |
| <input type="checkbox"/> | Video Documentation | | | |
| <input type="checkbox"/> | Others: | | | |
| II. Media Content | | | | |
| <input type="checkbox"/> | Newspaper | | | |
| <input type="checkbox"/> | Magazine | | | |
| <input type="checkbox"/> | Television | | | |
| <input type="checkbox"/> | Radio | | | |
| <input type="checkbox"/> | Social Media Posts | | | |
| <input type="checkbox"/> | Website, please specify: | | | |

APPENDIX B. INTERVIEW GUIDE FOR KEY INFORMANTS

| I. Preliminary Questions | |
|--|---|
| Key Questions | Probe Questions/Topics to Cover |
| Would you like to tell me about yourself? | <ul style="list-style-type: none"> • Name, age, interests • What is your position in the committee/department? • What do you generally do in the department? |
| II. Policies | |
| Key Questions | Probe Questions/Topics to Cover |
| Can you tell me what policies the city has that are related to waste management and plastic use? | <ul style="list-style-type: none"> • How they are implemented (<i>strict, lenient</i>) • How compliant citizens are • Punishment for those who don't comply • |
| Can you share how these ordinances were created? | <ul style="list-style-type: none"> • When it was created • How was the ecology back when it was created? • What did the ordinances aim to solve? • Why were the ordinances created? |
| How do you communicate these policies to your constituents? | <ul style="list-style-type: none"> • Medium of communication (<i>online, print, radio, etc</i>) • Type of material (<i>posters, audio, video, etc</i>) • How often they communicate policies • Who's in charge of dissemination • What message they want to convey |
| III. Programs and Projects | |
| Key Questions | Probe Questions/Topics to Cover |
| Can you share your LGU's programs/projects that are related to waste management and plastic use? | <ul style="list-style-type: none"> • What happened in every project • How it turned out (<i>attendance, what happened after, etc</i>) • When it happens (<i>yearly, monthly, just once</i>) |
| How do you come up with programs and projects that are geared towards the environment? | <ul style="list-style-type: none"> • People involved in planning • Conceptualization process • How they are disseminated (<i>medium, type of content</i>) |
| How do you communicate these programs/projects? | <ul style="list-style-type: none"> • Mode of dissemination • What message they want to convey |

APPENDIX C. INTERVIEW GUIDE FOR YOUTH INFORMANTS

| I. Preliminary Questions | |
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| Key Questions | Probe Questions/Topics to Cover |
| Kindly tell me something about yourself | <ul style="list-style-type: none"> ● Individual <ul style="list-style-type: none"> ○ What are you generally interested in? ● Interpersonal <ul style="list-style-type: none"> ○ Can you talk more about your family? How would you describe them? (<i>family structure, closeness, etc</i>) ○ Who do you generally hang out with? How are they like? ● Organizational <ul style="list-style-type: none"> ○ Student: What is your course? What are the organizations you are affiliated with or are interested in? ○ Working: What type of environment are you in, in your line of work? ○ Can you tell us about your religion and its role in your life? ● Community <ul style="list-style-type: none"> ○ Can you describe your neighborhood? Are you close with some of your neighbors? How about the barangay officials? <p><i>(Take note about the people/environment/community he/she is in most of the time, to be asked again in the discussion)</i></p> |
| Can you tell me how a typical day in your life goes? From the moment you wake up until you go back to sleep. | <ul style="list-style-type: none"> ● What do you do during weekdays when you have school or work? ● What do you do during weekends at home? <p><i>(Note if he/she mentions anything about any pro-environment activities)</i></p> |
| II. Advocacies (Zero Waste Movement) | |
| Key Questions | Probe Questions/Topics to Cover |
| Do you have any advocacies or things you're passionate about? Could you tell us more about it? | <ul style="list-style-type: none"> ● When and where did you first learn about it? ● What made you support and/or continue your advocacy? |
| Can you share with us what you know about the Zero Waste Movement? | <ul style="list-style-type: none"> ● When and where did you first learn about the ZWM? ● What made you support and/or continue your participation in the ZWM? |
| What do you do to support the Zero Waste | <ul style="list-style-type: none"> ● Online activity <ul style="list-style-type: none"> ○ Do you like/comment/share content on your social media |

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| Movement? | <p>platforms? How often do you do this?</p> <ul style="list-style-type: none"> ○ Reason for engaging online ● Offline activity <ul style="list-style-type: none"> ○ Behavior done in relation to the ZWM ○ What other things have you done in relation to the ZWM? (<i>clean ups, segregation at home or at school, etc.</i>) ○ (<i>if mentioned</i>) How was your experience in the group activities that you participated in? ● How informant incorporated ZWM on his/her daily life <p><i>(only probe these questions when mentioned by informant)</i></p> |
| III. Environmental Facilitators and Barriers | |
| Key Questions | Probe Questions/Topics to Cover |
| What led you to participate in the Zero Waste Movement | <ul style="list-style-type: none"> ● Internal influence (<i>interest, advocacy, hobbies, own factors</i>) ● External influences <ul style="list-style-type: none"> ○ Interpersonal (<i>Family, friends</i>) ○ Organizational (<i>organizations, affiliations, school, church, workplace</i>) ○ Community (<i>LGU, baranggay, village, culture, norms</i>) <ul style="list-style-type: none"> ■ Online groups ■ Social media content <p><i>(Focus on who motivates or supports them in the ZWM)</i></p> |
| Does anyone from your family/friends/schoolmates/workmates also have the same advocacy as yours? | <ul style="list-style-type: none"> ● What activities do you do together to support the ZWM? ● How important is it for you that someone close to you supports your advocacy? |
| Was there a time or situation that you wanted to participate in activity on ZWM but was not able to? | <ul style="list-style-type: none"> ● Can you tell us about the challenges you encounter in your participation in the ZWM? ● How did that impact your participation? ● What did you do to solve it? |
| IV. Public Policy | |
| Key Questions | Probe Questions/Topics to Cover |
| Can you tell me about your knowledge of national policies revolving around the Zero Waste Movement? | <ul style="list-style-type: none"> ● In your opinion, is it being implemented properly by the government? ● Compliance to the law ● Their stand on the law <ul style="list-style-type: none"> ○ How it helps or hinders their zero waste behavior ● Their perception on what the government wanted to communicate |

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| | through the policy |
| In your city, what are the ordinances geared towards the environment are you familiar with? | <ul style="list-style-type: none"> ● Awareness of local policies/ordinances ● How informant knew about policy (<i>medium, type of content</i>) ● How do you participate in the projects/programs you mentioned? ● Their stand on the ordinances as well <ul style="list-style-type: none"> ○ Agree, negotiate, opposed ● Perception on what the policy/ordinance is trying to communicate |
| In what way do policies/projects/programs by your LGU affect your participation in the Zero Waste Movement? | <ul style="list-style-type: none"> ● Influence of policies ● How policies help or hinder informant's participation in the ZWM |
| V. Insights on the Local Ordinances and Policies | |
| Key Questions | Probe Questions/Topics to Cover |
| What are your insights on your LGU's efforts in relation to the ZWM? | <ul style="list-style-type: none"> ● Are the policies/programs/projects enough? <ul style="list-style-type: none"> ○ No: If you were to add any more policies in your city, what could it be? ● What can you say about your fellow citizens in terms of their compliance? ● What can be improved? <ul style="list-style-type: none"> ○ With the city government ○ With the residents of the city |