# A POLICY FOR PLASTIC REDUCTION: AN INTERVIEW STUDY OF ENVIRONMENTALISTS ON THE IMPROVEMENT OF FEASIBLE APPROACHES FOR TAIWANESE GOVERNMENT

By

Chia-Yu Ko

柯佳妤

Submitted to the Faculty of
Department of International Affairs in partial fulfillment
of the requirements for the degree of
Bachelor of Arts in International Affairs

Wenzao Ursuline University of Languages 2021

# WENZAO URSULINE UNIVERSITY OF LANGUAGES DEPARTMENT OF INTERNATIONAL AFFAIRS

This senior paper was presented

by

Chia-Yu Ko 柯佳妤

It was defended on November 28, 2020 and approved by

Reviewer 1: Shao-Tzu Wu, Assistan	at Professor, Department of International Affairs
Signature:	Date:
Reviewer 2: Yu-Hsuan Lee, Assistar	nt Professor, Department of International Affairs
Signature:	Date:
Advisor: Daniel Lin, Associate Prof	Sessor, Department of International Affairs
Signature:	Date:

Copyright © by Chia-Yu Ko 柯佳好 2021

#### A Policy for Plastic Reduction: An Interview Study of Environmentalists on the Improvement of Feasible Approaches for Taiwanese Government

Chia-Yu Ko

Wenzao University of Language, 2021

#### **Abstract**

The Taiwanese government has policies to achieve plastic reduction in supermarkets, on marine conservation, on education, and on online shopping. However, many Taiwanese environmentalists believed that these policies were insufficient to significantly reduce people's use of plastic. Therefore, the study explored how environmentalists perceived what the Taiwanese government could do to better implement these policies. Seven environmentalists were interviewed, and their transcripts were edited, coded, and analyzed with MAXQDA. The findings indicate that, to promote plastic reduction, the government could start from the manufacturers, focus on marine environment more than marine resources, make connection with ecological system on education, and put the stress of social responsibilities for online sellers. With these efforts, more people would get inspired and be more willing to reduce their uses of plastics together.

Keywords: Plastic reduction, Environmentalists

# TABLE OF CONTENT

INTRODUCTION	1
Research Background	1
Research Motivation	3
Research Purpose	3
Research Questions	4
Conclusion	4
Limits	4
Delimits	5
LITERATURE REVIEW	6
Plastic Reduction	6
Plastic Pollution	6
Economic Development on Plastic Problem	9
Thoughts of Consumers on Plastic Problem	9
Plastic Reduction in The World	10
Feasible Approaches on Plastic Reduction	11
Plastic Reduction Policies in Different Countries	11
Plastic Reduction in Supermarket	13
Plastic Reduction on Marine Conservation	13
Plastic Reduction on Education.	13
Plastic Reduction on Online Shopping	14
Feasible Approaches on Plastic Reduction in Taiwan	14
Plastic Reduction Policies for Taiwanese Government	14
Effectivity of Plastic Reduction Policies	17
Proposed Policies to the Environmentalists in Taiwan	18
The Environmentalists in Taiwan	20
The Importance of the Environmentalists in Taiwan	20
The Distribution of the Environmentalists in Taiwan	21
Research Approach for this Study	24
Methodological Approach for Similar Studies	24
In-Depth Interview to the Environmentalists in Taiwan	26
METHODOLOGY	28
Research Design	28

Source of Data	28
Instrument and Data Collection	30
Data Analysis	31
DATA ANALYSIS	32
The Improvement of Plastic Reduction in Supermarkets	33
The Improvement of Plastic Reduction on Marine Conservation	36
The Improvement of Plastic Reduction on Education	38
The Improvement of Plastic Reduction on Online Shopping	40
Summary of the Data Analysis	41
CONCLUSION	42
Discussion of the Major Findings	42
Discussion 1: Plastic Reduction from Manufacturers	42
Discussion 2: The Importance of Marine Environment	42
Discussion 3: Making Connection with the Ecological System from the	
Education	43
Discussion 4: The Essential of Social Responsibility for Online Sellers .	44
Conclusion and Suggestions	45
APPENDIX 1	46
APPENDIX 2	50
BIBIOGRAPHY	51

# LIST OF TABLES

Table 1. Attributes of the 7 Interviewees	32
---	----

#### INTRODUCTION

#### **Research Background**

In Taiwan, people pursue "convenience" on everything. When it comes to convenience, without a doubt, it was the convenient stores. But there was the second huge usage in Taiwan could represent convenience, which was plastic product. Because the plastic is light, cheap, and convenience, Taiwanese used more and more plastic products and became a habit and culture. Especially, Taiwanese overused the single-use plastic products. When people bought a drink in the drink shop, the clerk poured the drink into the plastic cup, used a plastic lid to cover it, put the cup into a plastic bag, and gave a plastic strew with the drink to the consumer. After consumer finished the drink, he/she threw it away immediately. It was a problem that people abusing single-use plastic products. However, it caused a huge amount of the single-use plastic trash in Taiwan.

Based on the reason that the plastic was hard to be decomposed, the single-use plastic might become the garbage in the sea or be buried underground. The result of this problem was to damage the eco-system in the world and human's health as well. To improve the situation, Taiwanese government made some policies to limit the use of single-use plastic products. They were plastic reduction policies. The clerks could not provide single-use plastic products automatically when consumers purchased in the stores. Even, people needed to pay for the single-use plastic products. It decreased people's inclination of using single-use plastic products.

According to Ellen Macarthur Foundation, it mentioned that if the current trend of plastic using continues, the weight of the plastic could be more than the weight of fish in the ocean by 2050.<sup>1</sup> Only the action of plastic reduction could achieve the goal of thorough

<sup>&</sup>lt;sup>1</sup> Will McCallum, *How to Give up Plastic: A Guide to Changing the World, One Plastic Bottle at a Time* (Taipei: The Commercial Press, Ltd, 2019).

improvement on the plastic issue. The single-use plastic was the main reason why it caused the plastic pollution. But in one book which mentioned that it did not mean the plastic was not good at all. Especially, in the medical use, it was the best way for someone who truly needed this kind of material to live. So, it was impossible to prohibit the use of plastic product absolutely, but we could reduce to use the single-use plastic products in general<sup>2</sup>. It was the reason why the government had promoted the plastic reduction policies. Through the policies executing, it could decrease the reliance on the use of plastic products for the consumers. It also could change their habits of using single-use plastic products.

Literally, not only the government had promoted the related policies, but also several Taiwanese environmentalists had supported it. Greenpeace was one of the supporting environmentalists, it mentioned that the responsibility of the plastic reduction could separate into three parts. Firstly, it was responsible for the individual. A person could prevent overconsuming, use single-use plastic products, and realize the harmful effects on plastic pollution. Secondly, it was related to the government. It could limit and promote the use of plastic products in public, lead to improve the situation, focus on reusing system, and supervise the enterprise to do the plastic reduction on their products. Lastly, it was the enterprises in Taiwan. They could reduce the use of the plastic products and invest on the reusable service system and so on<sup>3</sup>. Thus, plastic reduction was a nationwide action.

Plastic reduction was the solution to decrease making the plastic trash, and prevent damaging the eco-system and the ocean. The government planned the plastic reduction policies from 2002 until 2030. And the environmentalists supported some policies or actions to protect the environment which included the issue of the plastic reduction. However, under

<sup>&</sup>lt;sup>2</sup> Ibid.

<sup>&</sup>lt;sup>3</sup> See more details in 綠色和平塑膠專案小組, "回收不能解決塑膠問題!企業、政府、個人可以做的減塑方法," Greenpeace 綠色和平, accessed February 25th, 2020. https://www.greenpeace.org/taiwan/update/12393/回收不能解決塑膠問題!企業、政府、個人可以做/.

the policies for several years from the government, the environmentalists might have some feasible steps for the policies. In order to achieve the goals, the environmentalists needed to have some specified steps to promote people to do the action together.

#### **Research Motivation**

Realizing the effects of using plastic and understanding the action people can do for plastic reduction are important for being a resident in Taiwan. After people understand the current situation of plastic pollution, they may be willing to make a change to have a better environment. Nowadays, recycling is not enough to improve the situation, people should follow the rules of plastic reduction policies and live up with decreasing the use of plastic products.

#### **Research Purpose**

Let the plastic reduction policies executive effectively, it is important to realize the solutions from the environmentalists in Taiwan on the plastic reduction policies which were promoted by the government. The purpose of the study is to explore the feasible approaches that Taiwanese environmentalists believe the government should improve on the policies of plastic reduction. There must be the lack of policies which the government needs to pay more attention. To figure out what are the approaches should Taiwanese government do and promote in Taiwan.

#### **Research Questions**

From the issues we can approach easily, I made the four research questions:

- 1. How can the government improve the policy of plastic reduction in supermarkets?
- 2. How can the government improve the policy of plastic reduction on marine conservation?
- 3. How can the government improve the policy of plastic reduction on education?
- 4. How can the government improve the policy of plastic reduction on online shopping?

#### **Conclusion**

In the consequence of the research, it could know that whether the government made a suitable policy or not, and what were the feasible approaches should the resident do. After completing the research, it might influence on the government and the residents. The research could be provided to the government to advise or make more details on the policies which the government had not done. The government could also promote the related requirement for the residents and the corporations in Taiwan. Executing the plastic reduction was not only the responsible for the government, but also the responsible for all the people in Taiwan. If everyone in Taiwan could decrease the use of plastic products together, it could let the movement be more effectively and improve the current situation soon.

#### Limits

There were two limits in the research. First, because of the time limited, I only could interview 6 environmentalists. The other reason was that this study was related to the environmental problems but only focused on the issue of plastic reduction. Therefore, I found the environmentalists which focused on the plastic reduction, not included the environmentalists of all issues in Taiwan.

### **Delimits**

Although the contribution of the research was having a better life, it was not included all the issues of the environmental protection. However, I only focused on the issue of plastic reduction. This research was related to the plastic problem.

#### LITERATURE REVIEW

#### **Plastic Reduction**

#### **Plastic Pollution**

As the population in the world continue growing, the garbage also continued to increase. One of the important issues we needed to pay attention is plastic pollution. When it comes to plastic pollution, people knew that plastic was produced because of the convenient, cheap, light, and easy to carry something away. Also, it was called "abandoned culture". In the book, 減塑生活, mentioned that the four most hugest plastic contaminations are plastic bags, plastic strews, plastic cups, and plastic lids. All of these four components were single-use plastic. However, the single-use plastic which was caused the most seriously on plastic pollution.

Besides, it could not be biodegraded, if they were not recycled and solved properly, it might cause a huge problem of the plastic pollution. The solution of dealing with the plastic which was not biodegradable was buried under ground or burned it, and caused air pollution.<sup>5</sup> This kind of solution on dealing with the plastic caused the environmental problem. If they were buried under ground, it could not be decomposed and keep releasing the chemical poison in the ground. It might influence groundwater people usually used and the plant people raised up. On the other hand, if the plastic was burned, it effected on the air pollution. The combustion gas was the main reason why it caused the air pollution. Therefore, the use of plastic effected seriously on the environment in the world.

To make worse, some plastic products could be recycled. Most of the recycling facilities were set up for recycling the hard materials. It was easier to separate the categories of the

<sup>&</sup>lt;sup>4</sup> Mentioned in McCallum.

<sup>&</sup>lt;sup>5</sup> More explanation in Roger Harrabin, "Should We Burn or Bury Waste Plastic?," BBC News, accessed 2020. https://www.bbc.com/news/science-environment-43120041.

plastic. In general. The machine could accept the softer recycling stuff. Also, the plastic bags could not be recycled into the new materials. It could not use the normal system to reach the goal of recycling.<sup>6</sup> In order to recycle the plastic bags, it needed to use additional fee to deal with. This was the reason why some plastic products did not recycle. Due to the completed procedure, it cost more fee on recycling a plastic bag than producing a new one.<sup>7</sup>

According to Earth Policy Institute, there was one trillion plastic bags are used in the world every year before. Because of the light weight of the plastic bags, it was blew to everywhere by the wind easily. It meant that the plastic bags can be everywhere included land and marine environment. It caused the pollution worldwide. Due to the plastic bags are soft, there were ten and thousands of birds, turtles, whales and other animal in the ocean or on the land mistake the plastic bags for food. When they ate the plastic bags into the stomach, the plastic bags could not be biodegraded naturally. It stayed in animal's gut forever. Then, the animal's gut prevented food digestion and had the very slow and painful death. It cost 1,000 years for plastic bags to decompose, then, once an animal died and decays after ingesting plastic bags, the plastic was still in the marine environment and kept damaging other marine animals.

There was a shocked video that was talked about a plastic straw in a sea turtle's nose. I thought it was the most helpful news for people who decided not to use the plastic straw anymore in the life. When people drank a beverage, usually, it should be with a plastic straw. The clerks in the beverage store gave the plastic straw automatically and free, people took it for granted. Otherwise, with the beverage, obviously, there were plastic cup with cold drink

\_

<sup>&</sup>lt;sup>6</sup> Professor Plastics, "Can I Recycle Plastic Bags in the Curbside Recycling Bin?," The Plastic Make It Possible, accessed March 3rd, 2020. https://www.plasticsmakeitpossible.com/plastics-recycling/how-to-recycle/at-home/can-i-recycle-plastic-bags-in-the-recycling-bin/.

<sup>&</sup>lt;sup>7</sup> Robin Konie, "The Dangers of Plastic Bags: Be Part of the Solution, Not the Problem.," Thank Your Body, accessed March 3rd, 2020. https://www.thankyourbody.com/dangers-of-plastic-bags/.

<sup>&</sup>lt;sup>8</sup> Janet Larsen, "Plastic Bags Fact Sheet," (2014), accessed March 4th, http://www.earth-policy.org/mobile/releases/plastic\_bags\_fact\_sheet.

and plastic lid with hot drink. But, it was danger if people used these plastic products when drinking or eating. It not only influenced on the animals' health but also effected on human's health. The plastic was made by polypropylene which was one type of plastic which came from petroleum. It was approved to be food-safe by the Food and Drug Administration, but there was still the evidence that the chemicals permeated into liquids and release poison out, especially exposing to heat, the situation became seriously.

In 1939, after world war II, there was a lack of resource, the western countries started to use plastic to replace rubber and some other natural resource. As the price of the plastic was cheap enough to make large amount of daily life, it was made the normal and general daily products for people in the life. However, the most special character of plastic was plasticity. It could be soft, hard and tenacious to make any products. Also, it was time for plastic designed culture and went into people's life.

In the result, the plastic pollution effected on environment, animals, and human. In other words, plastic could influence different sides in our daily life. The three components of the result of using plastic were related to people's health, in the end. People were making a worse earth for ourselves.

\_

<sup>&</sup>lt;sup>9</sup> The verification is in Christy Brissette, "Plastic Straws Aren't Just Bad for the Environment — They Can Be Bad for Your Body," The Washiongton Post, accessed March 4th, 2020. https://www.washingtonpost.com/lifestyle/wellness/plastic-straws-arent-just-bad-for-the-environment--they-can-be-bad-for-your-body/2018/07/02/d682fdfe-7964-11e8-aeee-4d04c8ac6158 story.html.

#### **Economic Development on Plastic Problem**

In 1950, the year for blossom of economics in Hong Kong<sup>10</sup>, plastic was the main part for the light industry, the plastic products which characters were light and not leak the liquid out such as plastic buckets. It could be replaced for the heavy wood buckets and iron buckets to carry out liquid. Gradually, plastic might be replaced for most of the stuff in the life.

From knowing the change of the daily habits, the plastic grew as the economic development. Due to the technological development, the plastic could involve into our life. When the technology started to grow up, the economics grew as well. As the economic development, people wanted high technological lifestyle so the inventors created different kinds of plastic products to achieve people's requirement of life quality such as keeping the food fresh, colorful design, convenience and so on. They were the reasons why the plastic went into the people's life.

When it comes to environmental protection of the plastic problem, it was also related to the economic development. When people's lifestyle was reached the higher level, they would start to think about something which surrounded them. The plastic issue was a classic example. Because of the use of plastic products for many years, it was full of people's life. The environmental protection appeared from plastic pollution. Therefore, the economic development was an important reason why there was an environmental awareness appeared.

#### **Thoughts of Consumers on Plastic Problem**

Plastic is a kind of component which is durability, stability, and cheap. Due to these characters, the report showed that the commonest plastic we use might release two

<sup>10</sup> The issue is in 毛詠琪, "【煩膠·一】難再愛多百十年 我們對塑膠從何由愛變恨?," 香港 01, accessed March 4th, 2020. https://www.hk01.com/世界說/174111/煩膠-一-難再愛多百十年-我們對塑膠從何由愛變恨.

greenhouse gases, methane and ethylene, when exposing under solar radiation.<sup>11</sup> The former could absorb heat and aggravate climate change, the latter would stimulate people's respiratory tract and cause toxicity on human.

In 2011, there was the most serious food safety issue happened in Taiwan.<sup>12</sup> The issue was about the plasticizer in some food. Usually, plasticizer is added into plastic products to let it become more softer than no adding. However, there was another serious plastic issue which was melamine resin issue in milk power in China and it happened in 2008. Melamine resin is one of the main materials of making plastic products.<sup>13</sup> After these issues happened, more and more people has focused on the plastic issue. Not only the residents pay more attention on the environmental problem because of plastic products, but also some environmentalists do. It was the time for people caring about the plastic issue. Obviously, plastic damaged environment and human's health.

#### **Plastic Reduction in The World**

The earth was getting worse day after a day. Almost, there was no resource to use because of the damage in the future. The damage came from the use of plastic. Using plastic became people's habits. It was impossible to prohibit the use of plastic products completely. There were some reasons, for instance, it was helpful on the medical system and sanitation. First, it was necessary for someone who needed the plastic straw for drinking water in the medical aspect. The other one was about sanitation, when there was an infectious disease, the plastic products were useful and helpful for it. Moreover, people could not live without the

<sup>&</sup>lt;sup>11</sup> Sarah Jeanne Royer et al., "Production of Methane and Ethylene from Plastic in the Environment," *PLoS* ONE 13, no. 8 (2018).

<sup>&</sup>lt;sup>12</sup> According to this thesis Yin-Ke Huang, "A Study of Government Crisis Management on Plasticizer" (National Chi Nan University, 2012).

<sup>13</sup> 張蓉安, "不該在牛奶裡的「三聚氫氨」, 是能吃的東西嗎?," (2017), accessed March 5th.

plastic products. But, people could reduce to use the plastic products which was not necessary for them in the daily life.

To pursue the convenience, the abandoned culture appeared in the world. It meant people were used to use the single-use plastic and threw it away after finishing using. The process of single-use plastic was to get the source of it, manufacture it, and throw it away. In order to change this habit, people could execute the reusable system such as circularity. This system was called circular economy. It reached the goal that to reuse and maintain the value of products. It could let the products be used as long as possible. In the meantime, it is also a good way to reduce the use of the plastic products. In other words, it could minimize the waste of the resource which was produced. Literally, according to the plastic reduction, it was circular economy such as using the containers, bags, straws, cups again and again. It might not cause the amount of plastic garbage and damage the earth.

#### **Feasible Approaches on Plastic Reduction**

#### **Plastic Reduction Policies in Different Countries**

Plastic pollution is the problem in the world, nowadays. It happens in different countries, nowadays. There are more countries focus on the issue of plastic pollution. The governments in different countries have promoted a lot of plastic reduction policies in order to improve the situation, not only for their countries but also for the earth.

There were some countries executed the plastic reduction to deal with the problem we had faced. Firstly, in 2016, France made the policies to prohibit selling disposable tableware, plastic cotton swab, and the cosmetic with microbeads, they executed from 2020. In the meantime, France hoped to achieve the goal which was no plastic rubbish emission in 2025.

11

<sup>&</sup>lt;sup>14</sup> "Reducing Plastic Waste – Why Is It Important?," Environmental Monitoring Solution, accessed March 5th, 2020. https://www.em-solutions.co.uk/insights/reducing-plastic-waste-why-is-it-important/.

Secondly, Canada mentioned the ocean plastic chapter ever in G7 summit in 2018. It was hoped that each country in the world can admit to corporate with the enterprises and let the plastic products be made with three characters, recycling, reusability, recovery. Although the America and Japan refused to give the signature, there was still other countries which decided to stand with Canada. Nearly, Canadian government hoped that they can start to prohibit the use of single-use plastic in 2021.

Thirdly, although there was not enough resource for African government, they still made the plastic limitation policies from 2005 and prohibited the use of plastic bags from 2017.

Fourthly, some countries belong to island country and they could not live without the ocean. Take Vanuatu for example, it had suffered the problem of global warming and the plastic pollution in the ocean. Start from 2018, Vanuatu decided to prohibit using single-use plastic bags, straws, and packages.

Besides, in Asia area, Korea and Japan were the two countries that they used plastic products for huge amount. However, fifthly, Korean government announced that the plastic rubbish should be decreased 50% and the recycling rate should increase from 34% to 70% before 2030.

Lastly, Japanese government started to execute the policies for paying the plastic bags. And also, it announced to reduce the use of plastic for 25%.<sup>15</sup> There were more and more countries which promoted the plastic reduction policies. Most of the countries wanted to make the effort on plastic reduction for the improvement.

<sup>15</sup> More information in 社會創新平台, "從歐美到亞非,從飲料到衣物!方方面面減塑大作戰!," 社會創新平台, accessed March 5th, 2020. https://si.taiwan.gov.tw/Home/sdgs/reduce plastic/int.

#### **Plastic Reduction in Supermarket**

There was the amount of plastic use in supermarkets. To keep the food and vegetable fresh and convenient to carry out, plastic package was necessary for the manufacturers and supermarkets. Most of the consumers purchased the stuff with plastic package in supermarkets.

Nowadays, most of the supermarkets provided the strategies which was related to the environmental issues. Reducing the use of plastic products was the main strategies which promoted by supermarkets. Hence, they needed to take it for the responsibility because there were a large number of plastic packages came from them.

#### **Plastic Reduction on Marine Conservation**

The plastic rubbish was eaten by the sea animals such as sea turtles died from it. When the plastic rubbish went into sea animals' stomach, it transpired the poisonous chemical material and kept staying in animals' body. As following the food chain, it might go into human's body and caused the damage.

Additionally, the ocean was polluted by the plastic rubbish. It could not become a sustainable development ocean for next generation and the earth. In other hand, due to the ocean could not be sustainable development, there was no enough marine resources could be earned money. The fishery might disappear in the world one day. Moreover, plastic issue was also important for the marine conservation and to figure out the solution for improving it.

#### **Plastic Reduction on Education**

According to the economic development and habits of people's consumptions, the use of plastic products prevails for several years, especially the single-use plastic, it was the main category of plastic products which people need to reduce. To reduce the plastic wastes,

education was utmost importance. Because it could educate the correct knowledge in every area, included the plastic wastes in the worldwide. Education was based on the school and home. It involved our daily life. Moreover, it was a great opportunity to change their habits on plastic products. In other words, it could change their knowledge, attitude and behaviors through education. From educating children's concepts on plastic waste, it was the fastest method of getting the correct knowledge and the reason why people needed to do plastic reduction. As the time goes, the concept of reducing the use of plastic products might stay in children's mind and have a better earth for themselves.

#### **Plastic Reduction on Online Shopping**

Nowadays, more and more consumers purchased products online. In other words, there were less people go shopping on the street. As the shopping style changing, it caused the plastic problem seriously. When purchasing the products online, the products might be packaged with single-use plastic and were sent by the sellers. There was more than one plastic bag when buying one product online. It was a huge amount of the use of plastic. Particularly, the plastic bags for delivery packages were single-use plastic. That was the reason why it was a huge problem which causes the plastic pollution.

#### Feasible Approaches on Plastic Reduction in Taiwan

#### **Plastic Reduction Policies for Taiwanese Government**

The issue of single-use plastic was a key point for the world to do plastic reduction, including Taiwan. Taiwanese pursued convenience so that the manufacturers in Taiwan made a lot of single-use plastic package. Moreover, they overused the additional plastic package in

<sup>16</sup> Cheuk-Fai Chow et al., "Plastic Waste Problem and Education for Plastic Waste Management," in *Emerging Practices in Scholarship of Learning and Teaching in a Digital Era* (Singapore: Springer Nature Singapore Pte Ltd, 2017).

their daily life. After making a huge amount of the plastic, the earth needed to afford the waste of the plastic. About the plastic reduction, secretary-general, António Guterres said in 2018:

On World Environment Day 2018, the message is simple: reject single-use plastic. Refuse what you can't re-use. Together, we can charge a path to a cleaner, greener world.<sup>17</sup>

In order to improve the situation in Taiwan, Taiwanese government promoted some policies. The policies could not become the prohibition immediately, for instance, it was hard to change a person's habits in a short time. Therefore, the government promoted the policies gradually. The policies have promoted from 2002 till 2030. I separated it for three parts of the period of executing the policies.

The Policies of Early Period from 2002 to 2016

In 2002, it was the special year which started the road of plastic limitation. The plastic limitation was promoted by the director of Taiwanese Environmental Protection

Administration, Hau Lung-Bin. The policies included limiting the residents to use plastic bags on July 1<sup>st</sup>. Then, in the same year on October 1<sup>st</sup> the government promoted to prohibit disposable tableware. Also, it included prohibiting using the plastic bags of the thickness which cannot under 0.06 millimeter. In the next year, the target of limitation extended to department store in Taiwan. According to the data from Taiwanese Environmental Protection Administration, it showed that it decreased 20.05 billions of usage of plastic bags

\_

<sup>&</sup>lt;sup>17</sup> "The Caribbean Addresses the Scourge of Plastic Pollution with Help from the Cartagena Convention Secretariat," UN Environment, accessed November 13th, 2020.

https://www.unenvironment.org/cep/news/editorial/caribbean-addresses-scourge-plastic-pollution-help-cartagena-convention-secretariat.

<sup>&</sup>lt;sup>18</sup> The event was mentioned in 行政院人事室, "郝龍斌署長重要事蹟," 行政院環境保護署, accessed March 6th, 2020. https://www.epa.gov.tw/Page/5D613C990CB950D2.

<sup>&</sup>lt;sup>19</sup> The policy mentioned inShu-Fang Huang et al., "In 16 Years, What Have We Changed?," CNA 中央通訊社, accessed March 6th, 2020. https://www.cna.com.tw/project/20180730-Plastic/.

<sup>&</sup>lt;sup>20</sup> Yong-Jian Shen, "The Role of Leadership in Policy Management: a Comparative Study of Two Policies of Environmental Protection Administration" (I-Shou University, 2005).

after the first policies in 2002.<sup>21</sup> However, in 2006, the policy from the government focused on the using of disposable tableware. Moreover, in the end of 2016, the government mentioned that there were six various stores could not provide the plastic bags for free such as drink shop, laundry, pharmacy, medical store, the store for 3C products and bookstore. Last but not least, if people needed the plastic bags, they were increased to NT\$5 for per plastic bag. It reached the goal which is paid for using.

The Policies of Middle Period from 2017 to 2024

As the plastic issue keeps appearing in Taiwan, there must be the policies to limit the residents using plastic products. The government made the policies step by step gradually and reduced the use of plastic. In 2017 and 2018, the government decided to make the policies seriously, there were three conditions of it. First, the rules were expanding the targets from six various stores to fourteen various stores. Second, the government canceled to provide the plastic bags which the limitation of the thickness of them were 0.06 millimeters. Lastly, there were three targets which were mass merchandisers, supermarkets and convenience stores could only provide the two-use plastic bags. The two-use plastic bag meant to combine the garbage bags for special purpose and shopping bags.<sup>22</sup>

<sup>&</sup>lt;sup>21</sup> 社會創新平台, "扛起便捷生活的隱藏代價:臺灣的減塑之路," 社會創新平台, accessed March 6th, 2020. https://si.taiwan.gov.tw/Home/sdgs/reduce plastic/gov?AspxAutoDetectCookieSupport=1.

<sup>&</sup>lt;sup>22</sup> The new policy promoted by 新聞傳播處, "環保新運動—擴大管制購物塑膠袋," 行政院, accessed March 6th, 2020. https://www.ev.gov.tw/Page/5A8A0CB5B41DA11E/f8d89849-e4f1-41e7-86ec-8fa9c2b496a9.

The biggest change in the years was that the government prohibited microbeads.

Although microbeads were the smallest part which leach into the ocean, it was still dangerous for the ecosystem.<sup>23</sup> In the period of the policy being made, the government gave the time for residents to improve their habits about the plastic reduction. Hence, the government made the policies slowly and let people could follow the government's step.

The Policies of Latter Period from 2025 to 2030

Generally, as the government making the policies for improving the problem, there is the future goal. In the future goals, the main target is about the disposable plastic such as he shopping plastic bags, disposable tableware, single-use plastic cups, and plastic straws. In 2025, the policies will focus on limitation of whole items. It is time for the residents get used to practice the plastic reduction. Because in the early years in 2002, the government made some policies, people in Taiwan need to take some changes gradually. So, the government has given enough time for the residents already. In the meantime, in 2025, because of the limitation, there is another policy which is making the price based on the quantity of using plastic products. It means that if there are the more plastic products are used, the higher the price is increased. The consumers won't be willing to pay more money on the plastic product.

#### **Effectivity of Plastic Reduction Policies**

In order to improve the plastic problem, there were some countries started the action of protecting the earth. It was not excluded Taiwan. When Taiwanese government promoted the plastic reduction policies. The main content of the policies was the limit of the use of single-use plastic bags. After plastic limitation policies executing, there was the improvement on

\_

<sup>&</sup>lt;sup>23</sup> 顏寧, "520 新政府環境政策總體檢(三): 不只禁用塑膠微粒,更要推動「資源循環」," The News Lens 關鍵評論, accessed March 7th, 2020. https://www.thenewslens.com/article/69062.

deceasing plastic bags on the beach in one year. According to the report of The Society of Wilderness in Taiwan, the data of the result of coastal cleanup in 2018 was the lowest number in the past 14 years. The average of plastic bags was 14.7% of all plastic rubbish which were picked on the beach. But, in 2018, the number of plastic bags were picked was 5.7% of all plastic rubbish on the beach.<sup>24</sup> The ocean protector of The Society of Wilderness mentioned that the improvement of plastic bags reduction is based on the government executing the plastic reduction policies in 2018.<sup>25</sup> The policies raised people's habits and changed it effectively. It was the encouragement for the government and the residents in Taiwan. Hence, the improvement of the plastic problem was not an impossible and long-tern project for Taiwanese. Everyone needed to make the efforts for the better earth.

#### **Proposed Policies to the Environmentalists in Taiwan**

Based on the research questions I mentioned, there were four policies which the government promoted. They were the policies for having the good environment in supermarkets, on marine conservation, on education and on online shopping.

Limiting the Use of the Plastic Tray and Box

The policy was made for limiting the plastic package in supermarkets or hyper-markets. But not all the plastic package could be used in these stores, there was still some plastic package with some special material, PET, PS, PVC, PE, or PP, were allowed in supermarkets or hyper-markets. These plastic package which could be used to package eggs, fresh fruits, meats, seafood and bread with the special material. Therefore, in the policy, there were three

<sup>&</sup>lt;sup>24</sup> In the press conference"荒野保護協會淨灘數據發表記者會," 荒野保護協會, accessed March 7th, 2020. https://www.sow.org.tw/info/news/20181219/6432.

<sup>25</sup> The resource is from 賴品瑀, "擴大限塑 海灘塑膠袋剩 5.7%," 台灣環境資訊中心, accessed March 7th, 2020. https://e-info.org.tw/node/215554.

main content for limiting the use of plastic tray and box in the designated places. First, using the own containers which could replace to use the plastic one. Second, decreased the weight of the plastic containers with the special materials. Lastly, do not using the plastic tray and box to package stuff in supermarkets and hyper-markets.<sup>26</sup>

#### Developing Plan of Marine Affairs

In order to enhance the security and maintain the livelihood of the fishermen, there were some plans that the government mentions in this policy. The purpose of the most related one was to prevent being destroyed Taiwanese ocean zone by other countries. The plan which was the most related to this study about the marine conservation and kept the sustainable resource in the ocean. The government wanted to do the marine conservation through enhancing the law execution in the ocean zone and the port management, also, cooperating with the marine training institution to train new experts.<sup>27</sup>

#### White Paper of Marine Education

As the awareness of marine conservation growing, the government provided this policy to educate the students who were in the elementary, junior and senior high school on how to treat the ocean. The purpose of the policy was to cultivate the talents who was interested in this marine area. There were three solutions, but only one of them was the most related to this study. It was to enhance the fundamental awareness of marine education. The government hoped that students could recognize, love, and treasure the ocean. In the meantime, it could build the right concept of the ocean for the parents and children.<sup>28</sup>

\_

<sup>&</sup>lt;sup>26</sup> Environmental Protection Administration, *Limiting Using the Platic Tray and Plastic Packaging Box* (Taipei: Executive Yuan, R.O.C (Taiwan), 2007).

<sup>&</sup>lt;sup>27</sup> The Team of the Security, *Developing Plan of Marine Affairs Policy* (Taipei: Executive Yuan, 2004), accessed June 7th.

<sup>&</sup>lt;sup>28</sup> Ministry of Education, *White Paper of Marine Education* (Taipei: Ministry of Education, 2017), accessed June 7th.

Decreasing the Amount of the Package on Online Shopping

According to the online shopping, it was more and more popular in the world, and Taiwan was no exception. But in the process of delivery needed a lot of plastic package. In order to deal with this situation, the government suggested the online sellers to minimize the plastic package and the maximized the circular system. It meant that the sellers reduced to use the plastic package and tried to use the circular package to execute the plastic reduction. The policy was a suggestion for the consumers and sellers, it had no law limitation.<sup>29</sup>

#### The Environmentalists in Taiwan

#### The Importance of the Environmentalists in Taiwan

People usually take the existence of the environmentalists for granted. But there was the significance for them existing in the society. As the plastic problem rising, the government had made some policies that hoping to have the regulation about the use of plastic. The policies which were promoted by the government were executed for general knowledge. It was a lack of the details of policies for whole direction on the plastic issue. They could point out what the government needed to pay more attention on. For instance, there were the specific policies for enterprises such as supermarkets, merchants, manufacturers, and so on. If there was no regulation for them, they might keep using the original packages which were not good for environment.

However, except impacting on the government, there was the other target for them. The main execution of environmentalists was teaching strategy such as indoor speech and outdoor teaching activities. This was the way to reach the goal which is environmental protection for them. The other main execution was to follow a concept. Take the plastic issue for example,

<sup>&</sup>lt;sup>29</sup> Environmental Protection Administration, *Decreasing the Amount of the Package on Online Shopping* (Taipei: Environmental Protection Administration, Executive Yuan, R.O.C (Taiwan), 2019), accessed June 7th.

first of all, people needed to get the knowledge on plastic problem we faced, then, the knowledge could become the attitude when facing the issue, finally, it changed to become the action on plastic issue.<sup>30</sup> This was the reason why environmentalists played an important role in the environmental issue, not only for the residents but also for the government.

#### The Distribution of the Environmentalists in Taiwan

The role of the environmentalists was a kind of supervising the government and point out what the government needed to improve. In the meantime, they held lots of activities which were good for the environment for the residents. They spent time and make effort on the environmental issues. The plastic reduction was one of it. They had some feasible steps and suggestion for everyone in Taiwan. The plastic issues could separate into the main four areas to discuss. They were the issues in supermarkets, on marine conservation, on education and on online shopping.

#### Plastic Reduction in Supermarket

In worldwide, there was a trillion single-use plastic bags are used each year. The chance of using plastic bags was based on consumption. When consumers bought something in the store, there must be a bag to carry out. The plastic bags were the most convenient bags which are light, weight, and cheap. Otherwise, executing the plastic reduction, it needed to stop using the plastic from the head of source. Supermarket was one of the places of head of the source for consuming the plastic bags.

In order to reach plastic reduction, there were some ways could be executed in supermarkets. First, removing the package was unnecessary and replacing another package

<sup>30</sup> Hui-Yi Jiang, "The Environmental Education Status and Praix of Environmental Ngos in Taiwan" (National Normal University, 2003).

with natural material. Second, developing the self-carry system that the consumers could pack how much they needed and purchase it by themselves with their own containers. Otherwise, the consumers did not need to purchase stuff with the disposable containers. In the meantime, it could remove to use the single-use plastic products and decreased the plastic rubbishes were made. If there were no containers for themselves, the companies could create other products which was based on the knowledges of circular economy. It could provide the take-out service that the consumers could give it back to the supermarket after using the main products. The last way was the price, consumers was affected by the cheaper price. If supermarkets provided the discount for not using single-use plastic package such as bags and containers, they could be appealed by the event. These were some tips for executing plastic reduction in supermarket. It was not an easy thing to do, but it could help to save the earth and did the social responsibility well.<sup>31</sup>

#### Plastic Reduction in Marine Conservation

The use of plastic kept increasing year by year, so did plastic pollution effect on marine conservation seriously. However, it influenced on marine environmental system. There was a report indicated that it affected at least 267 species worldwide, including 86% of all sea turtle species, 44% of all seabird species, and 43% of all marine mammal species.<sup>32</sup>

In order to protect the ocean, there was not only the visible plastic products but also the invisible one such as microbeads that people needed to reduce to use. Usually, microbeads were added into cosmetic or personal care products. But there was no scientific evidence that it was effective on cleaning up in the personal care products. Obviously, it effected on

\_

<sup>&</sup>lt;sup>31</sup> Greenpeace 綠色和平, "超市減塑有解,邁向「智慧型超市」淘汰拋棄式包裝 "Greenpeace 綠色和平, accessed April 11th, 2020. https://www.greenpeace.org/taiwan/update/10886/超市減塑有解,邁向「智慧型超市」淘汰拋棄式包/.

<sup>&</sup>lt;sup>32</sup> David Laist, "Impacts of Marine Debris: Entanglement of Marine Life in Marine Debris Including a Comprehensive List of Species with Entanglement and Ingestion Records," in *Marine Debris*, ed. James M. Coe and Donald B. Rogers (New York: Springer, 1997).

consumers' psychology that it could achieve thorough cleaning.<sup>33</sup> When consumers used it to wash the face, it went into the ocean with the water into the water pipe. The microbeads were plastic products, it needed years to decompose, even it could not be decomposed and stay in the ocean for several decades, and even more. The best way of protecting the ocean environment was to remove microbeads from personal care products and cosmetic.

Additionally, in order to protect the ocean, it was not only to prevent the use of visible plastic products but also to remove the invisible microplastic material. Those were the plastic debris for marine conservation.

#### Plastic Reduction on Education

People were educated from being a child to an adult. There were lots of places or stuffs could educate people such as school, home, social media, and so on. I was going to talk about the education in school from a child. Students spent most of time on being educated in school when they were under 18 years old in Taiwan. So, the knowledge of plastic reduction could be executed from school. It was an opportunity to change children's mind and influence on their family indirectly.

There was execution on plastic reduction in school. For instance, firstly, let students experience the action of plastic reduction, in the process of the action, students could realize the importance of reducing the use of plastic. Secondly, to hold the beach clean-up activity for the students seeing that how serious the problem was we face now. Meanwhile, the students could understand the threat which was caused by the plastic products. By educating, the environmental awareness might influence on students' family indirectly. Therefore, education was a quite effective side of executing the plastic reduction.

23

<sup>&</sup>lt;sup>33</sup> 馬子琪,"微塑膠百害而無一利 為何惠康還在賣?," Greenpease 綠色和平, accessed April 11th, 2020. https://www.greenpeace.org/hongkong/issues/plastics/update/3960/微塑膠百害而無一利%E3%80%80 為何惠康還在賣?/.

#### Plastic Reduction on Online Shopping

As the wake-up of awareness of environment, the online shopping companies such as Shopee, focused on the plastic-waste issue. The company incorporated with a startup company called PlasticPlus. PlasticPlus was a company that developing a new product to replace the plastic bags carried the stuff from online shopping. The replacement was reusable for the next online shopper. It achieved to reduce the use of disposable plastic bags on online shopping. It did the research and develop a special plastic bags which was good for environment. It could prevent to release carbon emission.<sup>34</sup> On the other hand, it not only provided the convenient service for consumers, but also was responsible for social responsibility. Meanwhile, the action could increase the great impression of the companies for the consumers.

#### **Research Approach for This Study**

#### **Methodological Approach for Similar Studies**

As the plastic environmental problem being more seriously, the government made some policies to deal with this problem. In order to improve the plastic reduction policies and environmental situation in Taiwan, there were some different issues need to be considered. They were the marketing, the performance of execution, the sustainable development, and the process of making the plastic reduction. In these considerations, the government needed to pay attention on not only the execution of the them but also the effectivity after executing them. In the environmental issue of other similar studies, the method which the researchers were done by the quantitative research. The purpose of doing the method was to explore the satisfaction after the government executing the plastic reduction policies in Taiwan.

<sup>&</sup>lt;sup>34</sup> See more details in 黃慧雯, "備戰雙 11 蝦皮購物採用歐盟認證減塑寄件袋," 中時電子報, accessed

April 11th, 2020. https://www.chinatimes.com/realtimenews/20191028003082-260412?chdtv.

There were four similar studies which are also talking about this topic. Firstly, according to the marketing of making the plastic reduction policies, Lee's research was called A Study on Policy Marketing of Government in Taiwan: A Case Study on "The Policy of Restricting Use of Plastic Shopping Bags and Disposable Tableware". His research was talked about efficiency for residents on the policy marketing. When the government promoted the public plastic reduction polices, it should be executed based on the policy marketing. The policy marketing effected on profit, non-profit organizations, enterprises, and society. Therefore, the researcher used the quantitative research to do it. In order to realize whether different kinds of marketing policies were workable or not, it was necessary to do the research by the questionnaire.

Secondly, based on the research, Comparison of Environmental Awareness and Public Support before and after the Implementation of the Restriction Policy on Plastic Usage in Taiwan, was written by Liu, Wang, Lee, Chang, Chen and Cai.<sup>36</sup> In their research, they used both methods which were quantitative and qualitative research to finish it. With the quantitative research, they used questionnaire to explore the consumer's behavior before and after the policies were executed. On the other hand, with the qualitative research in this study, they interviewed some shop owners to realize whether they had the strategies to cope with the policies from the government.

Thirdly, considering the sustainable development, it was important for operating the policies from government. According to Li's research, it was called A Study on Taiwan's Policy-making Process of the Restricted Use of Plastic Materials: The Perspective from Sustainable Development and Governance.<sup>37</sup> He analyzed, explained and judged the process

\_

<sup>&</sup>lt;sup>35</sup> Yung-Heng Lee, "The Study on Policy Marketing of Government in Taiwan—a Case Study on the Policy of Restricting Use of Plastic Shopping Bags and Disposable Plastic Tableware" (National Taiwan Normal University, 2005).

<sup>&</sup>lt;sup>36</sup> Chia-Zhen Liu et al., "Comparison of Environmental Awareness and Public Support before and after the Implementation of the Restriction Policy on Plastic Usage in Taiwan" (Tunghai University, 2017).

<sup>&</sup>lt;sup>37</sup> Ming-Hui Li, "A Study on Taiwan's Policy-Making Process of the Restricted Use of Plastic Materials: The

of making plastic restriction policies from the Taiwanese government. He used the perspective of sustainable development to do the exploration. He focused on the process and plan of making the plastic restriction policies by government for a case study and to analyze whether it was sustainable or not. About the sustainable development, it was analyzed by three parts which included economic growth, social fairness, and ecological balance. Making the effective policies needed to consider about the sustainable development of the policies, also, it could achieve the goal effectively. The purpose of the environmental policies was to protect the environment and be better. So, for the environmental policies, it should be sustainable development.

Lastly, based on Wang's research was An Argument Analysis of Policy Making of Restricted Use Policy on Plastic Shopping Bags and Disposable plastic Tableware<sup>38</sup>, during the process of making the policies, one of the influence factors should be the policy argument. It was between the government and stakeholders to make the policies. With the concepts of the policy argument, he also did interview for the environmentalists who was in the region of public policies, plastic industry, and the legislators. By doing the cross analysis between the arguments and the content of interview, it could get the result for the suggestion of revising the plastic reduction policies.

#### In-Depth Interview to the Environmentalists in Taiwan

The purpose of questionnaire method in this study was to explore the consumers' changes on the plastic reduction policies. Most of the researchers did the study by questionnaire to investigate the residents' thoughts for the plastic reduction policies. In the quantitative research, it could get the huge data of realizing the effectivity on the plastic

Perspective from Sustainable Development and Governance" (National Taiwan University, 2008).

<sup>&</sup>lt;sup>38</sup> Huai-De Wang, "An Argument Analysis of Policy Making of Restricted Use Policy on Plastic Shopping Bags and Disposable Plastic Tableware" (National Chengchi University, 2006).

reduction policies. However, there were still some researchers did in-depth interview for the study. The purpose of in-depth interview method was to analyze whether the policies were made suitable and whether there was any problem needed to improve or not from the government.

Therefore, there were the steps I did in this study. First of all, I did the research for collecting the data of the policies which were made by Taiwanese government. Thus, after realizing the condition of the plastic reduction policies which the government promoted, I could understand what the government did for residents in Taiwan. Then, find out the problems which Taiwanese environmentalists pointed out on the government. Finally, based on the problems, I did the in-depth interview to Taiwanese environmentalists for getting the feasible approaches on the problems of the plastic reduction policies. The environmentalists were the role of supervisors of the government on environmental issue. Hence, doing the indepth interview was the suitable method for the feasible approaches on the plastic reduction policies which the government needed to improve.

#### **METHODOLOGY**

#### **Research Design**

This research belonged to the one-shot case study. Nowadays, as more serious problems of plastic pollution we faced, there were more countries focus on the environmental awareness, and Taiwan was no exception. When it comes to the environmental issues, the government and the environmentalists focused on it together in Taiwan. The government promoted the policies for protecting the environment in Taiwan. The residents should follow them. Some of the policies did not work effectively. Simultaneously, the environmentalists could give the approaches which was aimed to the problems of the policies. So, I wanted to know that the feasible approaches which the government could improve.

#### Source of Data

The interviewees for this research were the environmentalists in Taiwan. I needed to get the response from the environmentalists in Taiwan. There were lots of different environmentalists in Taiwan, but not every Taiwanese environmentalist was suitable for this research. The characteristic of the environmentalists needed to be related to the plastic reduction issue.

In the study, I figured out what kinds of the environmentalists were able to be collective source. There was a list of the environmentalists which were related to the plastic reduction issue. There were five various categories of the issues could be my potential interviewees in the research, for instance, general environmental issues, the plastic reduction issue, plastic reduction in supermarkets, plastic reduction on marine conservation, plastic reduction on education and plastic reduction on online shopping. First, general environmental issues included all the events which were related to the environment such as climate change, plastic reduction, anti-nuclear, protect rainforest, the Arctic issue, and so on. I contacted the

environmentalists which focused on the general environmental issues, they are Greenpeace, the Society of Wilderness, Taiwan Environmental Information Association and Taiwan Watch Institution. In these environmentalists, I had not got the response from Greenpeace, but had got the others' acceptances.

However, the other four categories were based on the four research questions. Second, according to the plastic reduction in supermarkets, I contacted Unpackaged.U store and it was interested in the research. It was the retail store which was unpackaged selling and promoted to reduce the use of plastic package. In the store, it sold the stuffs which are similar to supermarkets.

Third, based on the plastic reduction on marine conservation, I contacted Kuroshio Ocean Education Foundation, Islander Divers, Intime, RE-THINK and Formosa County Beauty. They were all related to protect the ocean and the beach. I got one of these environmentalists' reply for accepting the interview, Kuroshio Ocean Education Foundation. It was an organization which protected whales and dolphins originally, then, it supported the awareness that over-use of plastic caused the plastic pollution in the ocean indirectly. Nevertheless, the main business of Islander Divers was free-diving. It also focused on the issue of plastic reduction. But Islander Divers did not do the interview for others, so, it refused it. However, the other three environmentalists focused on the action of beach cleanup. All of them had not replied the invitation of the interview.

Forth, it was the plastic reduction on education. It was talked about whether the awareness of plastic reduction could be involved in the education system. There was a suitable environmentalist could be represented, it was called Friendly Seed. It also accepted the invitation of the interview.

Lastly, it was about the plastic reduction on online shopping. There were some solutions of reducing the plastic package on the products for online shopping. Package Plus was a company which did the reuse of the package bags. But I had not got the reply from this company of the acceptance.

According to the list of the environmentalists, apparently, all of the environmentalists which I contacted are doing the action of plastic reduction, both direct and indirect way were listed in it. In conclusion, after counting, I contacted with thirteen environmentalists in total. There were eight environmentalists reply the invitation of the interview. Seven of them accepted the interview and one of them refused it.

# **Instrument and Data Collection**

After making sure with the environmentalists which were willing to accept the interview, I would keep contacting them for the next step. In order to let the interviewees realized more details, I would contact them by email. Through emailing, it was clearly to know what should both of us do.

First, I divided the research questions into four different area such as plastic reduction in supermarkets, on marine conservation, on education, and on online shopping. The four area were all related to the issue of plastic reduction.

Second, I mentioned four policies in total to react to the area. It is necessary to send the explanation of the policies to the interviewees. These interviewees were good at different environmental area but all of them were related to this study. Therefore, not all the interviewees were familiar with the four policies. I needed to give the explanation before the interviewing. The interview questions were made based on the policies. They were limiting the use of plastic tray and box, developing plan of marine affairs, white paper of marine education, and decreasing the amount of the plastic package on online shopping.

Last, the other preparation of the interview was to send the interview questions to the interviewees. After they realized the policies, they could answer the interview questions easily. Also, they still needed to spend time on preparing the answers. As I mentioned, they were not good at every area of this interview, they should prepare it for enough time.

# **Data Analysis**

As the policies I mentioned, firstly, the plastic reduction on supermarket was the use of limitation on the plastic tray and plastic packaging box. Secondly, the plastic reduction on marine conservation from the policy was developing plan of marine affairs. Thirdly, white paper of marine education was the policy to make the interview questions on the plastic reduction on education. Lastly, the policy, decreasing the amount of the package on online shopping, was the fundamental factor to make the questions of the last area. The data would be divided into three parts. They were the perspective of each policy from the environmentalists' side, the reason why they thought it was effective or not and the feasible approaches how the government needed to improve on making the policies.

After collecting the data, I used MAXQDA for data analysis. Through the data from the environmentalists' side, I could get the objective approaches to answer the four research questions. With the approaches, I could know that the exact thing which the government needed to do and improved on the plastic reduction policies in supermarkets, on marine conservation, on education, and on online shopping.

# **DATA ANALYSIS**

The seven interviewees were from the six NGOs: The Society of Wilderness, the Taiwanese Environmentalists Information Association, the Unpackaged.U Store, the Kuroshio Ocean Education Foundation, the RE-THINK, and the Friendly Seed. Table 1 describes the positions, the responsibilities and job descriptions of these interviewees.

Table 1 showed that there were two founders, one managing director, one volunteer, one project manager, one director of board, and one project vice director. My research questions were referred to the plastic reduction in supermarkets, on marine conservation, on education, and on online shopping. I planned to interview all the professionals from these areas.

Through my effort, I could only contact three fields due to one of the last fields refused it. However, I still managed to get some statements from them to address the issue of the last one.

Table 1. Attributes of the 7 Interviewees

	Position	Responsibility	Job Description
A	Founder	Supermarkets	Business plan
В	Founder	Marine Conservation	Business plan
C	Managing Director	Marine Conservation	Campaign planning
D	Volunteer	Education	Promoting issue
Е	Project Manager	Education	Course development
F	Director of Board	Marine Conservation	Suggestion providing
G	Project Vice Director	Marine Conservation	Executing issues

Source: Edited by the Author

In the following sections, I used my four research questions to lay out the analysis about collecting data.

- 1. How can the government improve the policy of plastic reduction in supermarkets?
- 2. How can the government improve the policy of plastic reduction on marine conservation?
- 3. How can the government improve the policy of plastic reduction on education?
- 4. How can the government improve the policy of plastic reduction on online shopping?

## The Improvement of Plastic Reduction in Supermarkets

The interviewees were asked how they perceived the limiting use of plastic tray and packaged box. The seven interviewees' statements could be classified into three categories: the perspective on the policy, the helpful ideas of the replacement of plastic package, and the concrete suggestions on the details of it.

First, the interviewees considered the policy with nominal purpose. Interviewee E said, "the policy is an encouraged one. The government didn't force to prohibit them strongly, just encouraged them." And interviewee F said, "it is one-way policy that no tracking system to check the performance." Because of the reasons, it was hard to make the policy become more workable.

However, the interviewees considered that the policy was ambiguous and it should change the limiting target. As interviewee F said, "it is hard to determine whether it is a good and clear direction or not for making this policy, and we cannot see the result of limiting the use of plastic package." Due to the nominal policy, it caused the difficult identification whether the policy was made toward the correct direction or not. Interviewee G mentioned, "it will be better that if executive place can start from manufacturers, for example, limiting the amount of the package." For improving the situation of the policy, the interviewees considered that the government should focus on manufacturers more than supermarkets.

Based on the two issues, interviewee A said, "the government should have the corresponding measures when making the policy." The government needed to build the system which could investigate the performance of the policy. Meanwhile, it needed to insist on requiring them to reach the plastic reduction. As the result, the policy was still not completely made by the government, they needed to consider more direction which they haven't thought.

Second, selling with no package, changing material, and no method were the three aspects which the interviewees provided about the replacement of plastic package. Firstly, interviewee A said, "selling with no package is a quite good way." But as interviewee B mentioned,

It is hard to accomplish the goal by selling with no package. Due to the weather in Taiwan, it is hotter and wetter than western countries, so, it cannot be executed such as success in western countries.

Selling with no package was a good way to reduce the use of plastic package, but it was difficult to achieve in Taiwan. Secondly, interviewee C mentioned, "changing material can be a way for plastic reduction." In contrast, interviewee E said,

If this measure is helpful, it should be made by only one new material, it cannot add any other material inside. Because there must have another procedure and machine to decompose the new material.

Due to the reason, it caused more fee on decomposing it. Additionally, interviewee B said, "if doing the changing material, it cost a lot of time and make unbelievable problems to experiment which material was better for being new package." In the period of experimenting, it not only caused problems but also spent time on it. Therefore, the method couldn't be the best one for the replacement at such short notice.

On the contrary, interviewee B said again, "there is no any good replacement of plastic package, the best way for me is to use the current plastic to produce in a better way." To sum up, instead of developing a new material of package, it would be better to make good use of current plastic such as plastic reduction.

Lastly, in terms of the plastic reduction inside the supermarkets, the efforts could be put on supermarkets, consumers, and manufacturers.

First, supermarkets should educate consumers about the basic environmental concept. As interviewee B said, "it is necessary to educate consumers about the environmental concept." And interviewee F said, "if there is a discount for consumers in supermarkets, it can catch their attention and emphasize on the environmental concept to them." Educating consumers was essential for the execution on plastic reduction, the same as holding the related activities to attract their attention which were about lowing price.

Next, consumers needed to enhance their environmental knowledges. As interviewee D said, "the plastic pollution comes from consumers, if there is the basic environmental concept in their mind, we can live in a better environment." Once consumers had the concept, they could make some decision while purchasing stuff. As interviewee F said, "consumers can choose to buy the stuff with no package, bring shopping bags, tableware or cups by themselves." Having the environmental concept let purchasing become more flexible and knowledgeable.

Last, manufacturers should consider that re-designing the package on products was the social responsibilities for them. Interviewee B mentioned, "it may influence on the product design of the brand, they can make some change on it and take it as the social responsibilities." Re-designing the package was to reduce the use of plastic package on products, in the meantime, it still could keep food fresh and have the well protection on them.

To sum up, having the environmental knowledge was the most essential thing for doing plastic reduction for everyone, no matter they were the consumers, the supermarkets, or the manufacturers. Although there were lots of ways of improving the situation, the easiest way was to reduce the use of it.

# The Improvement of Plastic Reduction on Marine Conservation

Developing plan of marine Affairs was the policy which was mentioned to the seven interviewees to discuss. They provided their own perspective on it, whether they thought it was an effective one or not, and they gave some suggestion to the government.

Firstly, the interviewees considered it was a well-planned policy, but they could not see the execution. As interviewee G said, "it is planned quite good, but it seems that the government haven't done something and I could not see the performance." Additionally, it didn't mention about the details in the policy which was one of the reasons why no execution on the policy. Interviewee E said, "there is no concrete way which should be described in the policy." If it was described clearly the details, it worked effectively.

According to the policy, the interviewees considered that the government should take marine culture more seriously. As interviewee E said,

Because Taiwan is an island, it is surrounded by the ocean. Most of the residents rely on the seafood to survive. Obviously, the government emphasizes on the seafood culture more than the marine culture.

Hence, the government focused on the marine environment and expand the area which the policy should cover to protect.

Secondly, the interviewees agreed that the effectiveness of marine conservation worked on this policy, but it only focused on the marine resources. Interviewee A said, "according to developing the policy of protecting Taiwan, it should protect Taiwanese marine area, absolutely." Most of the interviewees considered it was a good policy for protecting marine area, but the government should focus on environmental protection. As interviewee E mentioned, "on protecting the resources in the ocean is okay, but aimed at the environmental protection, there is no concrete explanation." It was not acceptable that people only pay attention on the seafood to eat, they should give the marine animals a better environment.

Lastly, although beach clean-up was a good way to let it become clean, plastic reduction was still the best way. As interviewee B said, "beach clean-up is good, it means like we take good care of the beach but the consumers cannot understand where the source of marine debris is." Cleaning beach was good for the tourism, but the consumers never knew they were the makers of marine debris and keep making the trash. Thus, only doing the plastic reduction could improve it completely.

However, the way of doing plastic reduction could be classified into two aspects: from the land and from the fishers. First, starting plastic reduction from the land was importance. As interviewee G said,

Marine debris are from the land, we should go back to see the policy about limiting the use of plastic in the land. Not only the environmental protection agency needs to consider how to make the workable policy, but also other public sectors need to corporate with.

Doing plastic reduction should be the daily life for everyone who live in any country. The debris came from other countries. Second, doing plastic reduction from the fishers needed the education for them, interviewee F said,

There are environmental protection fleet in Taiwan which consist of the normal fishers who want to make effort on it. Meanwhile, the government should figure out how to let the fishers start to do it such as educating and giving feasible measures.

To encourage the fishers to reduce the use of plastics, they should be educated the environmental knowledge. And the government gave feasible method on how to deal with the trash which they brought back to the port.

As the result, aimed at the policy, the government should consider more details of it. For having a better marine environment, everyone needed do the efforts on plastic reduction.

## The Improvement of Plastic Reduction on Education

According to white paper of marine education, the interviewees gave the opinions that how they considered this policy. There was the professional educational perspective on it, the other related issues of adding into educational system, and the two useful suggestions.

First, the seven interviewees thought it was a good policy, but it was no execution. And they needed to understand what the problems the ocean faced based on the side of the ocean. As interviewee B said, "it is a good direction on education, actually, but I cannot see there is any action of the execution." When there was a good start of the policy, there should be the next step of the action.

Nevertheless, the government should make connection between students and the ocean. Interviewee G said, "the policy needs to mention about making connection between students and the ecological system, they may be much closer to the ecology." By having the connection, the students were close to the nature and they would feel that they are part of the earth. Hence, they had the responsibilities on it. Interviewee F said, "the policy was made from the center of people, not from the ocean, we should emphasize on what the ocean has happened." After having the connection, people would concern about what the ocean happening right now and how to deal with it.

Second, the interviewees mentioned four issues which should be added into the educational system: the daily trash, the process of coping with garbage, the incinerator and the landfill, and microbeads.

To the begin with, the daily trash was the biggest problem. Interviewee A said, "purchasing choice can be different, people can reduce to use plastics in the daily life such as bringing their cups, tableware, bags, even boxes to buy something." Through reducing to use plastics, people could understand that they wasted a lot of resources every day.

Then, the process of coping with garbage was importance. As interviewee D said, "I think it is important to add the process of handling the garbage." During realizing the process of it, students could realize how complex it was and the how much pollution was caused by handling one trash.

Furthermore, the incinerator and landfill polluted the environment. Interviewee F said, "the incinerator and the landfill caused the serious pollution, and it was related to the daily life." They caused the land and the air pollution. Thus, it became the climate change that people had the worse earth than before.

Finally, microbeads caused unhealthy marine animals. Interviewee C said, "when the microbeads are inside animals' body, they cause some diseases on human because we usually eat the seafood." The issue was related to people's and animals' health, it destroyed the ecological system as well.

Thirdly, the interviewees figured out the two aspects of making feasible efforts on plastic reduction on education: observing the issue in person and creating the challenge.

Observing was the first step of the action. Interviewee F said, "observing it in person could let students experience it, not only listen to teachers. After it, they connect with the issues." During observation, people connected with the environment. Then, they considered how to do plastic reduction by themselves.

Additionally, through the challenge, the students got impression. As interviewee B said, Students should not be ruled by teachers, they should cope with the problems about how to reduce to use plastics. In the meantime, they could get the drink from the teachers. If they handled it successfully, they could get the achievement and become more willing to do it.

When getting the achievement, it became a part of their life and did it for a long-term plan.

In conclusion, not only the marine conservation but also other issues needed to pay attention on. All the issues were close to people, we could not ignore any of them. However, action, experience, and feeling were the three steps of becoming a habit.

# The Improvement of Plastic Reduction on Online Shopping

The practical perspective on the policy, the reason of no legal effectiveness on it, and the concrete methods were the three categories which the government could do and they were provided by the interviewees. They gave some opinions on how to decrease the amount of the package on online shopping.

First of all, the interviewees considered it was a good plan of leading people with the clear indicators. As interviewee G said, "it is a quite nice policy with the clear direction which people can follow." On contrary, interviewee B said, "although there is a clear method of the action, I still cannot see the execution." A good policy not only needed the clear statements but also executed it.

However, the government needed to figure out how to let the enterprise corporate with them. Interviewee C said, "the government needs to have the creative ideas to stimulate the companies to practice it, especially, the leading companies." When a leading company started to do plastic reduction, there were more and more companies would follow them.

Second, the interviewees thought it was an encouraged policy. Interviewee G said, "using encouraged way on the policy, the companies may accept this idea easily." In order to let the companies accept, they could not use punishment to them. It would cause the opposite effect

In the meantime, in the period of encouraging strategy, it cost time to revise the statements of it. Interviewee B said, "it costs time on revising the policy because it is impossible to make a policy well for only one time." It took time to communicate with the people and enterprises that whether it was helpful to improve the situation or not. When the government got most of the institutions' support, it could be executed smoothly.

Then, the reality was no additional manpower could do the inspection of it. Interviewee G said, "there are no too many people can do the inspection after formal execution." Thus,

making a good policy was complex. It needed to consider all the aspects of it, included the acceptance on everyone, the institution of execution, the manpower of inspection, and so on.

All in all, making the policy was complex that it needed time to revise, encouraged people to execute. Hence, let the enterprises have the social responsibilities was the best way to push them into practicing effectively.

# **Summary of the Data Analysis**

The three aspects needed to corporate with one another: the government, the consumers, and the enterprises. First of all, the government gave the direction of the policy on doing plastic reduction. Then, the consumers should enhance the environmental knowledge in their mind and chose the type of the purchase. Finally, the enterprises should re-design their package of the products. All of them were the important roles in this issue.

However, the marine policies which were mentioned in this research were the well-planned policy. It appeared some missing details. The government should not only focus on the marine resource but also marine environment on the issue. To pay attention on both of them could be the most effective on executing the policy.

Then, lots of ideas which they provided could decrease the damage of the use of plastic.

One of the solutions was making connection with ecological system. To observe, experience, and feel it on education were the three steps to make the change completely. Through the steps, it influenced on not only the children directly but also the parents indirectly.

Lastly, the enterprises reduced the use of plastic package on their own products. It caused inconvenience on the purchase for the consumers, especially on delivery for the online sellers. By contrast, although it was inconvenient, it could make the better environment to live.

# **CONCLUSION**

# **Discussion of the Major Findings**

Based on the research questions, I mentioned the major findings in the four areas which were the plastic reduction in supermarkets, on marine conservation, on education, and on online shopping.

## **Discussion 1: Plastic Reduction from Manufacturers**

Everyone needed to do the plastic reduction, especially for the manufacturers. They were the sources of making the plastic package. However, the government should limit the manufacturers to reduce the use of plastic for goods. According to the journal, it mentioned, "based on the knowledge, producers are best positioned actors to make the required changes to minimize impacts of their products." Due to making the products for the consumers, they could reduce the use of it first. It was the good start for plastic reduction. Then, the issue influenced on changing consumers' concept for plastic use indirectly. They were aware of the importance of taking good care of the environment. If the manufacturers started to improve the situation, it was the fastest method.

# **Discussion 2: The Importance of Marine Environment**

Instead of the marine resources, the government should focus on marine biodiversity for making the policies. As the research article mentioned in the book,

Early efforts towards protection and management of oceans and marine resources. But more recently, there are the clear move towards a more integrated approach, in which the conservation as a regulatory goal is firmly embedded with other management measures. 40

<sup>&</sup>lt;sup>39</sup> Ulla Saari Walter Leal Filho, Mariia Fedoruk, ArvoIital, Harri Moora, Marija Klöga, Viktoria Voronova, "An Overview of the Problems Posed by Plastic Products and the Role of Extended Producer Responsibility in Europe," *Journal of Cleaner Production* 214 (20th March 2019), accessed Octorber 23th.

<sup>&</sup>lt;sup>40</sup> Imèn Meliane Mark D. Spalding, Amy Milam, Claire Fitzgerald, and Lynne Z. Hale, "Protecting Marine Spaces: Global Targets and Changing Approaches," *Ocean Yearbook Online* 27, no. 1 (01 January 2013),

Having the good marine environment, it had plenty of health marine animals in the ocean naturally. So, everyone needed to concern of marine environment and understand what the problems the ocean faced right now from the side of the ocean. The marine debris were the garbage which were made by people. No matter people lived in the land or were the fishers, they needed to reduce the use of plastic. Reducing to make the single-use plastic garbage was the best way of the action. Then, we did not leave the trash to the earth, and spent time and money on decomposing the trash. It could decrease the damage to the ocean effectively.

# Discussion 3: Making Connection with the Ecological System from the Education

The effective education was making the connection with the target issues. As the Journal of Environmental Education mentioned, "Youthful experience of the outdoors and relatively pristine environments emerges as a dominant influence in these lives." Hence, experiencing the issues in person from youthful age on the side of environmental education could get the influence effectively. During the experience, it protected not only the environment but also the health by themselves. Additionally, the environmental issue in the educational system should include all the items such as the daily trash, the process of coping with garbage, the incinerator and the landfill, and microbeads. All of these items should be understood and educated. People could realize that how much resources they wasted and damages they caused by experiencing in person. Therefore, the government should make the policy towards the direction of making connection on educational side.

accessed 24 Octorber, 2020.

<sup>&</sup>lt;sup>41</sup> Thomas Tanner, "Significant Life Experiences: A New Research Area in Environmental Education," *The Journal of Environmental Education* 11, no. 4 (15 July 2010).

# Discussion 4: The Essential of Social Responsibility for Online Sellers

The government should encourage the enterprises to do the corporate social responsibilities. According to the Journal of Sustainable Development mentioned, "enterprise is an open dynamic system which exchanges with exterior environment continually and enterprise development cannot survive without survival resource provided by social system." It was essential that the enterprises did the social responsibility. One of the survival resources included the plastic package for goods. After using the resources from the earth, it was time for giving back something to the earth and making some change, especially on online shopping. It was necessary for online sellers to use additional plastic package to protect their products nicely. The government could encourage the online sellers to do plastic reduction of reducing the additional package for goods. It could decrease the damage for the earth and people.

\_

<sup>&</sup>lt;sup>42</sup> Yunfeng Ai Huiyuan Mao, "Enterprise Social Responsibility and Enterprise Sustainable Development," *Journal of Sustainable Development* 2, no. 1 (March 2009).

# **Conclusion and Suggestions**

The research purpose of this study was to explore the feasible approaches in these four areas from the environmentalists in Taiwan. Based on the discussions of the major findings, there were four approaches that the government should make more effort. First, the government should change the limiting target into manufacturers. Doing the plastic reduction from the source of makers was more effective than from the downstream of the industrial chain. Second, rather than seafood culture, the government should pay more attention on marine culture. It was important to concern of the marine environment. Third, observation, experience, and feeling were the three steps of education which the government should emphasize on the policy. In order to realize the issue, people put themselves into the situation in person is the best solution, then, they could reflect on how much debris they had made before. Finally, the government could encourage the enterprises to do the social responsibilities for the plastic reduction. There was no more resource could be wasted by people and the enterprises. To sum up, if the government revised the details with these approaches for the policies, they could be worked more effectively.

However, there was only one simple suggestion in this study. Remounting to the original source in each finding, it was the plastic reduction. The plastic reduction was the main key point for everyone putting it into action together. When people did the action together, I believed that the situation could be improve quickly.

# **APPENDIX 1**

# 臺灣環保團體對政府提出減塑政策之看法/訪談綱要

# 一、訪談資料

1. 受訪單位: 〇〇〇〇環保組織

2. 受訪者姓名:〇〇〇先生/小姐

3. 訪談者姓名:柯佳妤

二、<u>四項政策之說明:</u>提供完整四項政策的詳細說明,有利於受訪者提早準備訪談並 更了解訪談之項目。

# A. 限制塑膠類托盤及包裝盒使用政策

甲、指定公私場所

- (一) 量販店:只提供綜合商品批發或零售,結合倉儲與賣場。
- (二)超級市場:只提供家庭日常用品、食品零售,並附生鮮及組合料理食品者,包含百貨公司或購物中心內之超級市場、以員工消費合作社或聯合社型態經營之業者。
- 乙、指定容器:係指含聚乙烯對苯二甲酸酯(PET)、聚苯乙烯(PS)、聚氯乙烯(PVC)、聚乙烯(PE)或聚丙烯(PP)等塑膠材質之下列容器。 以紙類或植物纖維為主體,淋膜或添加前述塑膠材質者,亦屬之。
  - (一)用於盛裝蛋類產品,如雞蛋、鴨蛋、鹌鹑蛋、皮蛋等之托盤及 包裝盒。
  - (二)用於盛裝蔬果類、肉品、水產類等生鮮食品,及南北乾貨、壽司、生菜沙拉、涼麵等之托盤及包裝盒。但用於盛裝微波食品,或該食品食用前需直接烘烤或微波加熱者,不在此限。
  - (三)賣場內烘焙糕點麵包販售專區中,用於盛裝糕、餅、粿、糬、 派、酥、麵包、蛋塔、泡芙等產品之托盤及包裝盒。但用於包 裝需保冷之糕餅產品(如冰淇淋蛋糕等)者,不在此限。
  - (四)用於盛裝餐飲食品之杯、碗、盤、碟等一次用容器。但工廠出廠前即以前述一次用容器包裝者,以及盛裝餐飲食品後需直接烘烤或微波加熱者,不在此限。

# C. 國家海洋政策綱領/海洋事務政策發展規劃方案

- 甲、**強化海域執法**:全面提升海域執法整體能量,廣拓優秀人才,並加強勤務 執行與稽核,積極海域執法,有效打擊海上犯罪,創造安全、秩序、純淨 的海洋。
- 乙、**健全海域交通**:積極強化船舶管理機制,嚴密船舶安全檢查,充實船舶交通資訊系統及助(導)航設施,確保海域航行安全。
- 丙、**維護海事安全**:健全災難救護應變機制,充實救護能量,並整合全般資源,強化災難救護能力,提供海洋活動安全服務,維護海上人命、財產安全。
- 丁、**維護海域保安**:整合國內、外海域保安情資,廣拓國際合作管道,建立危 安預警系統及反制能量,防範海上不法危害,維護國家海域安全。
  - I. 工作要項目的:為了達成強化海域執法:全面提升海域執法整體能量,廣拓優秀人才,並加強勤務執行與稽核,積極海域執法,有效打擊海上犯罪,創造安全、秩序、純淨的海洋。

## Ⅱ. 執行作法:

- i. 加強勤務執行與稽核,有效海域執法:
  - A. 運用有限能量強化優勢勤務,綿密海域巡緝,查緝不法與維護 資源,確保主權權利。
  - B. 運用船務控管及雷情顯示資訊系統加強勤務稽核,提升巡緝效能。
  - C. 增(修) 訂海域執法作業相關規範及作業程序。
- ii. 充實艦艇、裝備、設施,提昇執法能量:
  - A. 汰換老舊巡防艦艇,並強化現有艦艇偵蒐裝備。
  - B 籌建大型巡防(護)艦船。
  - C. 籌建海巡母港基地,提升出勤效率,發揮服務品質。
  - D. 持續精進「海巡資訊系統」
  - E. 建立海巡指揮、管制、通訊、資訊、情報、監視及偵查整合系統。

## D. 海洋教育白皮書

甲、各級教育行政機關因應區域發展需要訂定海洋教育推動計畫及健全推動制度,提昇人才培育績效,以促進國家海洋社會、產業及環境保護的發展。

- 乙、各級學校加強海洋基本知能教育,培養學生具備認識海洋、熱愛海洋、善用海洋、珍惜海洋及海洋國際觀的國民特質。
- 丙、建立學生與家長對海洋的正確價值觀,且對海洋有充分的了解,必輔導依 其性向、興趣選擇適性的海洋所系科及行職業。
- 丁、各級海洋校院配合海洋科技及產業發展,創新海洋教育人才培育制度內 涵。
- 戊、整合產官學研界共同的海洋教育資源,合作培育符合業界需求的技術專業 人才,提升學生就業率及產業競爭力。

## E. 網購包裝減量指引政策

# 一、包裝減量:

- 甲、網購包裝 90%產品重量對應 10%包裝重量為原則,及包裝材重量應低於包裹重量之 10%。
- 乙、封箱膠帶不超過包裝箱長度高度總和之2.5倍。

## 二、環保材質:

- 甲、使用之包裝材質需可回收材質為單一材質(紙或PE)
- 乙、包裝箱(袋)以100%回收紙或以摻配25%以上塑膠再生料製作。
- 丙、紙箱保持紙版原色,包裝箱(袋)印刷面積小於50%。
- 丁、包裝箱(袋)、緩衝材、封箱膠帶不使用 PVC 材質。

#### 三、循環包材:

甲、使用可回收循環之循環箱(袋),使用比例提升至10%。

#### 四、減量包裝標章標準

甲、B2C:包裝減量、環保材質以及循環包材。

乙、B2B2C及C2C:包裝減量。

# 三、訪談內容

訪談問題的內容將分為四大部分:超市減塑、海洋減塑、教育減塑和網購減塑。

#### 1. 基本資料

甲、請問您在這個組織是負責哪個領域?工作內容包括哪些呢?

- 2. 超市減塑:限制塑膠類托盤及包裝盒使用政策
  - 甲、依據您的角度,您對於此項政策有什麼想法呢?
  - 乙、塑膠使用大多是為了防撞、保存新鮮及衛生,若沒有了塑膠包裝,您認 為有什麼替代方式可以做到以上使用塑膠包裝的目的呢?

- 丙、若超市需要實際做到減塑動作,您認為有哪些具體行動需要被實踐呢? (針對消費者、產品企業及超市本身)
- 3. 海洋減塑:國家海洋政策綱領/海洋事務政策發展規劃方案
  - 甲、依據您的角度,您對於此項政策有什麼想法呢?
  - 乙、就此項政策而言,您認為這是一個對我國海域保護是有效的政策嗎?為 什麼?
  - 丙、此政策中,其中有關注在海洋環境保育上,內容為防止他國漁船破壞我 國領海的環境保護,但對於在減少塑膠的使用上,您認為政府應該提出 什麼具體措施達到減塑目標呢?
- 4. 教育減塑:海洋教育白皮書
  - 甲、依據您的角度,您對於此項政策有什麼想法呢?
  - 乙、針對這項政策,政府只有將「海洋的重要性」這個概念灌輸給國小、國中、高中的學生,並將這個海洋保育概念加入教育系統裡,在教育系統裡,除了海洋部分,您認為因塑膠污染而影響的哪些部分也需加入呢?
    需要用什麼方式將這些部分加入呢?
  - 丙、讓學生了解減塑概念以後,您認為該如何執行讓學生可以實踐減塑行動 呢?
- 5. 網路購物減塑:網購包裝減量指引政策
  - 甲、依據您的角度,您對於此項政策有什麼想法呢?
  - 乙、您認為為什麼目前政府對於網購包裝的限制,只能做到指引推廣,而缺 乏法律上的效力呢?
  - 丙、若是要確實落實網購包裝的減塑,您認為有哪些具體措施可以執行呢?

# **APPENDIX 2**

# 環保團體對減塑議題之意見訪談/訪談同意書

在接受訪談之前,由於一些細節需要注意,請先仔細閱讀以下資訊並決定是否參加這次訪談。以下描述此論文訪談的研究目的、訪談需花費的時間以及訪談過程中進行錄音的意願。

# ■ 研究目的

透過訪談,可以了解臺灣環保團體對於政府提出的減塑環保政策的具體看法及因應措施,除了可以讓政府了解政策須如何加強細節,也可以讓民眾更了解如何在日常生活中做到減少使用塑膠製品的機會,藉此可以讓全國人民與政府一起努力改善塑膠污染問題,保護地球的自然資源及生態。

■ 訪談時間:需花費大約1小時。

# ■ 參與與錄音意願

經過以上的敘述,若您思考過後認為不適合進行此次訪談,可以提出停止訪談的 要求。訪談過程中會進行全程錄音,此行為是為了研究者撰寫論文內容成為文字稿, 不會將此錄音外流。

### 聯繫研究者:

若有認為問題,歡迎隨時聯繫研究者

研究者姓名:柯佳妤

聯絡電話:0910234650/電子郵件:eunice5231602@gmail.com

# 訪談同意書簽署欄

本研究的性質和目的及過程中將進行錄音已達到充份的理解,我同意參與本項研究。

錄音: □同意 □不同意				
受訪者簽名:	日期:民國	年	月	E

# **BIBIOGRAPHY**

#### **Chinese Section**

8fa9c2b496a9.

- 張蓉安. "不該在牛奶裡的「三聚氫氨」, 是能吃的東西嗎?." (2017). Accessed March 5th
- "荒野保護協會淨灘數據發表記者會." 荒野保護協會. Last modified 2018. Accessed March 7th, 2020. https://www.sow.org.tw/info/news/20181219/6432.
- 行政院人事室. "郝龍斌署長重要事蹟." 行政院環境保護署. Last modified 2019. Accessed March 6th, 2020. <a href="https://www.epa.gov.tw/Page/5D613C990CB950D2">https://www.epa.gov.tw/Page/5D613C990CB950D2</a>.
- 社會創新平台. "扛起便捷生活的隱藏代價:臺灣的減塑之路." 社會創新平台. Last modified 2019. Accessed March 6th, 2020.

  <a href="https://si.taiwan.gov.tw/Home/sdgs/reduce\_plastic/gov?AspxAutoDetectCookieSupport=1">https://si.taiwan.gov.tw/Home/sdgs/reduce\_plastic/gov?AspxAutoDetectCookieSupport=1</a>.
- 社會創新平台. "從歐美到亞非,從飲料到衣物!方方面面減塑大作戰!." 社會創新平台. Last modified 2019. Accessed March 5th, 2020. https://si.taiwan.gov.tw/Home/sdgs/reduce\_plastic/int.
- 馬子琪. "微塑膠百害而無一利 為何惠康還在賣?." Greenpease 綠色和平. Last modified 2017. Accessed April 11th, 2020.

  <a href="https://www.greenpeace.org/hongkong/issues/plastics/update/3960/微塑膠百害而無一利%E3%80%80為何惠康還在賣?/">https://www.greenpeace.org/hongkong/issues/plastics/update/3960/微塑膠百害而無一利%E3%80%80為何惠康還在賣?/</a>.
- 黃慧雯. "備戰雙 11 蝦皮購物採用歐盟認證減塑寄件袋." 中時電子報. Last modified 2019. Accessed April 11th, 2020.
  - https://www.chinatimes.com/realtimenews/20191028003082-260412?chdtv.
- 新聞傳播處. "環保新運動—擴大管制購物塑膠袋." 行政院. Last modified 2017.
  Accessed March 6th, 2020.
  <a href="https://www.ey.gov.tw/Page/5A8A0CB5B41DA11E/f8d89849-e4f1-41e7-86ec-">https://www.ey.gov.tw/Page/5A8A0CB5B41DA11E/f8d89849-e4f1-41e7-86ec-</a>
- 綠色和平塑膠專案小組. "回收不能解決塑膠問題!企業、政府、個人可以做的減塑方法." Greenpeace 綠色和平. Last modified 2020. Accessed February 25th, 2020. <a href="https://www.greenpeace.org/taiwan/update/12393/">https://www.greenpeace.org/taiwan/update/12393/</a>回收不能解決塑膠問題!企業、政府、個人可以做/.
- 賴品瑀. "擴大限塑 海灘塑膠袋剩 5.7%." 台灣環境資訊中心. Last modified 2018. Accessed March 7th, 2020. https://e-info.org.tw/node/215554.

顏寧. "520 新政府環境政策總體檢(三): 不只禁用塑膠微粒,更要推動「資源循環」." The News Lens 關鍵評論. Last modified 2017. Accessed March 7th, 2020. https://www.thenewslens.com/article/69062.

# **English Section**

- Administration, Environmental Protection. *Limiting Using the Platic Tray and Plastic Packaging Box*. Taipei: Executive Yuan, R.O.C (Taiwan), 2007.
- Administration, Environmental Protection. *Decreasing the Amount of the Package on Online Shopping*. Taipei: Environmental Protection Administration, Executive Yuan, R.O.C (Taiwan), 2019.
- Chow, Cheuk-Fai, Wing-Mui Winnie So, Tsz-Yan Cheung, and Siu-Kit Dennis Yeung.

  "Plastic Waste Problem and Education for Plastic Waste Management." In *Emerging Practices in Scholarship of Learning and Teaching in a Digital Era*. Singapore:

  Springer Nature Singapore Pte Ltd, 2017.
- Education, Ministry of. *White Paper of Marine Education*. Taipei: Ministry of Education, 2017.
- Huang, Yin-Ke. "A Study of Government Crisis Management on Plasticizer." National Chi Nan University, 2012.
- Huiyuan Mao, Yunfeng Ai. "Enterprise Social Responsibility and Enterprise Sustainable Development." *Journal of Sustainable Development* 2, no. 1 (March 2009): 193.
- Jiang, Hui-Yi. "The Environmental Education Status and Praix of Environmental Ngos in Taiwan." National Normal University, 2003.
- Laist, David. "Impacts of Marine Debris: Entanglement of Marine Life in Marine Debris Including a Comprehensive List of Species with Entanglement and Ingestion Records." In *Marine Debris*, edited by James M. Coe and Donald B. Rogers, 99-139. New York: Springer, 1997.
- Lee, Yung-Heng. "The Study on Policy Marketing of Government in Taiwan—a Case Study on the Policy of Restricting Use of Plastic Shopping Bags and Disposable Plastic Tableware." National Taiwan Normal University, 2005.
- Li, Ming-Hui. "A Study on Taiwan's Policy-Making Process of the Restricted Use of Plastic Materials: The Perspective from Sustainable Development and Governance." National Taiwan University, 2008.
- Liu, Chia-Zhen, Si-Chun Wang, Yun Lee, Yun-Kai Zhang, Cai-Jie Chen, and Pei-Ling Cai. "Comparison of Environmental Awareness and Public Support before and after
- the Implementation of the Restriction Policy on Plastic Usage in Taiwan." Tunghai University, 2017.
- Mark D. Spalding, Imèn Meliane, Amy Milam, Claire Fitzgerald, and Lynne Z. Hale.

  "Protecting Marine Spaces: Global Targets and Changing Approaches." *Ocean Yearbook Online* 27, no. 1 (01 January 2013): 213-48. Accessed 24 Octorber, 2020.

- McCallum, Will. *How to Give up Plastic: A Guide to Changing the World, One Plastic Bottle at a Time*. edited by Nian-Ci Wang. Taipei: The Commercial Press, Ltd, 2019.
- Royer, Sarah Jeanne, Sara Ferrón, Samuel T. Wilson, and David M. Karl. "Production of Methane and Ethylene from Plastic in the Environment." *PLoS ONE* 13, no. 8 (2018).
- Security, The Team of the. *Developing Plan of Marine Affairs Policy*. Taipei: Executive Yuan, 2004.
- Shen, Yong-Jian. "The Role of Leadership in Policy Management: a Comparative Study of Two Policies of Environmental Protection Administration." I-Shou University, 2005.
- Tanner, Thomas. "Significant Life Experiences: A New Research Area in Environmental Education." *The Journal of Environmental Education* 11, no. 4 (15 July 2010): 23.
- Walter Leal Filho, Ulla Saari, Mariia Fedoruk, ArvoIital, Harri Moora, Marija Klöga, Viktoria Voronova. "An Overview of the Problems Posed by Plastic Products and the Role of Extended Producer Responsibility in Europe." *Journal of Cleaner Production* 214 (20th March 2019): 550-58. Accessed October 23th.
- Wang, Huai-De. "An Argument Analysis of Policy Making of Restricted Use Policy on Plastic Shopping Bags and Disposable Plastic Tableware." National Chengchi University, 2006.
- "Reducing Plastic Waste Why Is It Important?" Environmental Monitoring Solution. Last modified 2018. Accessed March 5th, 2020. <a href="https://www.em-solutions.co.uk/insights/reducing-plastic-waste-why-is-it-important/">https://www.em-solutions.co.uk/insights/reducing-plastic-waste-why-is-it-important/</a>.
- "The Caribbean Addresses the Scourge of Plastic Pollution with Help from the Cartagena Convention Secretariat." UN Environment. Last modified 2019. Accessed November 13th, 2020. <a href="https://www.unenvironment.org/cep/news/editorial/caribbean-addresses-scourge-plastic-pollution-help-cartagena-convention-secretariat">https://www.unenvironment.org/cep/news/editorial/caribbean-addresses-scourge-plastic-pollution-help-cartagena-convention-secretariat</a>.
- Greenpeace 綠色和平. "超市減塑有解,邁向「智慧型超市」淘汰拋棄式包裝 "Greenpeace 綠色和平. Last modified 2019. Accessed April 11th, 2020. <a href="https://www.greenpeace.org/taiwan/update/10886/超市減塑有解,邁向「智慧型超市」淘汰拋棄式包/.">https://www.greenpeace.org/taiwan/update/10886/超市減塑有解,邁向「智慧型超市」淘汰拋棄式包/.</a>
- Harrabin, Roger. "Should We Burn or Bury Waste Plastic?" BBC News. Last modified 2018. Accessed 2020. <a href="https://www.bbc.com/news/science-environment-43120041">https://www.bbc.com/news/science-environment-43120041</a>.
- Huang, Shu-Fang, Yu-Xin Li, Ying-Yu Chen, and Chi Lin. "In 16 Years, What Have We Changed?" CNA 中央通訊社. Last modified 2018. Accessed March 6th, 2020. <a href="https://www.cna.com.tw/project/20180730-Plastic/">https://www.cna.com.tw/project/20180730-Plastic/</a>.
- Konie, Robin. "The Dangers of Plastic Bags: Be Part of the Solution, Not the Problem." Thank Your Body. Last modified 2019. Accessed March 3rd, 2020. <a href="https://www.thankyourbody.com/dangers-of-plastic-bags/">https://www.thankyourbody.com/dangers-of-plastic-bags/</a>.
- Larsen, Janet. "Plastic Bags Fact Sheet." (2014). Accessed March 4th. <a href="http://www.earth-policy.org/mobile/releases/plastic\_bags\_fact\_sheet">http://www.earth-policy.org/mobile/releases/plastic\_bags\_fact\_sheet</a>.

Plastics, Professor. "Can I Recycle Plastic Bags in the Curbside Recycling Bin?" The Plastic Make It Possible. Last modified 2015. Accessed March 3rd, 2020. <a href="https://www.plasticsmakeitpossible.com/plastics-recycling/how-to-recycle/at-home/can-i-recycle-plastic-bags-in-the-recycling-bin/">https://www.plasticsmakeitpossible.com/plastics-recycling/how-to-recycle/at-home/can-i-recycle-plastic-bags-in-the-recycling-bin/</a>.

Brissette, Christy. "Plastic Straws Aren't Just Bad for the Environment — They Can Be Bad for Your Body." The Washiongton Post. Last modified 2018. Accessed March 4th, 2020. <a href="https://www.washingtonpost.com/lifestyle/wellness/plastic-straws-arent-just-bad-for-the-environment--they-can-be-bad-for-your-body/2018/07/02/d682fdfe-7964-11e8-aeee-4d04c8ac6158">https://www.washingtonpost.com/lifestyle/wellness/plastic-straws-arent-just-bad-for-the-environment--they-can-be-bad-for-your-body/2018/07/02/d682fdfe-7964-11e8-aeee-4d04c8ac6158</a> story.html.

# The Transcripts

Date: 2020/07/01

Time: 14:00~15:00

Interviewee: interviewee A

Responsibility: supermarkets

# (Job description)

Q:首先先謝謝您只願意接受這次的訪談,我先自我介紹我是這次論文 Q 究者柯佳好,由於您們的商店是致力於不浪費,與環保減塑方面是有相關關係,那我們可以理解政府在減塑議題裡面會有哪些需要做改善以及進步的地方。關於這次訪談會有 12題,總共會有四個面向,分別為超市、海洋、教育以及網購,訪談時間大約在一個小時左右。希望在訪談過程中可以爭取您的同意讓 Q 究者錄音,還要請您幫我簽署一份訪談同意書,以便於我在日後撰寫論文內容以及分析資料。

A:好啊,沒問題。

Q:首先,我們先進入基本資料的部分。您在這間商店裡面是負責哪一個領域內工作內容包括什麼呢?

A: 我是負責整個營運規劃,以及包括行銷處理和面相,怎麼樣呈現給消費都是由我 作主導。

# Section 1 (Limiting the use of the plastic tray and box)

Q:好的,我清楚了解,那我們進入第一個面向是超市減塑,政府在這個面向裡提出了一項政策稱為限制塑膠類托盤及包裝盒使用的政策,那依據您的角度,您對這樣政策有什麼想法嗎?

A:當然政府出發點是好,但是要有配套措施,就好比說如果他要求業者不要使用像 塑膠類包裝,有難度,如果要用紙類做取代的話,那紙類的製程是使用回收資料、砍 樹或是進口的紙張,再來是成本考量,會用到塑料的包裝,大部分的商家是因為成本 考量的關係

**Q**:便宜。

A:也可以防撞,不會碰撞,政府如果他一旦去限制這個,弱勢政府需要限制這個使用,當然是好,但政府需要提出一個配套措施,如果要讓人民一下子不方便,要怎麼去改善,需要提出一些作法,會需要宣導期。

Q:OK,了解,那我們進行到第二題,如果是塑膠使用就像剛剛我們提到的目的是為了防撞啊、保持新鮮還有衛生,但如果沒有了塑膠包裝,您認為有什麼替代方式可以達到塑膠包裝的目的?

A:其實有一個新的包材叫做聚乙烯醇,那個東西比較特別,他是水溶性的,遇到水會分解,不會造成海洋污染,但目前這個東西沒辦法被使用,我認為他目前是可以取代塑膠包裝。

Q: 是台灣的科技還不能製成包裝取代塑膠嗎?

A:國外目前也還沒有,技術還未達成,這個東西目前已經出現在我們的生活裡了。

O: 像是說?

A:洗衣球,洗衣球就是這個成分,這個東西就有機會可以取代塑膠,因為他不會造成環境污染,但目前還無法打印。

Q:好的,了解,那我們進行下一個問題,如果是超市需要做到實際的減塑這個動作的話,您認為超市有什麼具體的做法可以實際做出呢?

A:你說像現在全聯嗎?像是可以賣散裝的買賣,可以減少外包裝的買賣,像外面的水果店也是用散裝賣的,可以自備容器去購物,那因為現今的超市已經轉換成便利為主,大家比較不會去思考要如何減少塑料使用,這是正常的,那他們如果要減少塑料包材,可以從蔬果開始。

Q:那超市減塑有分成產品企業本身,就是商品的公司還有消費者的部分,在這兩個部分的話,還可以做什麼具體的措施呢?

A:你是指製造商嗎?我覺得最大問題不是製造商誒,是通路商,製造商是一個問題沒有錯,但通路商如果要求你,我舉例啦,我就是通路啊,當我要求製造商散裝給我,那他還是會給我啊,只要我的量夠大。

Q: 所以主要還是通路商的部分。

A: 一切都是為了便利、快速,所以目前的消費型態才會像是現行的狀況,一切都是以賺錢為目的。

Q:利益還是為主啦。

A:如果說要減少,我覺得通路還是要先改變,其實製造商很容易配合,對製造商來 說本來不是問題誒,本來製造出來就是散狀的,只是說像生產線,他只是在生產線上 最後一部是包裝,但在生產線前面那幾段都是製造。

Q:OK,了解,那對於消費者方面呢?超市對於消費者可以做出什麼具體行動?可以讓他們也一起實踐減少使用塑膠包裝?

A:其實就是你的超市的型態,如果這件超市型態本來就是散裝的方法,消費者沒得選,他就會自備容器,這一切都是...

O: 買賣的方式, 還是比較重要。

A:如果真的要改變的話,有效地改變的話,要大家一起做才會有機會。

Q:還是需要雙方都改變,若是只有一方改變,另一方還是保有傳統使用塑膠的傳統的話,那也是沒有效的做法。

A: 對啊。

# **Section 2 (Developing plan of marine affairs)**

Q:那這個部分沒問題,我們進行下一個面向是海洋減塑,政府在這提到了海洋事務政策發展規劃方案,根據您的角度,您認為對這項政策有什麼想法嗎?

A:我覺得政府規劃的都是好的,當然是對我們海洋我是這樣的生態環境都是好事, 但是執行面執行驗就比較有感覺比較困難,好像都是在理論上還沒有到實作,在實作 上好像政府要加點力,才有辦法。

Q:好,那就這個政策而言呢,您覺得這是一個對我國海域保護是一個有效的政策嗎?為什麼?

A:是啊是啊,因為我們台灣台灣就是一個然後我們又是一個不太像國家的國家,我們有自己的體制和法治沒有問題,但是對國際上的角色來講,但是對角色型態比較模糊,政府在用這個有關政策發展規劃,好像是以軍事為主,當然保護海域,這是必須的,如果連土地都沒有了,國家如何振興,那政府以保護海域為準則,那 OK 啦。

Q:因為我對於政府在只有敘述該怎麼做啦,好像沒有太大的實質效用,所以我認為 政府在這塊可能需要提到更多是如何去執行,一些真正能做到的,沒有提到實質的做 法該如何做。

A:那他這個政策使由誰去提出的?

Q:主要是海巡署,與其他公家機關共同去制定的,但目前看來,還是只在文字敘述 而已,還是有寫要達成的目的是什麼啦,但提供的資料不太夠。

A: 所以他沒有跟政府要經費的狀況,那表示都還在規劃中,因為在一個政策方案出來,一定會跟政府要一些經費,再到立法院去表決,法院通過才開始執行。

Q:對的,好的,那我們進行下一個問題,有一部分是關注在海洋環境保育上面,內容為防止他國漁船破壞我國領海的環境保護,但對於在減少塑膠的使用上,您認為政府應該提出什麼具體措施達到減塑目標呢?

A:海洋的垃圾是經過洋流,他不是在海上產生垃圾,這政策應該是要針對該如何降低海洋垃圾的使用,應該是全世界使用垃圾的狀況,透過洋流飄到海洋上,再到台灣的沙灘、海岸。

Q:我這邊的想法是說,如果像是一些補網方面呢?捕網的製作還是使用塑膠偏多,若是今天比較沒良心的漁夫將破掉的補網留在海洋中,像是這種狀況,政府可以做哪些舉動避免這種狀況發生?

A:這蠻難的,第一海洋太大了,管不到,當然漁船要出海一定要申請,因為海巡署每天會看這些漁船的位置,但不會特別去注意到漁船上的設備的數量,假如說漁網回來了,垃圾有沒有留在海洋中,他也管不到,這完全就是自主性的,而且海洋那麼大,如果那個區域的海洋只有一艘船,那真的很難說,所以難度真的很高。

O:即使要教育的話,也是很難的。

A: 對啊,真的太難了,只能加強漁民的教育,但是真的還是很難啦。

## Section 3 (White paper of marine education)

Q:下一個面向是屬於教育上面的減塑問題,這裡的政策跟剛剛上一個面向的政策有關的海洋教育白皮書,那關於這項政策有什麼特別的想法嗎?

A:很好,因為台灣有海島型國家,我們有很多東西都是從外國進來,就像食物有很多都是從外國進口,豆子啊、義大利麵啊,那當然有這個海洋教育的人課程不是基本的認識,對台灣國民是很正面的影響,就是可以多了解說,海洋的操作是怎麼去維繫海洋的保護,或是怎麼去保護我們的海域,是很不錯的方法。

Q:好的,那我們第二個問題,針對這項政策,我閱讀到的政府是只有將海洋的重要性這個概念灌輸給國中小以及高中的學生,並將的概念海洋保育的概念加入到教育的系統裡面,但是在教育的系統裡,除了海洋以外,還有沒有其他相關的減塑議題也需要被加入進去?然後該怎麼做?

A:喔!那如果是在海洋以外,其實可以增加在購物上的選擇性,好比說你可以自備容器去買滷肉飯啊、手搖飲、在生活上如果能夠有效的減少,塑料的產生或是塑料的回收,我們可能要做回收,不要亂丟垃圾啊,不要亂丟垃圾感覺比較重要,我覺得台灣還是有點髒。

Q:其實有時候在路邊還是會看到很多垃圾啊。

A:對啊,三重這邊都是啊。

Q:真的要完全避免這種事情發生,真的還是要有一段時間的改變。

完全就是要內心啦,我們跟日本人不一樣,日本人就比較不會有這種狀況,比較少, 日本人比較少,可能一百個只會出險百分之一或二,可是我們的機率就高了一些。

Q:對啊,還需要進步,進步空間蠻大的。

A:對!還需要進步,台灣還沒,就我認知啦,台灣還在長大。

Q:OK,好的,那我們下一個問題,再讓學生們了解就是概念之後,您認為應該要如何確實執行,才可以達到減塑的這個行動?

A:我覺得可以透過一些,比如說學生跟著老師,不管在哪裡試試看自備容器這件事,可以用體驗的方式,像是在傳統市場,也可以用體驗的方式讓小朋友帶這些容器去裝,當然在教室裡面使用自己的湯匙筷子,全部都可以從家裡帶過來,讓同學知道說,減少垃圾是很容易的。

O:老實說我在家裡也是倡導家人們一起做這件事情。

A:對啊,就是一個傳一個。其實我們有被放進教材裡,我們有被放進高職的一本書裡面,好像叫做人生規劃。

Q:哦~真的喔!這樣真的很棒耶!那是怎麼放進去的呢?

A:他們來找我買版權。

O: 這算是政府提倡或是做的嗎?

A: 該.. 他可能不算政府。

Q:還是算出版社嗎?

A:對!他是出版社來找我買版權,那個出版社很大。

O: 我認為這是一個好的現象。

A:對啊,就是現在出版社也開始在重視這件事,在教育這塊有努力。

## Section 4 (Decreasing the amount of the package on online shopping)

Q:那我們進入最後一個面向,是關於網路購物的包裝減塑。政府提到了望夠包裝減量指引政策,根據您的角度,您對於這個政策有什麼想法?

A:他的指引政策具體內容是什麼?

Q:我消化過後,我的解讀是政府在倡導塑膠包裝上面可以減量,或者是用替代方案,他的替代方案像是紙盒、包裝大小,主要重視推廣這個政策,但是實質上他是不具有法律效力的,這個政策才剛推行沒有多久,所以還是在前期的適應期這樣。

A:其實網購這件事,目前超過七成的人會做這件事,那可能是說買一支筆好了,可能會有一個包裝盒,然後可能還會有一個緩衝材,再放進外箱盒,那中間就產生了外箱盒、緩衝材還有包裝盒,所以要減少垃圾感覺難度很高,就我來看,只能不斷循環外箱盒跟裡面的緩衝材,那外面的盒子只能回收,我們店內是可以回收小紙箱。

Q: 所以是一次性的都可以拿來這邊回收嗎?

A: 嘿是,都可以拿回來再次使用。

Q:那下一個問題,為什麼政府現在對於這項政策,只能做到指引推廣,不具有法律上的效力呢?

A:沒辦法法律化吧,因為東西大大小小的,沒辦法制定,網購一支筆要一件,啊網購一台冰箱。

O: 也是要包裝。

A:對啊,那要怎麼做一個規劃?意思是說他的包才有大有小,不可能用裝冰箱的箱子去裝筆,所以這個難度真的太難了。

Q:那就我個人的想法是像剛剛提到的這個政策會不會是因為剛推行,政府會想要先讓這個買家及賣家有這個概念,在網購的時候賣家可以減少使用塑膠,那買家同時也可以體諒少使用塑膠包裝,那下一步才是慢慢的去做改善。

A:不過這個概念完全沒有擴張,沒有讓大家去了解,老實說我還不知道,就是說他要指引也要大範圍的去推廣。台灣政府還有很多需要改進。

Q:是啊,沒錯。好那我們進下一題,若政府要確實落實網購包裝這項政策的話,您 認為有什麼具體措施可以實踐嗎?

A:我覺得就是重複使用,REUSE,然後可以把包材捐給需要使用的人,那收到包材的人,就不用在花錢去買包材了,成本會降低,垃圾產生也會減少。

Q:那我們訪談就到這邊告一段落,再次謝謝您撥空與我進行這次的訪談。

Date: 2020/07/06

Time: 16:00~17:00

Interviewee: interviewee B

Responsibility: marine conservation

# (Job description)

Q:我們直接進入的一個面向,那我們先進入基本資料部分,雖然說我大概了解您在這的職位是什麼,但我還是想要先詢問一下請問您在這個組織裡面的負責哪個領域, 工作內容包括哪些?

A:其實哪裡領域,好像蠻多的,我比較負責組織營運跟行銷上,可能想在議題的了解,就是要把它計畫成一個民眾好了解的內容,這比較算是我的工作內容,身為一個創辦人,就是校長兼撞鐘。

# Section 1 (Limiting the use of the plastic tray and box)

Q:好,那我們進入第一個面向,超市減塑的部分,政府提到了限制塑膠類托盤以及 包裝盒使用的政策,您對於這項政策有什麼特別的想法?

A:這個推出應該是行之有年的政策啦,應該快十年吧,應該說大方向應該是好的,就實際面來說我卻要真的能做到減塑,這個進步非常緩慢,等於你不太知道說,有些當然是實際上的障礙,另一個是推力上的不足,推力不足上應該是說超商沒有必要為此做整個,在這營運系統有改變,另外一個是可能民眾在這方面其實在所知道的或是所認知上,並沒有那麼深所以等於說超商會這麼做一定是為消費者會有一個推力,這兩者都沒有的話,這方面,在台灣推動算是緩慢了啦,政府還沒有到比較全盤線規劃之,像說規定Q究哪一種材質,所以會行之有年可是沒有什麼效果,大概就是這種原因吧。

Q:Ok,好,那我大概知道您對這樣的瞭解是什麼。第二個問題,因為塑膠的包裝大都是為了防撞啊、保存新鮮及衛生,但是如果今天沒有塑膠包裝你認為哪些替代方式可以做到以上的目的呢?

A:我自己坦白講,我覺得,我認知並沒有其他的替代措施,對我來說目前比較多可能就是PLA可分解塑膠使用,但這種東西在台灣就不成氣候,做了也蠻多也廣,但配套措施完全不成氣候了一個材質,現在大家都說要減塑可是沒有一個東西是完整可以取代塑膠,很多人說要實驗,但實驗要多久,同時也一直在產生問題當中,所以我並不覺得說有什麼是可以成為替代措施,怎麼樣是把目前的塑膠用更好的方式更好的材質,或者是規範讓他更好的使用,我覺得這是比較有可能啦,反倒是一直在用新的模式、新的材質,也有可能是產生更多問題啦,但當然要看整個規模做得如何,因為如果以全體來說當然我就目前有任何一個成熟穩健的配套材質來做,如果你說比較像對

小規模像里仁我不知道你知不知道他們說是,里仁其實是有自己的通路,生產者到他們他們有比較慎選,同時他們做一通路商,可以一直向上游的生產者去要求減少塑膠使用,生產者其實是願意去改變的,里仁後端也盡量去配合到,因為他們有些包材也適用 PLA,他們做了蠻多政策像是他們有用紙去替代塑膠然後用比較天然的東西比如說,紙盒間塑膠的薄膜,變成紙盒加蠟,的這種方式,然後用它讓材質比較單一,也有是就用 PLA,向里仁多半用的包裝都是 PLA 的材質,他們也有嘗試要自己回收,他們希望消費這買他們的東西然後自己回收,自己有一個工業的堆肥場,在這中間面臨到兩個問題,第一個是消費者到底會不會回收,這其實是很多品牌在做 marketing 的時候不會講到的問題,很多都會說我們是循環經濟,但數字攤出來看啊,誰敢談,那里仁跟我談過,我可能需要再跟他們 update 一下最近的數字,大概在 2017 年我就問過他們,他們的回收率是 3%左右,不高也不低啦,其實是什麼他們那個時候剛開始起步的時候,這麼做就已經有一些成效,而且他敢講,所以這是最可貴的地方,除了這種小規模真的很有理念之外,整個社會不一起做真的完全不行,我覺得蠻困難的並沒有一個完整的可以替代。

Q:那如果就是不說包裝這個部分化的話,像是買賣的方式呢。像上次我做訪談的無 商店店家,用裸賣的方式,這種算是有效的一種替代方式嗎?

A:我覺得其實是啦,但我不確定這個要多大的金流的規模製成它,我記得他們現在 開在三重嘛?

O: 對,沒錯。

A:我當然完全支持這種裸賣的理念,但他在實務上,我們去看這件事情可不可行,還是要看說他們營運的狀況,第二個就是鋪點嘛,身為一個我住在臺北市我不太可能跑三重去買一個我走50公尺可以到全聯東西,這坦白講對消費者來說是一個問題,第二個是到底有沒有比較環保,你省了包裝,可是你增加碳排,所以某程度上在台灣還是有一定的問題啦,因為裸賣其實是歐美流傳過來的嘛,台灣不像如同寒帶的國家,這個保存問題是要花比較多時間來看,但前提真的是鋪點,肯定是要很大的營收跟需求才會鋪點,可能真的沒有太大的營收做到這件事情,好的模式還沒有在市場上得到很好的迴響,也要看他們背後得到的益助,比如說政府有沒有在鼓勵推這種商店,比如說一些龍頭企業他們在推行 CSR 時有沒有注意到這類的事情,如果有的話有沒有藉由這個影響力去做到擴張,我不知道他們面臨到什麼困難或是得到足夠的支持。

Q:好的,了解,謝謝。那我們下一個問題,如果是超市需要做到實際減塑的動作他你認為哪些具體的措施需要被實踐的?

A:其實剛剛大致都有講到啦,就是所謂通路商就是要跟里仁看齊啦,里仁應該算在 台灣最有道德品質的通路商,所以像剛剛有講到,在影像生產者上就有一定的影響力 啦,比如說剛有講他們會...該~印象比較深刻的是愛之味上豆花生,他們就跟通路商說統一都不要給我上面蓋子,他有點像是說,我們沒有這個需求,我們消費者都會自備,這樣的話就不需要覆蓋上去的蓋子加湯匙,所以這可能會是一塊。然後像剛剛講的像產品上小小的異動,用玻璃罐取代塑膠罐,用紙取代塑膠黏膜。其實我也與他們對話過說,減塑真的是好的嗎?減塑真的是唯一環保的指標嗎?其他們也不敢說這樣是絕對環保,現在比較多在做實驗啦,像這幾年他們會做一些推肥處理,盡量跟消費者鼓吹要回收他們的包材,如果總的來講及時就從,當然我覺得每一個超商做到最頂級的話,每個對環境貢獻 100 分的話,要做到 10 分的話,你一定要教育消費者嘛,教育消費者這是好的制度,簡單來說就是自備購物袋啦。要再好一點的就是你可能可以影響到你自己品牌的產品設計,在廣一點可以影響到通路商,等於說生產者某程度來說還是會被通路商綁定,若通路商有想要改變整體狀況的話,或大或小還是有可以改善的地方。

# Section 2 (Developing plan of marine affairs)

Q:Ok 好那我們進入下一個面向是海洋減塑,政府提到了海洋減塑部分提到了海洋事務政策發展規劃方案這像政策,您對於這個政策有什麼想法嗎?

A:向台灣海洋污染跟塑膠污染其實蠻嚴重的,行政院最近推的向海致敬的政策,某程度來說架構蠻雷同的,這個政策有點像是將東西的責任回歸到人民身上,就有點像是如果你在海裡面出事,這是你的事情,這不再是國家的事情,那向海致敬某一塊跟海洋塑膠比較相關的是他開始要清理在台灣的所有海岸,希望每一寸土地都乾淨,這是一個蠻樂觀的理念啦,我自己跟環保署開了蠻多次會啦,關於塑膠其實,我自己是不太看好這個政策,就是說,喔環境出現問題是國家該擔的責任,那民眾來淨灘,讓民眾看到海岸垃圾這個問題是不合理的,院長說的意思就是對民眾拍謝啦,對我來說問題製造者本來就有義務去看見問題處理問題。我自己是響應這個政策開始實施,然後這樣多單位應該是蠻大動作去,我們接收到任務或是把認為自己管轄地,他就把它整理比較乾淨,我認為有點不符合效益啦,如果你今天真的要教育台灣,在源頭端要減塑,你又把末端整理得很乾淨,那他要從哪裡得到環境教育,這我覺得有點荒謬啦,這個我也跟環保署討論繼多次的。

O:那環保署是要求哪個單位去做這件事情的呢?

A:其實蠻多的,台灣的海攤是被瓜分成非常多主管機構,可能像是地方清潔隊、台電等等,某程度可能是官方下達命令,像是說台電我們就要自己推人力,維護他所管轄的區域,但是過了這個出海口就不是我們的喔,是他們的喔,這樣的態度在進行,他們的權責劃分的很明確,當然向海包括很多面向,環保署就有做一個海廢治理平台,透過很多面向去治理海廢,包括漁業、河川、教育,某程度也是在 cover 這一塊,我自己覺得這個政策很粗暴啦。

Q:其實我也很認同您說的,源頭很需要去節制,那源頭其實就是我們一般民眾去使 用塑膠包裝這個部分,那如果政府推動這項政策,是希望各級單位去處理,是真的不 太合理的。

A:對啊對啊,如果你今天不給民眾看到海龜的鼻孔去卡住吸管,那他們要怎麼減少 吸管的使用?

Q:沒錯,好OK那我們下一個問題就是向政策而言你認為這是一個對我國海域保護 是有效的政策嗎?為什麼?

A:我覺得是啦,如果要以一個宏觀但短期,確實是啦,某程度上有點自打嘴巴誒, 好像在解禁海洋跟人民的距離,但他又要把海洋照顧得很好,讓民眾看不見問題,感 覺 pros and cons 都有耶,就是有點想提升台灣的海洋觀光資源,但他又有點想要掩蓋 目前的問題。

Q:那我們下個問題,在這項政策中呢,其中有關住在海洋環境保育上面,內容是防止他國漁船破壞我國領海,但是對於減少塑膠上面的政府是沒有提到一個具體的措施,所以您認為政府應該在可能制定海洋塑膠使用的部分有什麼建議嗎?

A:其實就對於環保署提出的海廢治理平台來說,我們就提出了一個蠻明確的目標,他有一個減塑的啟程,包括從 2018 年開始塑膠袋是以價制量,沒辦法拿到免費塑膠袋,到 2019 吸管的內用的限制,一直到 2030 年會限用非常大量的一次性的餐具,我記得在塑膠袋限用上的效果是顯著的,所以要從很多面向去治理,像用限制地區、數量、材質與一些替代方案,其實很多會在這個期程上會慢慢地發生的,坦白講有一點夢幻美夢的程度在啦,很明顯限用塑膠袋和吸管是相對好去禁止的東西,如果今天要限制塑膠杯呢?民眾反應會怎麼樣,第一他面臨到的是執行面上他到底能不能做到,第二個就是政治的問題,減塑一直都是民進黨在執政的時候很強的一個環保政策,如果政黨輪替或是政務官輪替的話,他的風向會改了嘛,到底這個期程能不能如期實施,我們就是看看啦。感覺似乎未知數蠻大的。

#### Section 3 (White paper of marine education)

Q:了解,再來我們去下一個面向,關於教育上面的減塑,那政府有提到個政策是說 海洋教育白皮書,那與前面的政策是有相關性的,那根據你的角度來看,你對這項政 策有什麼想法呢?

A:很好啊,但是沒有什麼實際的規劃,我覺得現在比較多的是有一個方向跟政策去教育,但沒有一個強致力是什麼什麼是必須做的,而實際上又要怎麼執行,而不是只滿足了某些時數,如果說一個學校某科要完成多少時數,那老師就去找與海洋相關的影片去播放就好,然後沒了,並沒有一個完整的課網,像是有脈絡的去了解海洋,至少應該要了解某部分的基本知識,都沒有很明確的規範出來,就...嗯。

Q:OK,我了解您的意思哈哈哈。那我們進入下一題,針對這項政策,政府只有將海洋的的重要性這個概念想要灌輸給國中小以及高中的學生,並將這個海洋保育的概念加入進教育的系統裡面,但是在教育系統裡面,除了海洋的部分,你認為因為塑膠污染而影響哪些議題也需要被加入?那該如何加入?

A:我們進入蠻多校園的啦,有一些方法可以實際去改變,比如說政府應該要有一些明確的規範,像最基本的,台北市政府規範一次性餐具不能進入校園,或是公部門啦,像說還是有蠻多漏洞的,這是一個好的開頭,所以有比較明確的政策下來到分支的一些 scenario 裡面,大致會想一些結果方法,這個政策應該是前年還是大前年推出來的,由柯文哲推出來的,各個台北市學校就開始會在一些地方想方設法,向學校的教官站在門口看到塑膠袋就會說:「該該該!塑膠袋不可以帶進學校。」,像有些大活動,像台北跟新北其實在校園是大型活動減塑商店蠻多的,嘗試跟努力吧,在台北很多學校在辦大型活動,像音樂會、運動會、校慶啦,都很常會出現的,學生可能就要想方設法說,我怎麼樣不塑的賣我的珍奶或是麵包,這都是響應的方式,或像在Q討會等等都是被需要的,目前可能具有一個契頭的政策跟主要想那些人可他還並沒有一個考核的制度,政府需要一個政策但是沒有一個檢核的標準,既然有減塑動作,我們就每個月去測量學校的垃圾重量,有沒有逐年下降,或是可回收的比例逐年下降,其實政策是好去檢測的啊,或是配合的回收廠商,那可以去做檢視,沒有的話就是在講空話啦,我覺得有一個明確的方式但一點粗暴的方式,不知道是政府願不願意去做。

Q:感覺像是如果要推動一個政策的話,需要用半強制的方式,才可以達成效用。

A:一定要的一定要的。對啊,像現在也有很多的漏洞啊,一些一次性的禁用,但老師怎麼請飲料的?只有在某些時候有去管制,但在校園裡面還沒有一個共同的共識啦。像在學校的大型活動,可能頭兩年有一個熱度在,過了那個時間又不執行了。

Q:OK,好的,那我們進入下一個問題,再讓學生了解這些減速概念之後,您認為應該如何去實踐這個減塑動作呢?

A:我覺得剛剛講的是一個,有一個指標性的指數或是 index 幫助大家去達成目標,第二個是我覺得現在配合 108 年課網有一些核心素養,學生應該具備一些能力,讓學生在生活中就會發現一些塑膠的問題,從早到晚,從進到校園到補習班,有沒有一個場域或是時間,會讓學生產生大量的一次性塑膠,我們要想什麼解決方法去解決它,學生應該具備解決問題的能力,不應該只是被規範而已,學生應該要成為想到解方的其中一員吧,像我們有教學生,有些學生會想到不錯也有很可一 尤的東西啦!有些學生就想到說,看他們能不能建立一個無塑的學區,所以我就跟店家講,學校地圖攤開啦,以後看到學生穿這個制服就不要給塑膠袋,你 ok 的話幫你蓋認證,畫在地圖上面,可以在學校裡面推廣說,哪幾間店家有在配合、友善環境的店家,那學生就會去支持這些店家,這些都是學生透過思考去想出來的過程。

# Section 4 (Decreasing the amount of the package on online shopping)

Q:那我們進入最後一個面向,是關於網路購物方面的減塑,那政府提到了網購包裝減量指引的政策,那您對於這項政策有什麼想法嗎?

A:其實坦白講蠻好的,我有去跟環保署開會討論這項政策,實施的面向都是合理而 且有依據的,你上面寫的從既有的東西去改、減少使用道推廣租賃的方式去使用,其 實這些都是很好的方法,但執行齁...。

Q:好,那為什麼目前政府對這項政策只有做到指引推廣,沒有法律上實質的效用 呢?

A:我覺得應該是沒有法律可以去管控,政府的權力去規劃,桌前其實有跟環保署開過會,就是他們其實想要去做一個平台,環保署加上一些觀光業者依照我這個方式去走喔,但為什麼這些觀光業者要聽政府的,政府可以講的像是約束民眾的消費,其他真的沒有了,當你掏不出命令或是法律規範的時候,其實業者不一定要響應你,那其實現在很多業者對於作網購減塑來說是屬於他們的 CSR 或是 marketing,就是沒有辦法達到 marketing 的目標的話,那與我何干,所以他們無法可管的話,我覺得有可能會淡掉啦,因為說到底一定是有推力跟拉力,這是一個政策形式,所以如果沒有一個本身政策法源的話,再做推廣其實是沒有用的,如果拿環保局很多政策來看的話,很多政策都是這樣開頭的,而無疾而終,比如說政府很愛推環保集點,還是我去哪個地方消費搭乘大眾運輸的收集一些點數,說到底業者有加入的必要嗎?業者實際要看的是,政府推動,民眾接收,如果沒有的話,業者也不願意去響應那項政策,民眾的響應就是,我透過 app 可以得到一些優惠、免費的東西,這有關係到 app 好不好用,執行度高不高,所以這整個推廣,無論是 app 還是什麼都蠻受限的,比如說,我們做 app 會考慮到 active user,這些活躍行的東西有沒有人在用,如果不能快速增加,就不是一個成功的 app,政府之前有在推環保旅店吧,政府會給一些標章,我有問過一些

旅宿業者說這些標章給你們些什麼改變嗎?他們只覺得就是在門上多了一張貼紙,當 他沒辦法造成消費者訂房的轉換的時候,除非業主本身自己很有心意,不然與他何 干。所以整理來說,政府沒有讓他變成一個有法源的東西。

Q:我對於這個問題的想法是,有點像前面的塑膠包裝的限制,在那個政策裡,政府一開始也是用推廣的方式,講不好聽一點是希望洗腦人民不要用塑膠袋或是塑膠包裝,先讓人民有這個概念以後,在漸漸地用扮強制性的方式去訂規範,那會不會說政府在這方面也是一樣的想法呢?

A:我期望是啦,我去年跟他們開過會,那時候沒有任何的法令可以去依據。拿塑膠吸管為例好了,這個其實是多方啦,包括公部門、業者和NGO民眾端,共同的勢力很大才可以成立,一開始是希望公部門根NGO一起推動這個新的限制跟法令,政府當然有法可管,跟這些業者說,業者當然會不爽覺得太麻煩,但當民眾累積到一個積極度的時候,業者會理所當然為了民眾去改變,這個政策會成功真的是因為麥當勞開了第一槍,有了龍頭企業出來做之後,慢慢很多企業都會跟著響應,反彈會比預期的小非常多,當然回到各方所需,政府當然要給個命令,加上民眾、教育的知識、企業、網紅一些別的組織的推廣可以讓整個政策更有效地被執行,每一方都需要做到其所需啦,不然其實蠻困難的。

Q:好的,最後一題,若是要確實實踐網購包裝這個政策,您認為政府應該訂出一些 法源來制定,那還有沒有其他的建議呢?

A:我覺得業者需要把這個拿去當他的 CSR 啦,講一些題外話,但 CSR 這個東西在台灣還是一個學走路的階段,CSR 這個東西其實很廣,企業對內部,台灣的 CSR 屬於在行銷的階段,真正的 CSR 是當你是問題製造者的時候,要怎麼樣自己改變生產結構,去達到一個永續和並進的經營模式,其實網購業者執行減塑的這個點,需要好好思考一下,很多業者都是認為配合廠商去做減塑。

Q:所以他們這種舉動算是被動的行動,大多不是主動去做減塑。

A:是啊是啊,民眾應該要給企業更多的壓力,企業本身應該要有更多 CSR 的動機啊。

Q:針對今天的討論來說,我聽下來如果要確實執行的話,應該是要雙向都要有減塑方面的概念,像是政府推廣政策,同時,消費者要有減速的概念,所以才能把這些政策做到一個有效的成果,還是非常謝謝您特別撥空與進行訪談,過程中很愉快也受益良多。

Date: 2020/07/08

Time: 14:00~15:00

Interviewee: interviewee C(A) &D(A2)

Responsibility: marine conservation (C) and education (D)

## (Job description)

Q:那我們就開始今天的訪談,雖然說大概知道兩位的職位跟工作內容,但還是想再詢問一下兩位在這個團體裡面是負責哪個部分,內容包括哪些?

A: 我是理事長,如果在海洋這塊是跟大家一起策劃海洋的主題與參加一些公部門的 一些會議。

A2:我算是志工,志工就是志願服務,我們才在去年成立減塑小組,針對減塑的議題用各種方式推廣這個議題,舉辦減塑園遊會、告訴學校我們會怎麼做,然後現在也有到市場去做宣導。

## Section 1 (Limiting the use of the plastic tray and box)

Q:Ok,我了解了,我們進行下個問題。

### A1&2:好!

Q:政府在 2007 年時有提到限制塑膠類托盤及包裝盒使用政策,依照兩位的角度來看,您對於這項政策有什麼特別的想法呢?

A: 你說托盤嗎?那個沒有必要就不需要裝吧。

A2:你說是2007年。其實我看了還蠻驚訝的,因為我看了超市還有很多都是塑膠托盤,環保署管的東西製造出來了,使用的以後又說要限制,限制包裝這個部分又是另一個機關去限制的,兩邊的行政機關沒有同步去運作。

A:因為塑膠包裝還是有一個底下的托盤呀,你如果沒有改良一個好的東西的時候,他變成他沒有辦法去解決它的水會滴出來,然後若是紙的材質的時候他滴到水,他會爛掉。不過我覺得因為這個托盤其實惠具有很多材質都可以選,只是我們現在是選擇最便宜、最不環保的方式,那對於說價錢要升高是不是可以回收這些,我們弄一套方法出來,理論上應該是可以的,就是台灣可能有一些政策就面上面想要做的時候,他沒有一條線狀去顧到全面,所以就會出現說你現在要推他才是用他舊的方法,可是他要用新的東西去包裝的時候是這一個人他要自己去開發,等於說有十家廠商,這十家廠商都要自己去尋找自己開發的,民主國家的時候就會這樣,他覺得讓他彈性可是對使用者來說他會覺得無助。

A2: 我這裡補充一下,剛剛說的是食品藥物管理署,主婦聯盟消費合作社,他之前啊,有推動過紙蛋盒是可以回收再利用,前年吧,就是因為有個法規說蛋盒不能重複使用。

O: 剛剛提到蛋盒不能重複使用,我可以了解一下為什麼不能重複使用嗎?

A:他主要是他就是蛋的那個表面他會有一些菌在上面,你若重複使用擔心其他的問題,所以他就是一次性。

A2:他們會怕交叉感染的問題。

A:主婦聯盟那個時候推的時候,後來第二次就沒有辦法推,因為你沒有辦法去保證 他上面不會去沾到,那現在我們的蛋殼包裝因為但都水洗過,因為他要把一些菌上面 都處理掉,所以他裝在那個盒子上面他用完他這一個理論上應該是要可以回收的材質,再回到蛋的材質,可是我們現在這一個是目前用的是不能回收的材質。

Q:好的,了解,那我們進下一個問題,塑膠的使用大多目的是為了防撞、保持新鮮和衛生的部分,但是如果今天沒有了塑膠包裝,有什麼替代方式可以取代塑膠包裝的目的呢?

A:防撞的材質應該蠻多的吧,像是瓦愣紙,像是咖啡杯下面的材質還是用回收的紙類做成的固定架,主要是防撞的部分蠻容易去處理的。

其實要為了保鮮那些目的的包裝的話,不管用什麼材質,只要是量多的話就會產生環境問題,不是說你用什麼材質就能夠解決,就是說現在的社會,大家都要上班,沒有時間去傳統市場買,若是去傳統市場買,是有辦法可以完全去除掉多餘的包裝的,但現在社會形態是到超市去購買,所以這個政策主要涉可以稍微減量,就是不要過度包裝。

Q: 像您提到的去傳統市場購買,這種買賣方式是裸賣,若是裸賣這種模式在超市裡面產生的話,像在蔬果區,那有什麼需要注意的嗎?

A2:在蔬果區做裸賣是比較容易的,因為比較不需要冷凍,產生額外的包裝,最需要及重要的事是國民素質的提升,不喜歡挑東西,然後就東摸摸西摸摸,在超市就沒有老闆可以看著或是幫忙挑蔬果,超市為了減少食物的耗損就需要包裝,避免去挑它,所以這是需要教育的。

A:其實很多都是需要連貫性的,只要其中有一條卡住,都是累積問題之一,那你機 沒辦法解決他就全部當垃圾,像家裡面你有很多東西沒有定時去清洗的時候你也會造 成垃圾。

A2:我曾經看過大潤發怎麼賣的,就是魚釣上來,直接馬上冷凍起來,完全沒有包裝,所以其實是有方法的,但加工品就有點難,例如說培根啊,所以大家要一起想方法,如果有法規、罰責的話,會促使大家去想辦法,但現在應該沒有。

A:我覺得說每一個東西都會應具它的差異性你可以做什麼樣的減塑的方法,不一樣的減塑的方法也不是說我一個政策下來全部通用,那你就覺得這個我可以這樣推然後在什麼情況下這樣推廣,因為你全部都要的話,沒有給人家方法真的...。

Q:好的,了解,若今天超市要實際得做到減塑的動作的話,那您認為有哪些具體的措施可以做到呢?討論深入一點的話,我們分為三個面向,包括消費者、製造商以及超市本身。

A2:對於消費者的話,就是剛剛提到的素質要提升。在整個消費市場裡,其實是消費者需要什麼,製造商才會怎麼做,如果今天消費者不去要求商品美觀而去購買,那超市或是製造商不會去做過多的包裝,所以其實源頭是消費者。

A:減塑生活那本書有講說如果那個賣的商品啊,覺得他的包裝過量什麼的,其實可以第一個就寫信給那一個廠商,然後第二個就是所有的消費者裡面就是大家一起來說明這個東西的不必要,減塑很有想法很積極的,台灣可能在這個部分就是順向接受,他賣的樣子看起來舒服然後他又看起來覺得那個明亮眼睛所以他就買。

A2:現在我是覺得說大家的習慣是乾淨整齊,但真的很難可以要求大家去改變這個習慣。

A:另外推行的方式,像是下面墊的塑膠包裝,長期下來會吸到食物本身,間接影響到人類的健康,那就變成我們再去查相關資料說如果確定他用的某些東西是有傷害的,就去取消那些過度包裝。不過政府對於過度包裝這件事,需要有一個規範,就你去看很多賣的商品,他可能原本就已經是一個包裝的他外面一定還要加一個膠膜,這就是過度包裝,其實過度包裝,我覺得可以從源頭裡面不管廠商或其他的,去一一檢視的,我有聽說過這樣黑松企業他們原先就是在整個產銷跟包裝的上面他們有做改進,他也提升了他的那個成本企業形象,我覺得應該是可以做到。

### **Section 2 (Developing plan of marine affairs)**

Q:了解,那我們進下一個面向,政府在2004年的時候提出了海洋事務政策發展規劃的方案,那根據兩位的角度來看,您對這項政策有什麼想法嗎?

A:這個比較偏軍事化的政策,他是有提到保護漁業,但是對於海洋環境保育的部分,沒有太多的提案。

Q:另外,想談論一下關於向海致敬,關於這個政策,政府希望台灣的每一寸土地都 是乾淨的,您對於這項政策有什麼看法呢?

A:政府希望海灘道潮間帶的每一個部分都是乾淨的,但因為還沒執行,所以我也不知道現在的狀態是怎麼樣,不過我覺得可以看出想做的心,現在是下達,但執行的狀況還在觀察,不過最近照顧海洋的人也變多了,因為最近幾年全世界或其他地方大都覺得,海洋是連在一起的嗎,那我們的海洋海岸如果乾淨的話其實對我們的海洋觀光是有幫助的。

Q:對於向海致敬的政策,如果我們可以從消費端,也就是我們說的源頭來說的話, 事不是可以更可以達成垃圾減量的問題呢? A:源頭減量,我們認定的頭不一樣,我們認定的是消費端,他們認定的頭是丟垃圾或是負責觀光的那一端,所以需要去建構那個頭的標準,我們當然希望可以從最前面使用端,當然最好也可以從製造端去減量。

Q:就我們一開始提到的綱領政策,您認為這是一個對我國保育有效的政策嗎?為什麼?

A2: 這個政策有包括漁業廢棄的部分嗎?

Q:有的。

A:漁業廢棄物的部分,他們希望漁網實施實名制啦,保麗龍的話想要做改進,看有什麼替代材質是可以做到替代保麗龍。那對於政策來說希望是走長期的,而不是一年向海致敬,不是做做口號而已,垃圾也不是一天造成的,所以不可能一年就把垃圾清乾淨,如果一昧的做最後那一端的事情,其實做不完,政府其實就是努力去制定政策,NGO發現什麼問題就努力去教育,企業的話,政府說什麼哪一些事你就做到,至少要到政府的標準。

O: 意思是說希望政府在政策制定上市長期的趨勢,不是短暫的。

A:等於是說執行度要做好,我有說你上面如果政策做好,等於你這裡就杜絕掉大部份的問題,政策好不見得執行率可以到100%,所以其他的部分就比較不會那麼大的缺口,另一個做法是用口號宣導,我相信上面如果去做好好宣導的時候,那個每天那一句至少他可以減少掉。

O:了解,那請問另一位受訪者有沒有其他想要補充的呢?

A2:沒有,謝謝。

Q:好的。那下一個問題,若是針對海洋事務政策上面,因為裡面的內容包括海洋環境保育這方面,內容是關於房他國漁船破壞我國領海這部分,對於塑膠的使用上,可以做到什麼限制或改進?

A:因為管不到耶,真的太難了,前面提到的是台灣有做到漁網實名制,但是真的漏洞太多了,對於浮球的話,可以想辦法去做到製作的時候,不要讓漁網跟浮球分開,這樣就不用分開兩個去管理,那另外一個應該是保麗龍,很容易從別的國度跑到我們的國度我們的國度,我們的也會跑到別人的,所以這有很多需要更細膩的政策去推。 A2:另外的是漁民的生活垃圾怎麼處理的?這是一個問題,但是我們管不到。

A:現在有藍海艦隊,台灣鼓勵他們自己帶出去的垃圾弄回來,不過這個政策至少比沒有時候好,不過執行度到什麼地步,希望可以有強烈的環境意識。

#### **Section 3 (White paper of marine education)**

Q:那我們換下一個面向,是在教育上面的減塑,政府提到了海洋教育白皮書這個政策,那根據你們兩位的角度來看,對這項政策有什麼特別的想法嗎?

A:我們現在海洋教育全部都國小國中都融到他的課程裡面,國小沒有特別的單元嗎 所以你還比較近的他們可能就會以他們的特色課程進行,沒有限制多少,但希望它融 入,國中高中因為他們都有地球科學那個單元台灣是海島國家,介紹海洋的時候,對 我國海洋的認識,我覺得要深度認識,有機會的話可以親自體驗大海的感覺。

A2:對於海洋保育這件事情,還有海岸的消坡塊的部分,現在港口應該是建到極致了,但就是海岸線的開發,讓大家來思考這樣是不是真的比較好呢?

A:消坡塊的問題,真的就是不放心只好一直放,如果在學校講這些,教育這些,把範例或是實例放進課程裡面,讓學生理解,就好像如果今天沒有看到海龜鼻子裡有吸管,就不會去限制吸管的使用了,所以把範例加進課程裡是很好的做法,消坡塊的部分還在持續進行中,如果越多人關心,那推動的速度會更快。

# Section 4 (Decreasing the amount of the package on online shopping)

Q:針對海洋教育白皮書這個政策,政府只有將「海洋的重要性」這個概念灌輸給國中小以及高中的學生,並將海洋保育的概念加入到教育的系統,除了海洋教育這個概念以外,還有哪些議題也需要被加入來教育學生呢?那該用什麼方式加入?

A2:我覺得可以加入垃圾處理這個問題,大家都知道要乖乖丟垃圾,但這些垃圾丟了 之後跑到哪裡去,應該讓學生了解這塊,大家就會知道垃圾污染的嚴重性,可能大家 都會覺得燒掉就好,但是真的燒掉就好嗎?燒掉以後會造成什麼問題,這些都是需要 做教育的。

A: 塑膠微粒,其實也是另一個問題,跟食物的連結這一塊,他剛講的焚化爐也是需要注意的,塑膠原本是減少森林或其他破壞的原因而出現的,現在不是因為不好的關係而要減少使用,而是因為過度使用,他應該可以用更久的但一次就用掉,所以如何把這個環節處理好,學生的問題,應該要從頭告訴他們整個處理的過程該是怎麼樣,讓他們正視這個問題。

Q:所以兩位在這個問題裡面認為,食衣住行和塑膠微粒以及焚化爐的部分都是需要被注意的。

A2: 是要讓大家了解事後的影響很重要。

Q:我本身認為家庭的影像真的很大,若是教育可以藉由小孩子影響家人的想法,其實是最有小、最快的。接下來我們下一個問題,若是要確實執行減塑動作的話,該如何確實執行呢?

A2:其實我們有在減塑園遊會,要從團體壓力著手,可能像若是在家爸媽給他們的觀念是使用自己的餐具杯子,但看到同學拿著手搖杯就會動搖,所以可能需要在學校教育並宣導。

A:我們協會有推減塑園遊會,很多人需要成功的經驗,沒有經驗的人不知道怎麼改,有經驗就去學習,第一年在園遊會做的時候,活動結束有好幾個黑色大塑膠袋裝著,第二年改進了之後只剩一個黑袋子的底都不到,學校也覺得這樣讓園遊會更環保,這就是落實,有人的經驗值其實很重要,也願意做這件事。

A2:有些學校推動的時候其實沒有想像中的順利,所以從上頭開始改變是最有效的。 A:有機構希望我去詢問看教育部能不能給個標章,認證哪幾間學校是環保學校,但 教育部覺得很難認證啦,說學校是自主團體,所以很難。執行的那個部分的家長跟學 生跟老師可以一起做,就是爸爸媽媽還是要有一點耐心去做這件事就說你回出門你就 是帶著餐具去買東西回去。另外我覺得要實踐減塑這件事,我覺得要實踐體驗,就會 有意識到。

Q:那最後一個面向是網購的部分,政府在去年的時候有提到網購包裝指引政策,依 照兩位的角度,您對這項政策有什麼想法呢?

A2:因為他還沒有法律效力,就是只有道德勸說。

Q:您的意思是說,只有推出一個理論上的敘述,那執行上還需要再努力嗎?

A2:對~然後可能要想想看為什麼網購需要那麼多包裝。

A:因為會亂丟啊。所以我們可以從運輸業去強調,我覺得做是代表一個人的氣質, 代表文化,所以文化可能需要跟著提升。確實在網購這點,我其實不太了解太多,只 知道用很多膠跟套住。

A2:現在有企業在推重複使用的環保袋。

Q: 您說的是 packaged plus 嗎?

A2:對,就是從企業開始推的話,其實也是很不錯,政府可以有創意發想,怎麼讓企業願意做這件事。

Q:是的,我很認同剛剛提到的運輸業這塊,可以從運輸業著手做到小心輕放。

A:是啊,像是若在箱子外面貼個小心輕放的話,其實運輸業減少摔的動作的話,其實真的可以保護到商品,或是需要小心輕放的商品運輸的時候,運費多加一點也是合理的。

A2:或是邀請物流業者可以一起想辦法,去想辦法解決這個問題,像是可以去製作循環包裝這個部分,可以一起響應這個問題。

Q:那我們進行下一個問題,為什麼目前政府對這項政策只能做到指引推廣,而不具有法律上的效力呢?

A: 就我剛剛說的管不到吧,另外就是可以對做塑膠包裝的業者徵收稅收吧,不然就 是針對物流業者去改變。 A2:可能對台灣自己的部分先要求,加上綠色行銷這塊真的要一直區宣達,這個網購業者也可以標榜著友善環境的包裝,這對企業的行銷也有一個幫助,互相去做行銷, 對網購業者和物流業者都是有幫助的。

Q:好的了解,那最後一題是,若要確實落實網購減塑的話,有什麼具體的建議嗎? A2:其實我覺得我們很難提出一些具體的措施,因為他們有什麼困難點還需要去了解,這樣才知道可以該怎麼改進,加上我也是很少在買網購。

A: 所以就像剛才說的,若是可以外部多貼一個提醒的貼紙,提醒運輸業者小心輕放,這應該就算是一個方式。像我們自己在做減塑的動作,我就去算哪些包裝可以減少使用,哪些是多餘的包裝其實是可以刪減的。

Q:我認為本身還是跟賣家的影響最大。

A: 還是可以從買家去做動作,確實從消費端可以給企業一些壓力和改變,才能夠去 做真的的改變。

A2:我有聽過的事重複使用包材,回收包材,就可以減少製作包材,減少包材的生產。

Q:是的,了解,那我們今天的訪談到這邊告一段落,再次謝謝兩位今日撥空與我進行這次的訪談,過程中受益良多,也對我這次的論文非常有幫助,謝謝您們。

Date: 2020/07/14

Time: 14:30~15:30

Interviewee: interviewee E

Responsibility: education

## (Job description)

Q:首先你在這個組織裡面是負責哪一個領域?工作內容包括哪些?

A:我主要是負責在課程前端,主要是現場會有教師嘛,教師會去幫民眾上課,但是 我們在前端會有客發小組,我現在的角色比較是在前端的課發,然後做系統管理、專 案管理協助訓練現場的講師,可以讓他們去現場做教學,這是我目前要主要工作。

O: 所以主要是在教育這個方面。

A:對,沒錯。

## Section 1 (Limiting the use of the plastic tray and box)

Q:好的,那我們進入第一個面向,第一個面向是超市減塑,政府在這個政策裡面提到了一項政策是限制塑膠類包裝及包裝盒使用,那依據您的角度,您對於這項政策有什麼想法嗎?

A:目前是這樣政策比較是鼓勵型的啦,他就是沒有嚴格的禁止,超市不能用因為其實我們有接觸一些農民們,他們也會對於食品不包裝,本身是容易損傷的,所以在以食品的保存來講,不只是為了要能夠順利上架,他其實包含了食材保鮮以及保存的關鍵,所以我覺得政府比較可以致力的應該是在強力規範多於包裝因為其實有些像小農,他們本身有做有機耕作,可是他不得不他如果要進入市場的話一定要經過品管,品管就得要殺菌,要有一定的規格性嘛,他們只要沒有照的這個流程走,他的產品就沒有辦法上架到一些小農的平台,所以對於很多友善小農來講,他就是不得不必須要配合包裝,只是政府有沒有辦法強制的在過度包裝上做管理,例如說買菜的時候,比較容易損傷的有下面會多一盒子,然後再加一個保鮮盒,但如果是不容易損傷的就不需要這些東西,例如說馬鈴薯,那其實就不需要多一個盒子嘛,然後多的盒子也許一方面是為了要提高它的市場價格、他的美觀,他也有可能幫助他關於到底怎樣的基本包裝才是足夠保存食物,然後是便於做品質管理的可能政府可以再更努力的就是有效的區別必要包裝跟多餘的包裝是什麼,現在市場上有看到有規範啊,但是事實上沒有很嚴格。

Q:是,我也認同您說的希望政府提出一些政策以外,還是需要提出一些配套的半強制措施,例如像檢驗、審查等等,那這些團這些機構有沒有確實的執行到這個目的。 A:目前我覺得有一個問題是我覺得政府可以嘗試想看看的,食品包裝來講好了,如何保存食物的食品他的材料是被環保署所檢驗的,等於是他製造多少盒子他就必須要 付多少環保權利金,必須對社會付出相當的價格,確保我日後是有錢可以處理這一個製造產品嘛,我知道很多塑膠用品是很多小廠商做的,寶特瓶本身只有大廠,小廠沒有,小廠的量實在是太少,少到沒有必要用多餘的行政成本去管理她,但是更多更多我們這些塑膠產品它是找不到來源的,他上面沒有被追蹤的任何資料,所以你怎麼樣確保這些生產者,我覺得從源頭管理應該就會比較好的一個方法啦,生產者生產出這個東西,那我就必須付出環保權利金,生產幾頓就要付出多少的回收成本以確保我們之後的回收廠可以做這件事情,因為回收歸回收但80%的回收被焚燒了,我們教育的角度好了,我們都希望從源頭,一方面是廠商源頭,另一方面是消費者源頭。

Q:好的,那下一個問題是塑膠的使用大多是為了防撞、保存新鮮以及衛生,若是沒有了塑膠包裝的話,有什麼替代方式可以做到使用塑膠包裝的目的呢?

A:材質,有非常多的生質塑膠,他們是利用生物材質,甘蔗、黃豆、玉米這些東西,可是這些生物塑膠有個問題,他有沒有真正單一材質?

O: 您指的單一材質是?

A:例如說用甘蔗提煉的生物塑膠,你就100%提煉,如果不是單一材質後,他是沒有辦法回到回收系統的,但是這些塑膠的後端處理也是一個很大的問題嘛,有多少的場地、成本可以處理?所以目前塑膠的成本比較大的是土地成本跟來源。

Q:若替代方式是改變買賣型態呢?我的想法是像裸賣的方式。

A:裸賣是可以啊,我們現在比較多市場都是裸賣,我們也找很多小農來合作,很多 小農還是會覺得可能裸賣就容易就損壞,消費者習慣挑選碰撞,他就會損傷,他的他 的外觀他就可能會降低購買率,裸賣是環保的,但裸賣對蔬菜來說是相對有影響性 的,所以裸賣當然很好,只是我們有沒有辦法教育消費者,他不要去損傷蔬菜。

Q:所以教育消費者還算是一種,很大的問題。

A:對但是裸賣,像我們去市場的話,一定有裸賣,可是以現在人的生存方式,現在 來說已經沒有傳統市場了,雖然這是很好很好的方式,但裸賣本身確實會損壞食材, 還有增加販賣上的供需,會增加很多行政成本。

O:如果今天超市需要做到實際包裝的話,那有什麼具體的作法呢?

A:其實我們跟很多大眾接觸,當跟大眾接觸了之後,會知道狀況其實一般大眾跟我們環團的,對他們來說要買裸裝的食品,對大多數人來說是麻煩的,對現階段來說,不用過度期望超市要減塑,而是政府有推出政府會提出里程碑,一開始用鼓勵的方式,鼓勵做減塑這件事情,再來可以做很多推廣活動,辦很多有趣的鼓勵行活動,這件事情讓人感覺的刺激、挑戰型的,可是基於食品安全包裝,所以真的要減塑沒有辦法全減啦,因為跟食品安全有關係,如果今天因為裸賣影響到民眾健康的話,真的很難追究責任,但是至於減量的問題,還是可以基本包裝就好,但民眾要知道基本包裝

有一個標準,或是或是自備袋子。我在公司裡最常講的就是綠色生活,我發現其實大家都不太了解環保概念,如果今天必須購買杯子的話,你覺得哪個材質比較好?

Q:紙杯嗎?

A:大家都會覺得紙杯比較好,但是回到源頭單一材質呢。

O: 所以是全塑膠的比較好囉?

A:對呀,單一材質的話就是製造原料跟製成什麼的都是單一原料跟機器都是最基本、最單純的。像紙類就會有塑膠淋膜加紙加印刷,所以他會有那麼多東西就需要有三個工廠來做他的過程,會增加碳成本,但單一材質的話就是單一成本製作成的塑膠原料,這個塑膠還可以拿回去回收,做成次級塑膠。今天環保局規定的,但清潔隊因為回收場不收,所以不收,這都是因為以利益為考量,所以上有政策下有對策囉,所以很多都會專漏洞,中間有太多利益會影響到。

## **Section 2 (Developing plan of marine affairs)**

Q:那我們進入下一個面向,是關於海洋減塑,政府提到了一個議題是說海洋政策發展規劃,依據您的角度,您對這項政策有什麼看法?

A:這個綱領對於海洋保育的部分提到的很少,我看了一些細節,他針對了海洋保護但沒有針對環境保護,第一個是他沒有精確地提到怎麼提到如何保育海洋,保育海洋部要酸化?保護海洋環境?還是保護海洋的狀況?他並沒有精確地提出,他其實沒有提到要保育什麼,大多我們想到的保育就是生物,但要對於海洋廢棄物等等的話就要提到漁船管理,像歐洲規範的話,出海之前,要先申報有哪些東西,回來就要回來至少三成,台灣有自治條例,但是有沒有確實做到真的很難,因為確實真的有太多漏洞了,很多海洋魚類的生計去做出政策,我還是希望哪天漁民可以自發性地去做這些事,但當然初期,可以用鼓勵的方式。

Q:那我們進入下一個問題,那就此項政策而言,您認為這是對我國海域保護是有效的政策嗎?

A:海洋保育資源來講應該可以,但就於環境,還沒看到具體的說明,但在資源的面相這個是有的。

Q:根據這項政策提到的,您認為對於在減少塑膠的使用上,有什麼建議嗎?

A:像你提到的漁網的部分的話,現在政府有提到實名制,我是很贊同實名制,也是會影響到生計的問題,像帶出去的漁網等等,會有漏洞啦,還有生活用品都是塑膠包裝的,如果改變材質的話又會有重量問題,這也是滿多面向的難題。但現在政府強調的是,海鮮文化不是海洋文化,可能是因為台灣還是海島國家,是靠海吃飯,所以需要先強調海鮮文化的部分,但是可能重點可以再多一點文化。

Q:就我所知,目前政府有規定到說希望每一寸土地都是乾淨的,所以海岸被分為好 幾個區塊,但我覺得是不是應該讓民眾也就是我們源頭來去了解目前垃圾製造的後 果,影響到的部份是很嚴重的,而不是讓被分配的機構去處理。

A:目前其實台灣的海岸都有轄管單位了,但真正會被清理的只有觀光區,非觀光區的垃圾還是一樣,除非需要從海那一側來清,可是你剛剛提到的讓民眾來清,也是我們現在在做的事情,我現在在帶他們做綠色消費的課,現在在上這些課的人都是有被規範的,那些沒被規範的我怎麼能讓一般大眾能去了解,我覺得你這個提問是很好方向,但我怎麼讓一般大眾有什麼動機可以去主動上這個課,就是一個很大的問題。

#### **Section 3 (White paper of marine education)**

Q:Ok,了解,我們進入下一個面向,是教育上面的減塑,我在這裡提到了海洋教育白皮書,依據您的角度,您對這項政策有什麼想法嗎?

A:其實跟剛剛講的那個,我們的海洋教育目前比較著重在於他可以結合到12年國教的狀況,獨立的議題關於海洋教育的部分,然後裡面很多內容都談到安全,就是你去海邊注意安全、然後海岸的類型組成比較知識性的、海鮮怎麼吃,很少很少談到海洋行動,只有課綱裡面只有國中以上就要提到我們要有環境行動,所以有海洋教育很好,但是目前他著重在於減塑比較少,他比較著重在於環境,海洋環境、安全,比較少是在於環境行動。

Q:好的,了解,下一個問題是,像剛剛提到的,他有將海洋的重要性放在教育系統裡面,且將這個概念灌輸進教育系統裡,您認為還有哪些議題因為塑膠污染而被影響的議題也須被加入在裡面?

A:以現階段教育來講,大家都會以為是跟海洋有關係,但是真的只有海洋廢棄物是該要減塑的嗎?

Q: 當然不是啊。

A: 所以以我們而言,我們在做減塑是從生活,不只是海洋廢棄物,在生活中的選擇就是綠色消費啦,綠色消費的第一個條件就是不買,就是重複使用,還有選擇標章,所以是可以從生活切入。

Q:剛剛您提到的是說,其實我們可以從日常生活中就做到這些行為,那您認為可以 怎麼做呢?一些具體的行動。

A:如果是我們會透過教育的方法,可以做到闖關活動,會嘗試一些挑戰,類似說讓 他們自備餐具去採買物品,要先讓他們有體驗才會有感受嘛,有感受才會有態度嘛, 所以我們偏向讓他們直接去體驗,有體驗之後就會反思,之前我們帶了高中生,最後 他們成為倡議員,他們自己去設計了遊戲,他們提倡自備餐具,等於說我們去訓練種 子,讓他們自己去倡議,去影響其他人,所以還是從行動,讓他們去體驗、感受。 Q:我題外話想詢問一下,當初是如何與這些學校合作呢?

A:那時候我在國家公園,每個學校都被規範要發展特色課程,剛好就找上我們,所以我們讓他們去做議題探討,我們帶他們去探討很多,後來他們要做倡議是他們自己去選擇的,很多學生後來發現,上完課之後才知道原來他們的選擇是很大的。很多人都沒他不是不做,他是不知道,但是當上過課說他覺得原來我今天帶一個杯子我可以減少很多垃圾,那是他沒有意識到,那不代表他不願意,在我們的教育裡面沒有對不對的問題,我不會告訴他說你用塑膠不對,必要的時候就是得用塑膠,像現在疫情,不得不用一次性的東西,一個是確保自己的安全,另外一個方法就是因為我們沒辦法避免,然後當你無法避免源頭的話,現在是必要時刻,就得著用必要手段,所以如果以環教立場是會讓他知道的故事,讓你知道你有什麼選擇,要不要選擇你自己決定。

## Section 4 (Decreasing the amount of the package on online shopping)

Q:那我們進入下一個面向,是網路購物的減塑,在這裡提到了網路包裝減量指引政策,依據您的角度,對於這項政策有什麼想法?

A:我是支持的啊,但就對於這個政策好像還沒有太普遍,像是其中有提到的是循環 包材,那網購的話就是寄給大眾,所以是使用一次性包裝,看這個問題能不能減少塑 膠使用,或是包材、包裝重複使用,也減少化學印刷,然後用更多一致的尺寸去合適 的使用。

Q:好的,那因為您支持這項政策,但您認為為什麼現在政府對於這項政策只能做到 指引推廣,缺乏法律上的效力呢?

A:應該是有市場的反彈吧,因為我們是自由國家,也有自由買賣的權利,政府能做的應該是可以做到稅制吧,他可以做的是,像是製作包材的工廠,去繳交物流權利金,從社會責任去看這件事,讓那些網購的業者因為稅收的影響,去精簡我的成本,給他們另一個成本壓力。

Q:對於我的想法的話,我會覺得會不會是因為這個政策剛開始提出,所以還在一個前期的狀態,所以還在一個鼓勵的狀態?

A:對啊,台灣的政策很有趣啊,不管怎麼樣一定會有反對方,儘管這個政策是好的,但一定有反對方出聲,那民眾會有思考力的啦,但還是會有被煽動的,希望大家還是以制訂這個政策的方向去思考。

O:那如果要確實執行網購包裝的減塑,您認為有哪些具體的措施可以執行呢?

A:剛剛好像有不小心提到了一些,覺得就是稅制跟權利金,另外一個是使用重複包 材的包裝,所以有時候是可以選擇的,可以選擇去減少使用這些包裝,去向製造商提 出要求。

Q:好的,謝謝您今日與我進行訪談,今天的訪談就到這邊一段落。

Date: 2020/07/15

Time: 14:00~15:00

Interviewee: interviewee F

Responsibility: marine conservation

## (Job description)

Q:首先想先詢問您在這個團體的職位是什麼,工作內容包括哪些?

A:我主要因為我其實過去6年是單是擔任執行長,工作除了組織的一個整體運作、 方向的判斷還有團隊溝通之外其實我還有一個比較核心的議題,當然也包括對外發言 和跟公部門開會,就是有一些政策的建議。

#### Section 1 (Limiting the use of the plastic tray and box)

Q:好的,我瞭解了,那接下來是超市減塑的部分,依據您的角度,您對這項政策的看法是什麼?

A:我在看這個政策的時候會針對他們後續的成效是怎麼樣,明顯的績效指標就是所有的車牌可以去了解說到底他頒布限塑政策之後,他真的減少多少塑膠盤使用,針對這個部分在推進但是很可惜是我覺得環保署的政策很多都是比較單向,他就沒有一個進程,或是想要往下追蹤這樣子,好像在政策上面彼此就會看到說啊可能這一年在推的是,最開始他其實在生產的這一個部分啊比方說他是去管制塑膠的比例是多少,後面就是開始推塑膠袋的限用,然後再來就是塑膠吸管,最後是限制塑膠類的托盤,這是超級市場和量販店他基本上就會是很多一次性的包裝產生的地方,所以是一個很好的方向,但是整體的政策感覺沒有一致性,整個的政策標準跟限制的轉移,就是他有沒有去對比政策發展前跟發展後的狀態。

Q: 所以您的意思是審查機制的狀態嗎?

A:應該說他們會有審查機制,但是績效如何就不好說,對這個東西其實我們看不到 限塑的成果、效果的樣子,所以很難去判斷說這樣的政策是不是對的方向,對於塑膠 的產生跟塑膠的處理有沒有幫助,那這個部分可能會比較可惜。

塑膠的目的是為了防撞、保存新鮮和衛生,如果今天沒有了塑膠包裝,您認為有什麼替代方式可以達到塑膠包裝的目的呢?

我還是會覺得說,這個部分是不是完全沒有辦法克服尤其是像國外有一些超市或是大型連鎖店,他們其實也有辦法去做替代的方案,我不會認為說完全就是只能依賴塑膠 包裝,具體的方式...。

Q:我這邊提供一些我的想法,我認為說這個替代的方式,可以是裸賣的方式,您認 為如果今天使用裸賣的方式,超市可以用什麼行為去做到呢? A:消費者來看的話你在不同超市請他們的包裝方式會不一樣,像全聯他為什麼洋蔥可以不用一個一個裝,可是這些產品他不見得需要用這樣的包裝方式對我來講,我覺得這三個理由都是需要使用塑膠袋的方式,我覺得還是核心的概念耶,如果今天超市願意做無塑買賣的話,可以改變擺放的方式加上人員的配置,主要還是如果超市本身自己有意願的話,可以讓消費者去選擇要不要用塑膠包裝。我覺得替代方式可能消費者這邊也是需要去做教育宣傳的,不然真的覺得這個部分很難會同時做到。

Q:好的,那下一個問題是如果今天超市需要做到減塑的行動,那有什麼具體的建議嗎?

A:我認為超市可以減少提供塑膠袋,花蓮農會是有啦,就是一個回收機制,把其他人不要用的塑膠袋放在超市讓民眾再次使用回收的塑膠袋,加上現在都是會員制,如果有提供回收的塑膠袋的話,就給這些會員一些優惠,這些都是一個鼓勵的方式,另外也就是說提供另一個選擇給消費者,自然有環保意識的人會使用,讓消費者可以自己選擇,也可以鼓勵消費者去做這件事,但就對於超市來說就是可以提供一些優惠給消費者。其實整個狀況回到源頭,就是有沒有去教育消費者,讓消費者有這個概念其實會很好的切入環保買賣。

## **Section 2 (Developing plan of marine affairs)**

Q:下一個面向的話是海洋減塑的方面,在這裡提到了一個海洋政策綱領,依據您的 角度,您對此項政策有什麼看法嗎?

A:依據當時的背景,政府訂定政策應該多少都是以軍事為主,那對上面有提到環境保育,可能是順帶提到的,但是一般來說不太會太直接的執行或是提到更細節的關係。

O:對此項政策而言,您認為這是一個對我國海域保護是有效的政策嗎。為什麼?

A:當下應該是,台灣在國防安全部分就比較敏感,所以..可能比較有效吧,這個我不知道該怎麼回答。

Q:那我在這裡提供一些其他環團給的建議,有環團認為這是一個宏觀但偏短期的政 策而且就對於海洋資源是有效的,但對於環境上的保護有太多作為。

A:我是不覺得海巡署對海洋保護有什麼保護啦。

Q:OK,好啊,我們直接進下一題好了,其中比較相關在海洋保護是防止他國漁船破壞我國海域的部分,那對減少塑膠使用上,您有什麼想法嗎?

A:可能漁業署需要執行一些法源的部分,去做宣導讓漁民出海的時候不要亂丟垃圾,但是其實真的沒什麼用,宣導了以後,漁民把垃圾帶回來之後他要丟在哪裡都會是一個大問題所以漁民不願意把垃圾帶回漁港,這幾年其實環保署他們就有一個環保 艦隊這樣子的一個政策,他其實是有點像是希望是可以讓漁船或是一般的船,就是他

們願意守護海洋的的這個乾淨海洋啊這樣子。其實這也是有點想你前面提到的配套措施,今天政府提倡不要把垃圾丟到海洋裡,但是當漁民把垃圾帶回漁港時,有沒有回收機制,或是處理垃圾的地方可以讓他們去落實垃圾回收這件事情,這個就是政府缺乏的。

#### **Section 3 (White paper of marine education)**

Q:那我們接下來進下一個面向,這個面向是教育上的減塑,這裡提到的政策是海洋教育白皮書,依據您的角度,您對這項政策有什麼看法嗎?

A:其實在海洋教育方面,一開始我覺得他還是一個非常概念式的方向,我們的海洋 教育其實是並沒有太明顯的出現在正規的教育的理念所以其實說我覺得他才是一個比 較空泛的概念沒有辦法落實到課綱裡面這個形式的一個問題第二個問題就當然這幾年 開始有與時俱進,這個教育的概念其實很早就開始在談,我在補充一點好了就是我覺 得在在我們的海洋教育政策就是知識的傳遞,可是事實上,他並不會去強調海洋面對 的現在面對什麼樣的危機,然後或者是說當我們談海洋資源的時候,在整個教育的思 維裡面,我們還是很基本的,另外一個我覺得比較明顯就是我們還是看到他是以人類 為中心的海洋教育裡面談到人怎麼利用海洋,海洋資源指的是要如何的使用它,比如 說漁業資源我們有什麼海洋發電,但是台灣談海洋不是以海為中心去思考,還是以人 為核心,如何使用海洋這一塊去談。連結起來,對於學生來講,那是很大的斷層,他 知道說海洋怎麼了,可是跟他無關,感覺不到跟自己的關聯性是什麼,確實比較難的 問題就是去產生連結的這一塊,你沒有連結產生的時候當然對於學生講,他就只是純 粹覺得無關緊要的知識,因為考試不會考,反而在環境的這一塊,我覺得很難引導孩 子去了解說你可以透過行動去創造、改變,純粹是透過書本然後你沒有製造讓孩子沒 有在你的教育方針教育的方案裡面去創造一個真正連結起來的經驗的話,那不會有改 變。

Q:對教育上來說,其實學生會想吸收的大多都是考試會考的東西,但是反思的部分還要再加強努力,所以才會想要拿出來討論一下,看看有什麼辦法是政府可以改進的,那我們進下面的問題,就這項政策而言,就像剛剛有提到的政府將了海洋的重要性加入進教育系統,那您認為還有哪些因為塑膠污染的議題也需要被加入?然後該如何加入呢?。

A:除了課程以外,我想到的是呈現一個因果關係啦,這個部分是很少去被提及的, 回到剛剛說的以人為核心跟海為核心是不一樣的,要如何去落實就是體驗,我比較期 待的是實際做道可以進入到教學的觀點,要怎麼讓學生和海洋有一些連結的設計,就 是一個問題,或者是說帶他們出海,或是去學校旁邊觀察一條河流,所以學校可以帶 學生去做親自觀察,慢慢去讓學生去產生連結,而不是只是在課本裡的水系等等的。 做一些透過親海的體驗,去讓學生接觸到海洋教育,因為現在的教育概念部會教我們 處在這樣的環境裡面我們怎麼跟自然共存

Q:剛剛回答到的好像比較偏第三題的部分,一些具體的行為如果做到在教育上的減塑,剛剛提到的是有一些親身的體驗作法,讓學生跟自然狀態產生連結。

A:然後我也會建議學校有一些作為,像是我們花蓮的學校老師我都會覺得他們很用心,就是他們會試圖打破課綱很有限的東西,你就會發展出,他是一個很綜合型領域,它並不是只有在國文科下面是在自然科下面他其實都有相關的,所以他們可能會發展出一種比較中和行的課程包含像他可能會提到環境啊還有環境海洋的汙染,然後也會提到海洋文化裡面或是說不同的民族怎麼利用太陽象徵,比較屬於綜合型的課程設計那我覺得這是學校可以去考慮的,他就不會放在科別下面他會是一個透過不同的角度比較活化的方式讓學生去理解,有些老師不會有這些概念跟知識,就會透過跟地方或找NGO團體競到學校去那有一些合作的課,花蓮的話就NGO合作就是會他們做一些環境的觀察那除了知識的東西的傳達情意,所謂的情意就是你讓他在自然裡面產生連結,所以有了關懷你才會進一步去思考自己的行動,這些都是我們覺得比較實際上的做法另外,其實就是用很靈活的方式去與學生做教學方案,這是比較需要被帶到體制內的。

Q:OK,那我們回到第二題,其他環團有提到他們覺得除了海洋的部分,還有其他議題也需要被加入到教育的系統裡,像是焚化爐的議題,如果今天垃圾被燒掉以後,會產生哪些問題,這些環團認為這是一個也蠻重要的議題可以教導學生,讓他們了解。 A:其實我剛提到的都是海洋,但大多都是塑膠垃圾的問題,所以當然剛你提到那個焚化爐垃圾怎麼處理,他會去談到陸地上生活跟海洋,我們也帶了學生做了追蹤垃圾桶之後怎麼處理,幫我們就去回收站去看他們怎麼去分類然後也會倒垃圾掩埋場去看他們怎麼,先去看垃圾集中站轉運站怎麼被轉運到這個地方再來看垃圾掩埋場,我提到的那個連結的部分,讓學生從生活連結到海洋。

#### Section 4 (Decreasing the amount of the package on online shopping)

Q:了解,那我們進入下一個面向,是網際網路上的減塑,在這裡提到了網路包裝減量指引政策,依據您的角度,您對這項政策有什麼看法呢?

A:現在真的是一個購物型態的轉變,那包裝的問題真的需要被關注,他可以怎麼樣去做減量這部分他有沒有辦法有更好的配套措施,他有沒有辦法有更好的吸引力,無論是製造商或是消費者都是需要改變,當然這個政策現在都是一個試水溫的狀態,當然我們都很期待有確實執行,比方說他們有提到循環箱的商機,如果有業者願意做這件事,真的是很好的狀態,如果政府願意協調資源或是優惠的這個角色,可以更推動,這也可以發展成一個新創的產業,政府可以一起推動。

Q:好的,那下一個問題是為什麼政府現在只能做到指引推廣,而缺乏法律上的效率?

A:我覺得任何政策推動都需要時間,當然政府會比較保守,是因為她一項政策推動 前,會涉及到很多層面,也需要去溝通,那如果沒辦法跟業者做到全面的溝通的話, 政策也很難推動,我覺得網購這個問題,還是有一些困難,就是特別去考慮的因為其 實網購的來源,不只是國內的的店家,就有一些是境外的的廠商那你要怎麼樣去管 制,這是階段性的指引推廣,都是現階段的狀態,但是我會被他期待的會是以上是我 們針對限塑政策我們會希望有個啟程或者是有個目標那這件事情,在政策上面我們當 你會其他說最重要就是法律上規定的效力,在那之前你可能要克服什麼樣的一個問題 不是在階段性的嘗試是什麼。就是我剛剛講我覺得協調資源是很重要的就是說,如果 有一些因為有一些民間的產業她已經開始在做環保舉動時,政府提供一些優惠給那些 產業,要先有示範性的成功案例才能繼續推動下去。再加上,他們一個政策推動以後 會做支持度調查,可能結果是 85%支持,但是政府會看到的是那 15%為什麼不支持, 而去改變政策走向或是修訂,這是我說的需要關注到不同面向。要去做推動另外一個 就是產業界其實本身的技術是成熟的,就是我覺得公部門這邊需要更進步去掌握的 事,生產者這邊的技術這件事像吸管的議題,他們當時環保署的政策裡面他是允許吸 管塑膠含量有多少,但是當時環團是反彈的,因為我們知道中華紙漿廠他是有辦法做 到純紙漿的吸管,當技術已經達到程度了,就可以跟上技術成熟程度去訂定政策。 O:好的,那您認為如果今天要確實執行到網購包裝的減塑的話,您認為該怎麼做 呢?

A:像 package plus 這種產業,就是可以給他們補貼這個部分,包含像是在網購平台和消費者,政府其實具體的角色就會是推廣,然後在產業上面就做一個具體的協助,那當然剛有提到說可能政府可以協助協調支援哪方案,可以去協調歸還點,因為這個循環的方法就是他可能寄到這是你使用這個循環的東西,可是你需要一個歸還點,但是我歸還點沒有辦法普及的話,基本上他就很難被推動了,所以我覺得政府可以去協調就是這樣這個點是否值得推廣,或是可以提供一些使用循環包裝可以減稅的誘因,這也是一個很好的做法。

Date: 2020/07/20

Time: 16:00~17:00

Interviewee: interviewee G

Responsibility: marine conservation

#### (Job description)

Q:接下來我們直接進訪談問題,第一點的部分是基本資料的部分,那想請詢問您一下,請問您在這個團體的職務是什麼?工作內容是哪些呢?

A:我2014年8月加入協會,負責的部分是信託的部分,是關於環境信託的計畫,環境信託是以公益性質的方式保護環境,希望所有人都可以加入其中,包含的部分有森林跟海洋,海洋就需要去了解政策跟議題,前幾年是透過淨灘來收集海廢的數據,長期收集下來會更認識台灣海洋廢棄物的樣貌,這樣才會知道我們為什麼會有那麼多海廢在沙灘上,那他們來源會從哪來,配合著政策該如何去改變,所以大致來說從2014年開始一直在做這個,那政府在2017年成立海廢治理平台,那我從那時候就參加這個會議一直到現在,包含國際的交流,日本的沖繩2014年有與協會做交流跟合作,所以會有國際上的接觸。

### Section 1 (Limiting the use of the plastic tray and box)

Q:好的,謝謝我了解,那我們接下來進入第一個面向,這是超市減塑,這裡提到的 是限制塑膠包裝的政策,依據您的角度,您對這項政策有什麼想法嗎?

A:我會覺得比較可惜,他從 96 年開始到現在指定的公私場所都還是在超市跟量販店,但是隨著消費型態改變,已經不是只有這兩個地方有包裝的生鮮、食品或是蛋之類的,我會覺得針對場所去做限制真的會比較可惜一點,不太確定可行性,但我覺得如果能夠從製造端改變,就是直接去限制他包裝的方式、跟用量的話,會限制場所作法更有效,那此外的想法的話,看守台灣會希望禁用 PVC 塑膠了。

Q:是,那剛剛您提到希望從製造端來改變,一開始我也是這樣認為,但我經過訪談後,有收取到一些消息是說,其實通路商希望怎麼做,製造商都是最好配合的,所以我認為可能消費者跟通路商的做法需要改變。

A:對,的確,剛剛說到的這個點是說,如果今天這項政策真的要限制的話,可能從 製造商去限制比較好一點,就是他出品的材質要慢慢汰換,或是塑膠材質在一個包裝 的含量逐年減少。

Q:好的,我了解您的意思,下一個問題是塑膠包裝使用的目的是在防撞、保持新鮮以及衛生的功用,那如果今天沒有了塑膠包裝,有什麼替代方式可以達到塑膠包裝的使用?

A:我覺得這很難,因為現在要方便等等的原因,就會需要包裝來保鮮,現在如果以 小眾來說可能還有機會,但我覺得難度蠻高的。

Q:那就我自己的想法來說的話,我這裡提供的想法是裸賣的方式,您覺得是可行的嗎?

A:我覺得可行的,但問題就是保鮮,進貨量可能低,或是要快消掉那個量,還有相關的法規啊,這就需要通路上跟消費者願意嘗試,我覺得衍生出來的很多問題,之前有好多案例都是很需要消費者的環境教育,這還是很重要的。

Q:關於這點我也跟其他環團討論過,他們有兩個想法,一個當然就是您提到的教育 消費者的部分,這點就是需要長時間的改變,第二個就是台灣氣候的問題,因為裸賣 這種方式主要是從歐美國家流傳過來的,所以氣候相對乾燥,其實真的要在台灣完全 使用到這種買賣型態的話,有相對的難度。

A: 這對目前現狀來說的話,真的有點無解啦,或是說有封閉的循環回收系統的話,應該是不錯的想法與做法,假設店頭那邊有提供回收再生的塑膠袋,會更好。

Q:好的,那我們進入下一題,如果超市需要實際做到減塑的動作的話,您認為有什麼具體的做法可以做呢?

A:主要是教育消費者,當然一般的環團可以去輔佐,但還是必須由超市教育消費者這個部分,擁有環保概念,企業的話可以減少使用包裝塑膠含量,這都是現階段可以去改善的,沒辦法完全做到,但是可以盡力去做。

Q:大多的環團的想法也是與您類似,其實今天為什麼通路商賣的東西需要很多塑膠 包裝是因為消費者的要求,若今天消費者沒有要求美觀與衛生的話,通路商也不會需 要這些多餘的包裝。

A: 是啊, 真的真的, 的確是這樣。

#### **Section 2 (Developing plan of marine affairs)**

Q:那下一個面向是海洋減塑,與您比較息息相關一點,在這裡提到了海洋綱領政策,依據您的角度,您對此項政策有什麼想法嗎?

A:從以前我們就一直說海洋國家,這幾年才有的是海洋綱領跟海岸法,先不論有沒有一百分,但是我覺得有,是一件好事,只是日後要去與公部門討論、溝通一起達到我們的願景,法規有法,但政策怎麼去執行又是另外一回事。

Q:那有一個環團有提到說,他認為大多在提升海鮮文化,不是提升海洋文化,您對這點怎麼看呢?

我覺得現在看起來比較偏向產業,會以經濟部分去思考,即便是環保署也是,我覺得 蠻可惜的,加上文化的部分,可能跟細項提出的政策有很大的落差,沒有確實的寫出 來真正該怎麼做。那有一些夥伴會覺得,以漁業開頭算是一個很好的起跑點。 Q:那就此項政策來說,對於此項政策而言,您認為這是對我國海域保護有關的政策嗎?為什麼?

A:我覺得至少有文字畫以後,不在是長官隨口說的方向而已,是有幫助的,但是怎麼執行就是很大的問題,不知道是不是真的能確實執行和落實,只能說政府與海巡署有沒有共同共識去落實這個政策。

O:那所以在一個政策推出以後,還是需要各個公部門去協力合作。

對啊,因為他有他的複雜性,沒辦法完全去歸責任到哪個國家或是機構需要去負責。 另外我覺得這個政策有提到海洋科Q的部分其實也很重要,要先了解他們的專業知識 或是背景資料,所以公部門的人員也需要被教育到完全了解整個生態。

Q:是沒錯,那我們進入下一個問題,內容是關於防止他國漁船破壞我國領海的部分,那對於減少塑膠的使用上,沒有太多的限制,您對這點有什麼想法?

A:海廢其實是陸地上來的,那陸地上的話就是回到環保署去訂定政策減少使用塑膠,所以海上減塑這件事情應該是要回到源頭是陸地上的減塑政策去制定,當然不是只有環保署需要多去思考如何制訂這一項政策,還有其他公部門也需要配合,雖然步伐是有點慢啦,但就慢慢努力。

Q:那如果是漁網的話要如何去改進的嗎?

A:有人會覺得說這是由事業生產出來的配件,就要回到事業管理的公部門去制定, 漁網這個問題,他今天是在漁船上是一個佔空間的東西,方便的話就會直接在海上處理,他們會鼓勵漁民不要海拋掉東西,所以會用一些優惠的方式去鼓勵做這件事,再 透過用教育的方式說這個海域也是他們賴以為生的工具,破壞他等於破壞生意,再去 作改變。

#### **Section 3 (White paper of marine education)**

Q:那我們進下一個面向,下一個面向是教育上面的減塑,那依據您的角度,您對這項政策有什麼想法?

A:算是一個好事,把它納入一個教育的重點,他們可以安排海洋課程與學生的關係 與連結,除了把海洋教育納入特色課程之外,還納入課綱是真的不錯,可以讓學生去 更貼切他們生活的生態狀況,那我比較擔心的是,他們被接受到的教育說海灘很多垃 圾,那他們會不會覺得說海洋很多垃圾是很正常的,是常見的事,少了很多體認之 後,就會覺得衝擊性很小,但的確特色課程是更活潑,實際去看到那個狀況,去體驗 狀態,回來再告訴他們怎麼會這樣的演變。Q:那剛剛說的特色課程,這個大多都會 發生在生活在那個環境的學校才會設計這個課程,那對於住在都市,會比較少接觸到 這些環境的學校,該如何做呢? A:我覺得是要讓學生、老師及家長都可以完全理解說,為什麼學校需要加入這些升學考試不會考的內容到教育課綱裡,如果是這樣的話,應該會更好推動這項政策,而且家長也不會擔心學生的危險,應該說正確認識海洋就不會危險,不認識他,才會更危險。

Q:OK,那我們進入下個問題,政府在這項政策中將「海的重要性」灌輸給國中小以 及高中的學生,並將海洋的概念加入進教育的系統裡,那除了海洋的議題以外,還有 沒有其他議題也需要被加入進教育的系統裡的?那該如何加入?

A:塑膠污染會變成海洋廢氣是事理所當然的,這個體現當然不只在海洋環境上,我們的氣候變遷和整個全球,人的生活型態都會被改變,這幾年Q究塑膠污染偏重於在微塑膠,影響到底多大,哪些狀況都需要被關注,或許可以視狀況去加入進教育的系統裡面。

Q:這裡有個環團提到的,我蠻認同他的說法,他認為如果可以讓學生去了解整個垃圾處理的過程的話,事後的影響到人體的狀態,他們可能會更能理解他因為這個小小的不分類等等的舉動,會影響到整個地球的變化,他們才能更願意去做減塑或是對環境友善的議題。

A:這還蠻好的,我自己會覺得說,我去學校演講的時候,會知道說塑膠的問題不是 只有從海洋廢棄物,而是從日常生活中去造成的垃圾,源頭就是我們一般的生活日 常,所以當我們使用、製造就有很大的機會會讓垃圾留到海洋裡,那這個就可以教育 學生說,我們可以怎麼做讓影響降到最小,或是源頭該怎麼減量,是最有效的。

Q:好的,那我們進入到下個問題,再讓學生了解減塑概念以後,有什麼具體的行動可以做到實際的減塑行動呢?

A:這塊我們做得比較少,我知道有範例是做減塑小卡,讓他們有個里程碑的概念, 像學校的話,老師會請客喝飲料,那就讓學生去想可以怎麼做減少杯子的使用,看能 不能要求店家說提供學生大的茶桶,讓學生自己裝,這就是一個教育的方式,上完 課,實踐完,就會內化成自己的想法並主動去做改變。

#### Section 4 (Decreasing the amount of the package on online shopping)

Q:再來我們進入最後一個面向,是網路購物的減塑,這裡提到的是網路包裝減量指引政策,依據您的角度,您對此項政策有什麼想法呢?

A: 我覺得算不錯,就是有一個指標,有訂出一個範圍,讓大家有方向可以怎麼做,還有提到回收的部分,像是單一材質,還有印刷面積小等等的,這算好事。

Q:有環團提到說運輸業的部分可能也是個很大的問題,若是可以教育運輸業者對於 有標示的包裹的輕放,會不會有幫助? A:緩衝材這件事情,當然可以保證人員的小心輕放,但是若是路途中的顛簸造成的 傷害,就很難保證,若是有封閉式的緩衝材的回收系統的話,這也可以請運輸業協 助,或許可以減少很大的使用量。

Q:好的,那我們進下一個問題,您認為為什麼這項政策只能做到指引推廣,而缺乏 法律上的效力呢?

A:如果以比較正向的做法的話,感覺是以鼓勵代替懲罰的方式去改變,我覺得這幾年政策都是這樣,加上業者也會比較能接受,同時,如果有龍頭企業願意開始做示範計畫的話,會更容易影響到其他業者一起響應這個議題,但若是政策已經提出,但沒有企業願意做這件事的話,那就可以證明,當時社會還沒到這個程度,所以可能是先用試水溫的方式去了解狀況。

Q:對啊,我也認同這個想法,這真的就是整個政策的前端部分而已。

另外也有可能是現實面,現在還沒有太多人力可以做事後的稽查這個動作,所以需要 先用鼓勵的方式看看政策的有效程度如何,法規才會正式上路。

Q:好的,了解,那最後一題是,若是要確實執行網購包裝的減塑,具體措施應該要 怎麼做呢?

A:有一個很大困難是,他們想要保護顧客的隱私,所以很多的包裝箱,是因為顧客 隱私不能洩漏,我不確是不是有明確的依據,但如果以第一個討論的案例,我一樣是 做盒子,但是內涵負面的影響的含量就減量,少一點,這是可以努力的方向,還有就 是產品包裝的設計,本身就可以保護一點緩衝的設計在上面,固定方式就不讓他碰 撞,能夠降低盒中盒或是包裝設計的改良。

Q:是,當然。那今天的訪談到這邊一個段落,還是在謝謝您今日撥空與我進行訪談,過程中受益良多,謝謝您。