

CATEGORY 4 RESOURCE DEVELOPMENT

Group 4-067

FOOD FOR FUTURE

Group Members:

Heng Ziyang [L] 4A309

Caleb Lim 4A303

Chai Yichen 4A304

ABSTRACT

Food shortages are an extremely apparent problem in today's society. However, people nowadays still refuse to acknowledge and take action about the threat to our literal rice bowls. Food for Future is a comprehensive guide as to the ways we, as individuals, can do to combat this problem, while educating them on the severity of these issues. We aim to make sure that as many people as possible are aware of this issue and are willing to take the first step and create change. Though this issue is not new, it is still ever more important to educate people about these pertinent food issues the world is currently facing that could very soon happen to us. In order to achieve this goal, we created simple and easy-to-understand guidebooks and infographics as a full resource package to educate people on the issues of food wastage and future-ready foods. These resources are fully available online and can be printed out or viewed online for further reference.

1 INTRODUCTION

1.1 Rationale

As stated in Goal 2 of the United Nations Sustainable Development Goals, humanity as a race should strive towards Zero Hunger. As Singaporeans are more and more wealthy, people do not understand the importance of our food resources. Food wastage in Singapore reached an all-time high at 809,800 tonnes of food in 2017. According to a news article published by Today Online, Electrolux conducted a survey amongst 1000 Singaporeans revealing that more than half of the respondents irresponsibly generate waste through poor portioning such as over shopping and stockpiling with the food items they buy and that 83% of Singaporeans would only buy fruit and vegetables that look fresh and good. A quarter of them will never eat "ugly foods" - foods that have slight deformities or darkened skin colour, yet still edible and fresh. Hence, it is painfully clear that most Singaporeans do not know very much about the food shortages mankind is facing and do not adopt food wastage reduction practices. In order to improve this situation, awareness levels of the people must be raised.

1.2 Objectives

We aim to tackle this issue of our food resources by educating people on the importance of food, by letting them understand the causes, issues, and solutions of the dire situation (e.g. food shortages) we are in, and hopefully incite change in attitudes and actions of people towards our food resources.

1.3 Target Audience

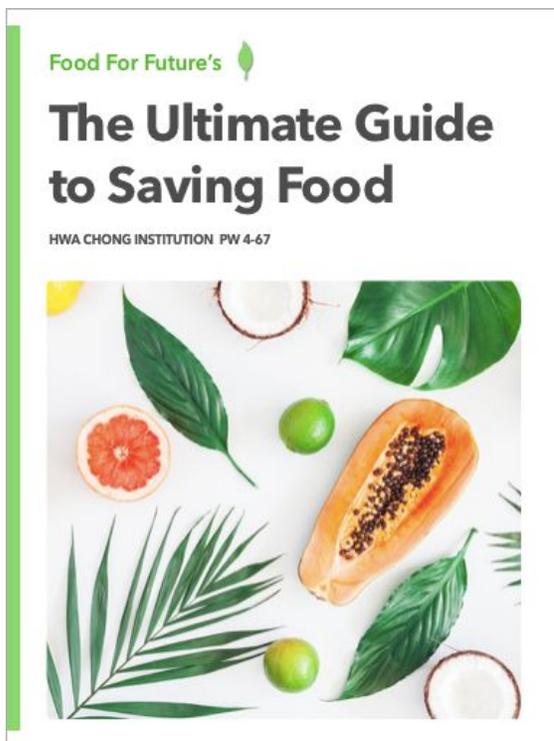
The target audience of Food for Future is secondary school students(aged 13-16) and their families.

1.4 Resources

The resources developed for our project includes a comprehensive resource package including two guidebooks with a selection of different guides, tutorials, articles, and interesting readings, and a website containing interesting facts and infographics, all about food wastage and future-ready foods.



Our Website's Cover Page



Food For Future: The Ultimate Guide to Saving Food



Food For Future: The Ultimate Guide to Future-Ready Foods

Food Waste in SG

What is it?
Food wastage is food that is discarded or lost uneaten. food loss occurs at the stages of producing, processing, retailing and consuming.

Food lost down supply chain

54%
OF WASTED FOOD COULD HAVE BEEN SAVED THROUGH PRUDENT MANAGEMENT

30%
global food supply is wasted equating to \$1 trillion worth of wasted food each year

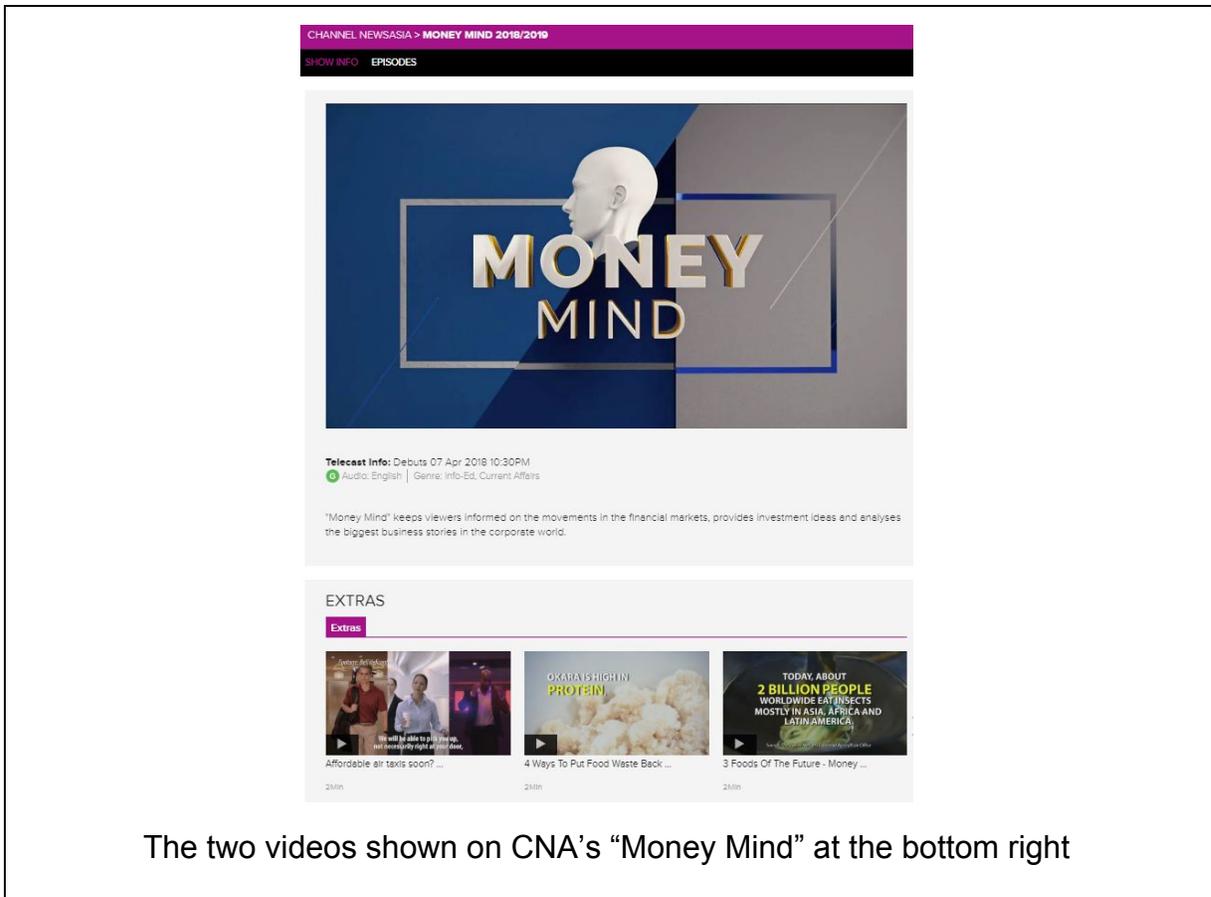
total produce (70%) | wasted (30%)

Small snippet of the infographics

Documentation of Ugly Food Initiative

2 REVIEW

To aid in our research, we have looked up several initiatives done before, with the most prominent being the Love Your Food Initiative by the National Environmental Agency. This initiative’s educational resources are very narrow in its approach to why we should save food and only provided monetary reasons as to why we should save food. Also, further research showed that future-ready foods are a rather foreign and not very well-understood topic in Singapore, as no public campaigns have been launched to educate people about future-ready foods. There are limited resources covering the topic of future ready foods in Singapore, such as the Channel News Asia’s “Money Mind” series where there are only two videos on future foods. While the resource briefly covers the topic on microbes and future food sources, we expanded and delved deeper into the subject. Our project aims to provide a multi-faceted approach to the topic of our food resources, letting people understand in-depth the cause, impacts, and possible solutions to the issue at hand.



The two videos shown on CNA's "Money Mind" at the bottom right

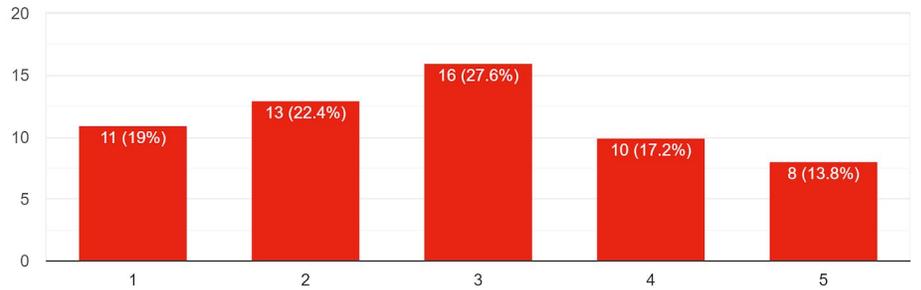
3 METHODOLOGY

3.1 Needs Analysis

From a needs analysis survey of 58 people, many respondents lack knowledge on the topic and some of them do in fact waste food. The survey has also shown that many are indeed unaware of the recent popularity of future-ready foods, hence there is a need to educate them through our resources.

How often do you waste food?

58 responses

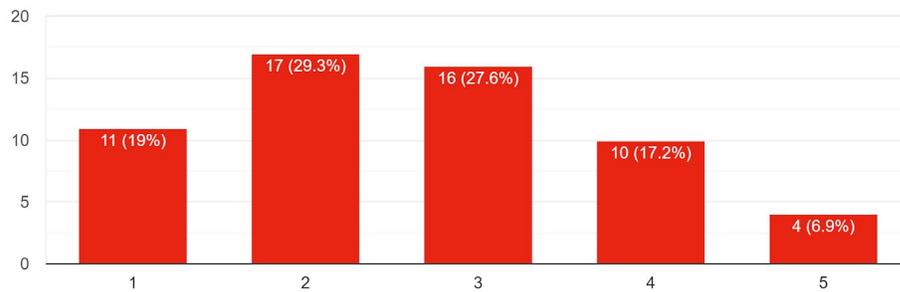


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*On a scale of 1-5

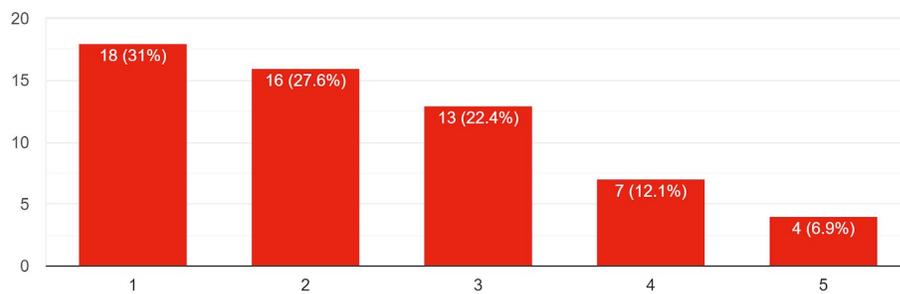
How much do you know about food wastage?

58 responses



How much do you know about future ready foods?

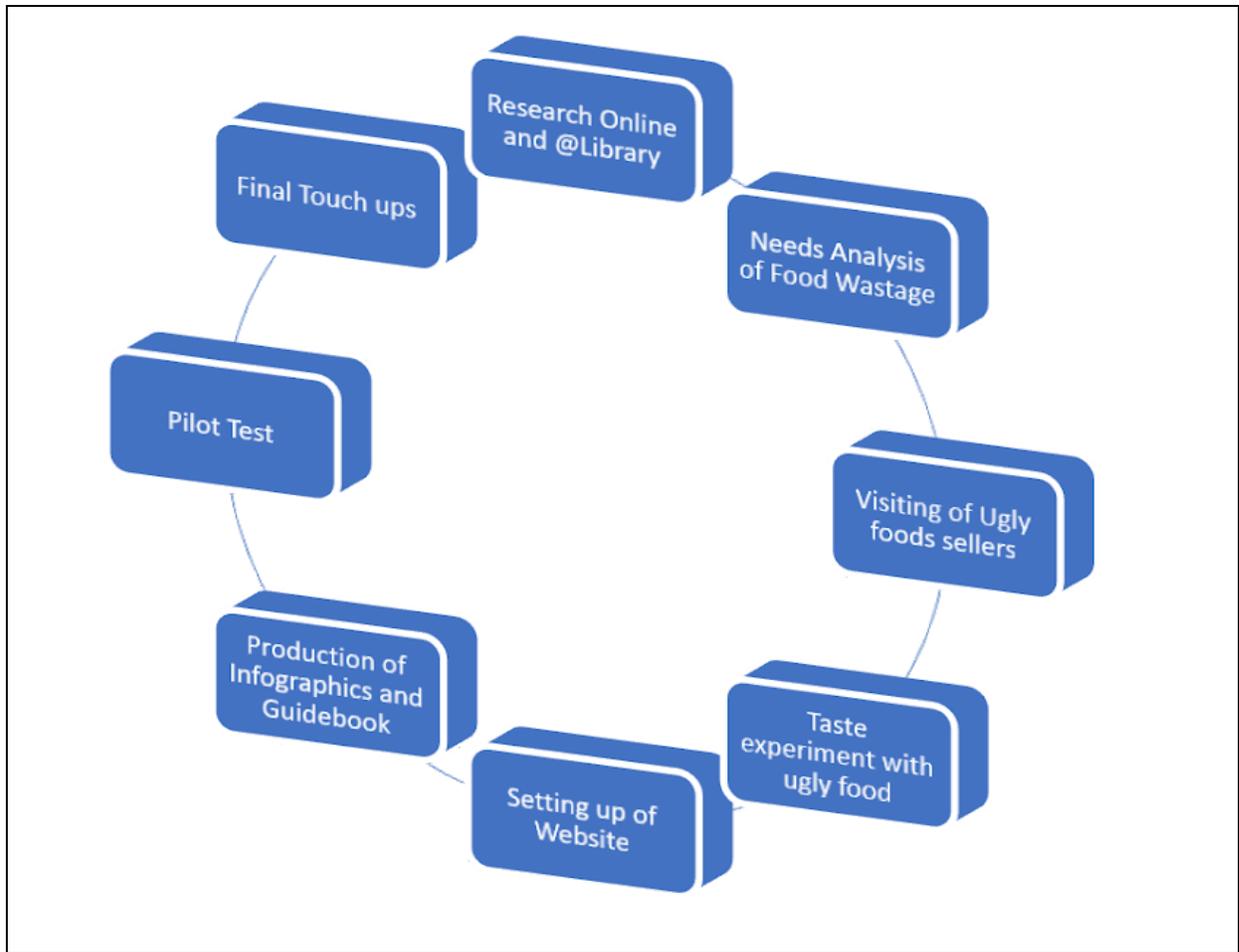
58 responses



The results of our questionnaire.

3.2 Construction Of Resource

We embarked on this project by researching online and going to the library to read up. We paid a visit to Uncle Foo's, a grocery store that sells ugly produce to customers, so as to understand more about the topic. We had conducted our own "Ugly Food HCI" initiative in school, a social experiment where we gave sliced fruits-- from normal-looking fruits and ugly looking fruits-- to participants without them knowing the origins of the foods and had asked them to compare the taste. The initiative had successfully changed people's negative perceptions on ugly foods and had encouraged them to buy ugly produce that would be otherwise be thrown away. The process of the initiative was documented on the website. Before July 2019, the website was already set up where all our resources are compiled, including infographics, downloadables, such as a print-out guidebook on how to manage food waste and information on future-ready foods.



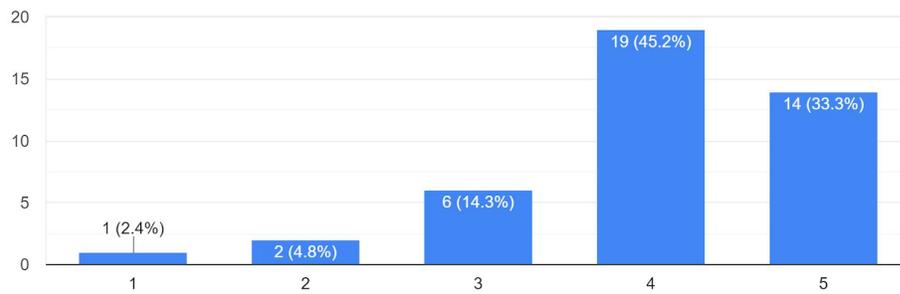
3.3 Pilot Test

The pilot test was conducted on a group of 42 students with our final products. They had provided their insights after viewing our website and our guidebook. From the pilot test, it was revealed the majority feel that the resource was useful and they understood the importance of the topic. The majority of respondents stated that the resource has changed their perception of ugly food for the better, motivating them to play a part in managing food waste. The pilot test reflected that the objectives have been met.



I have learnt to appreciate the value of food and produce.

42 responses

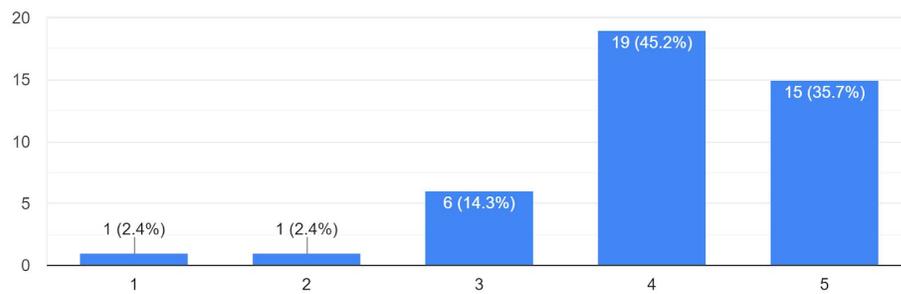


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*On a scale of 1-5

I am willing to play my part and reduce food wastage.

42 responses



4 OUTCOME & DISCUSSION

Positive reviews and comments were given for our pilot test, but further decisions were still made to increase the amount of information and resources provided as part of our resources. Advice was given to concentrate more on tackling the food wastage problem, and also future ready foods, instead of the sustainable agriculture portion (ie vertical/urban farming, genetically modified foods) since such information overlaps with the current Geography syllabus. Hence, the final products would now include the guidebook on future-ready foods”, more infographics and content on future based foods.

5 CONCLUSION

The journey of doing the project was not smooth sailing, but the learning experience was fulfilling. Large amounts of time and research were committed to developing and finalising the website. The guidebooks and infographics required creative input which was not an easy task. Other challenges that were faced along the way included convincing people to participate in the taste-testing since many have a prejudice against the ugly fruits that have slight deformities or ugly skin colour. It was also quite difficult to find information about future-ready foods, with it being a rather obscure and unknown concept. Hard work, perseverance and teamwork were necessary for the completion of the final products. Crucial skills such as time and people management skills were some of the many learning points from the process.

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