

## End of AY 2017 Report for SIP – Group 11

### Project Title

Food waste in Japan
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### Team

GSDM ID	Name	School	Department	Year (e.g. D1)	Leader/ member
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**Objective:** Explain what social/global issues that this project tried to address and why the issue is important.

According to the FAO, food waste is a part of food loss and refers to discarding or alternative (non-food) use of food that is safe and nutritious for human consumption along the entire food supply chain. Although millions of people around the world are struggling to find enough food to eat, surprisingly millions of tons of food is tossed out every year. Between 33-50% of all food produced globally is never eaten. Food waste is a huge problem mostly in developed countries and it has serious economic and environmental consequences. Food waste is a critical issue in Japan especially in light with the country's low food self-sufficiency rate and shortage of available landfill sites for waste disposal.

Why the issue is important  
800 million people go to bed hungry every night, therefore morally this is not right to waste food. The food waste from retailers and consumers in developed countries is more than enough to feed the world's 870 food insecure people. Food waste is very bad for the environment too. Many resources like land, water, labor, and energy are utilized to grow those uneaten foods. In addition, when these food wastes go to landfill, releasing so much greenhouse gases by creating methane. Therefore, due to moral, economic and environmental reasons, we have to consider this issue seriously.

**Method:** Explain through what kind of approaches you tried to achieve the objective.

\*About the list and details of the interview, add the appendix.

We have decided first to understand the food waste issue in Japan from the stakeholders like farmer, whole seller, retailer and consumer point of view and then to come up with possible recommendation to take appropriate steps in reducing food waste and loss in Japan. To do that we have developed a semi-structured qualitative questionnaire to interview relevant stakeholders of each level to understand factors affecting each stakeholder while producing, selling and buying food items through directly interviewing them. In our project, food means fresh and frozen fish, vegetables, fruits, and meat. So far data was collected from 5 consumers and 1 whole seller. Agencies such as the Japan Agriculture (JA) is planned to be approached as well. Interview will be also conducted with food waste specialists.

**Outcome:** Explain what kind of results you obtained from this project and discuss how it addressed your focal social/global issues.

It is expected that the results of this project would allow us to understand the reasons of why the wholesaler or retailers are not willing to buy/sell certain kind of agriculture/aquaculture products that is produced at firm level and how much food they waste each day (if there is any). What are the consumers preferences while buying mentioned food item would also be explained by the study results.

In January, 2018, we had conducted few interviews with 5 consumers around a supermarket in Nezu area. We have also interviewed 1 retailers of that supermarket. Results show that 4 out of 5 persons came to the supermarket to buy vegetables and 2 of them also bought fruits. While buying these food items, all of them replied that they consider the size of the products and 2 of them mentioned freshness as well. Only one person mentioned about price and one person thinks about the color. Interestingly, all of them said that they are able to finish everything what they buy and they do not through anything away.

Furthermore, all of them mentioned that they buy food from the supermarket to get the cheaper price. When the respondents were asked how to decide how much food to buy each time, most of them replied that they consider the quantity of buying based on their need or shortage amount they have. Only 1 person said she buys the quantity of food considering the price. The respondents affirmed to consume all their foods.

According to the retailer/supermarket staff, they buy fruits and vegetables directly from the market. They know what consumers are looking for especially the size, color, shape and price of goods. In case of perished and non-sold food item, the supermarket usually lowers the price by only removing the perished food from the package.

We started the project quite lately, therefore, did not have opportunity to interview all the relevant stakeholders. We plan to interview other stakeholders as planned if the project is extended for the second year.

**Budget:** List the budget this project implemented. \*About the details, add the appendix.

Purposes	Expense
Total	0

## Appendix 1. Questionnaire for interviews

Date: ...../...../.....

Area:

Respondent: farmer/super market/whole seller/retailer/consumer

### Farmer

1. What is the per year production (..... KG)
2. What is the per month production (..... kg)
3. How much do you sale per month ( quantity )
4. How much do you sale per year ( quantity )
5. Where do you sale agricultural products: a) whole seller b) Retailer c) Local market d) neighbor e) other
6. Where do you prefer to sell produces: a) whole seller b) Retailer c) Locally d) Other
7. Why selling to whole seller/retailer: a) profitable b) easy to sell bulk amount c) others
8. Why do you sell to local market: a) not good quality b) produced small quantity c) others
9. If farmer is selling produces within neighborhood, then ask why: a) not good quality b) produced small quantity c) easy to sell d) others...
10. If you do not sell all the harvest, why not: a) not good size b) not good shape c) Not good color d) buyers do not like it e) Others
11. Do you sometimes/always have any unsold harvest: a) vegetables b) fruits c) fish: a) yes b) no
12. What do you do with them: a) through away b) give it to someone c) sell locally at cheaper price
13. Do you have to through some of the produces due to not being good quality: a) yes b) no
14. Do you through some of the produces if there is over production: a) yes b) no
15. If yes, why a) to keep market price stable b) can't sell them c) others
16. Who are your main buyers: a) whole seller b) Retailer c) Local market d) neighbor e) other
17. What things they prefer to buy: a) good quality b) bad quality c) price d) others

### Whole seller/retailer

1. Where do you buy vegetables from: a) directly from farmer b) association
2. Where do you buy fruits from: a) directly from farmer b) association
3. Where do you buy rice from: a) directly from farmer b) association
4. What things you consider while buying vegetables: a) size b) color c) shape d) season e) price f) freshness
5. What things you consider while buying fruits: a) size b) color c) shape d) season e) price f) freshness
6. What things you consider while buying fish: a) size b) season c) perishability d) condition of fish
7. Why do you think about those conditions: a) customer care about b) we care about c) others
8. What percent of what you sell daily become wasted: a) vegetable..... b) fruits..... c) fish.....
9. What do you do with perished and non-sold food: a) sell in discounted price b) through away c) sell to restaurants d) others

Consumer:

1. What fresh food you bought today: a) vegetables b) fruits c) fish
2. What things you consider while buying these: a) size b) color c) shape d) season e) price f) freshness
3. Are you able to eat/finish all the food you buy: a) yes b) no c) not always
4. What do you do if you are not able to eat them: a) through away b) others
5. Do you prefer to buy food from: a) super market b) local food shop c) convenient shop d) others
6. Why you do so: a) good quality b) cheaper price d) near to my house e) others
7. How do they decide the amount of food that they buy at a supermarket
8. What do they feel when they find there is an excessive amount of food in their fridge because they have bought too much.
9. What would they do if there is an excessive amount of food? Just throw away or not?