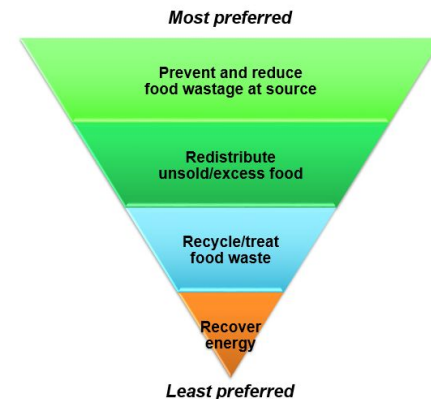# PROBLEM STATEMENT

- Climate change and Food wastes
    - 3.3 billion tons of greenhouse gases are generated
    - The blue water footprint (i.e. the consumption of surface and groundwater resources) of food wastage is about 250 km^3
    - Produced but uneaten food occupies almost 1.4 billion hectares of land; representing nearly 30% of the world's agricultural land area

- In Singapore
    - 763,100 tons of Total Food Waste Generated
    - Only 17% of Recycling Rate which is 126,200 tons of Food Waste

- In NTU
    - 32,236 persons including all student and staffs
    - 33 Food Courts with more than 250 food stores

Most preferred

Prevent and reduce
food wastage at source

Redistribute
unsold/excess food

Recycle/treat
food waste

Recover
energy

Least preferred

APPROACH

- Created a *single* webpage named "Share For Food " to tackle food wastage issue in NTU.
- Techniques Emphasized: **Closed for Modifications, Open for Extensibility**
- Target audiences: Stall owners & Voluntary Organisations.
- Stall Owners
    - Update their leftover cooked food after their businesses everyday, which includes...
        - Rice
        - Meat
        - Vegetable
        - Soup
        - Timing for collection of food
- Voluntary Organisations
    - Request for the exact amount of food (in terms of kilograms) from the stall owners

OUTLINE OF METHODS

- **Webpage**
  - Javascript+CSS+HTML
- **Database**
  - Firebase
- **How it works?**
  - Stall owner will first check and key in the amount of leftover food in each category and hit submit
  - These inputs will be stored in Firebase.
  - Then, the voluntary organisations will then choose the stall(s) they want to request food from and how much they want to request.
  - Firebase will then provide the data on the food availability to the voluntary organisation.
  - After requesting for the food, the amount of food left will be updated to Firebase.

IMPACT AND SCOPE

- With Share For Food, we plan to reduce food wastage to a larger extent by providing a platform for food sharing between charity organization and involved food stall owners
- As an online platform, we aimed to expand Share For Food dynamically from locations to locations, canteens to canteens and stalls to stalls.
- This way, charity organisations would find it to be way easier to contact stakeholders involved in a more efficient manner rather than visiting the areas physically.