



Plate, Platter, and More: Reimagining Food Waste and Sustainability

Agenda

1

INTRODUCTION

Understanding food waste and its environmental impact and implications

2

HEARING FROM YOU

An ice-breaker to uncover the average user perspective and experience with food and food waste

3

SOMEBODY'S FOOD

A deep-dive into the project and its activities – research, food audits, systems maps and food diaries

4

FUTURE PLANS

Exploring upcoming activities and collaborations on events

5

REFLECTIONS

Critical questioning at every stage to uncover various dimensions to concepts and mechanisms

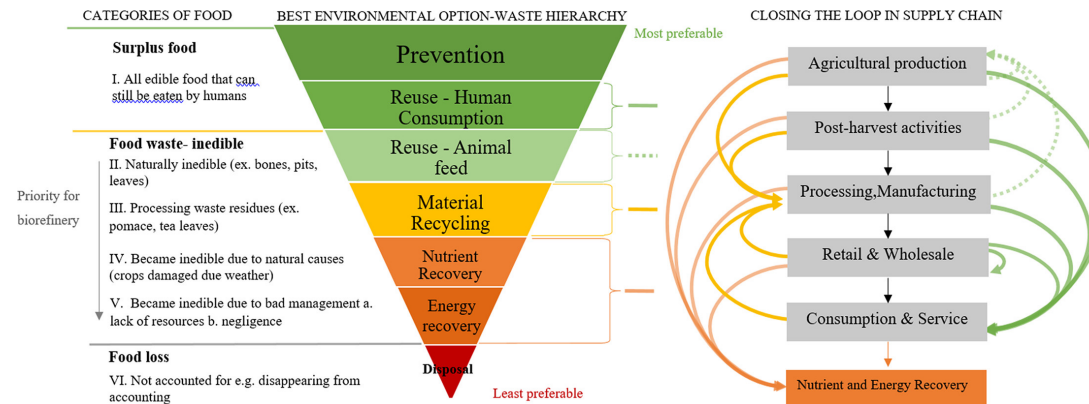
Food Waste, Food Loss, and Food Waste

Understanding the concept

Food waste means the loss of food due to deterioration or waste and occurs at all stages in the journey of food from farm to fork – production and manufacturing, storage and warehousing, transportation, packaging, distribution, retail, and consumer household.

This may be due to pests, mould, improper handling, cooking techniques, and more. It is divided into two kinds:

- **Food loss** refers to the loss that occurs due to problems in the stages before it reaches the consumer such as production, storage, processing, and distribution.
- **Food waste** is food that is edible and fit for consumption, but deliberately discarded at the last stages in the journey of food – retail and consumption. This could be due to the excess preparation, over-buying, large package sizes, concerns over food labelling, improper disposal of scraps, etc.



Annual estimated food waste for 2018

9.5bn kg

65kg

Methane produced by 1 dry ton of food waste

To decompose in a landfill, a single head of lettuce can take

25yrs

10%

Methane Emissions are due to landfills

Methane is more harmful than CO₂ by

25x





Reflect. Think. Share.

What do we know about waste?



**You have a hot cup of green tea.
The teabag should be disposed in _____**

- (a) Mixed Recycling**
- (b) General Waste**
- (c) Food Waste Recycling**



**A bag of frozen green peas have expired.
You should _____**

- (a) throw the bag and peas in General Waste**
- (b) throw the peas in General Waste
and the bag in Mixed Recycling**
- (c) throw the bag and peas in Food Waste**
- (d) throw the peas in Food Waste
and bag in Mixed Recycling**



What is the right way to dispose food waste?

In ____

- (a) Black garbage bag**
- (b) Transparent plastic bag**
- (c) Biodegradable plastic bag**
- (d) Food bin without any bag**



Recycling and Student Life

Understanding the Students' Perspective

A 2013 nationwide study of over 2,500 students by Suez Recycling and Recovery UK and National Union of Students revealed some alarming facts and figures:

- Only **54.8% were committed recyclers**, compared to the national figure of 75%
- **8.2%** of students **did not recycle** at all
- Nearly half respondents think they are doing enough in terms of recycling, and the other half need system support
- Off-campus students were less aware of the campus recycling system – only 46.9% were aware of campus recycling schemes



Nudge Theory

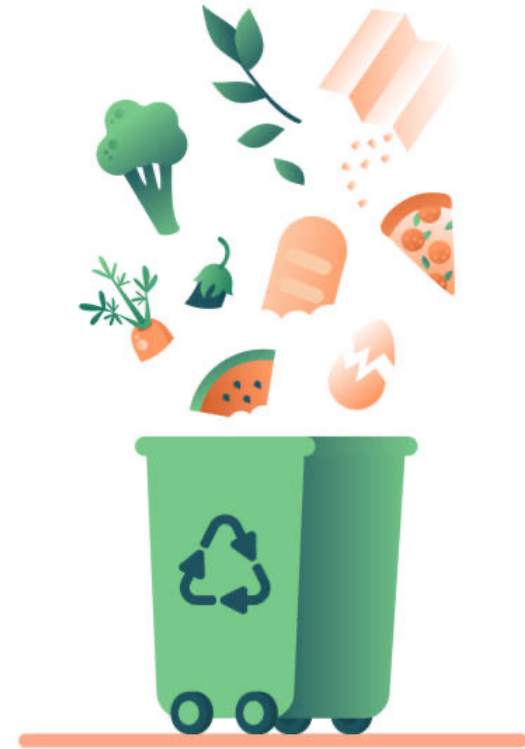
Application of Theory to Waste Management

Nudges are conscious efforts to influence people in ways that improve their lives.

Thaler and Sunstein (2008, p. 6) defined a nudge as “any aspect of the choice architecture that alters people’s behavior in a predictable way without forbidding any options or significantly changing their economic incentives.”

For an intervention to be a nudge, it must be easy and cheap. With regards to behaviours around food waste, Barker *et al.*’s research (2021) has shown successful results with three nudge techniques – **social norms**, **reminders**, and **disclosure** with social norms having most impact.

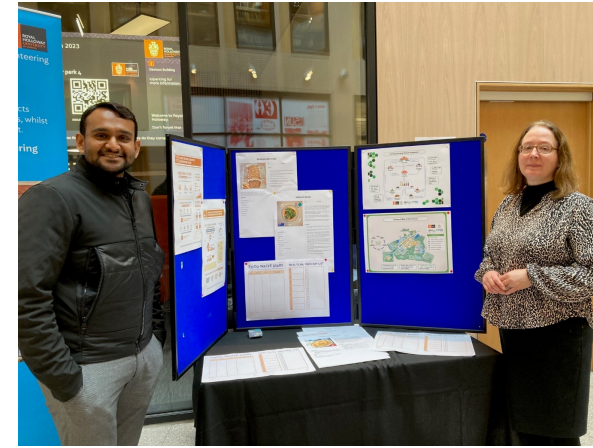
Thus, we aim to apply nudge theory to positively impact people’s attitudes and behaviours with regards to food waste.





Somebody's Food

An RHUL-based project



A social science approach to create a generic process model designed for students residing in university campuses, accommodation managers, recycling companies, and other key stakeholders to identify, discuss, and transform on-campus food.

Website: <https://royalholloway.ac.uk/research-and-teaching/departments-and-schools/business-and-management/somebodys-food-project-202223/>

Somebody's Food

The Journey So Far

As part of the project, we embark on the following:

- Research work with EBNet (Environmental Biotechnology Network)
- Understanding the recycling industry with LeapAD
- Work with stakeholders at RHUL to understand its recycling practices and challenges
- Food audits to uncover recycling habits of students and other stakeholders
- Proposing practical solutions to be implemented at the University to positively impact food waste
- Educating students and staff to minimise wastage and maximise effectiveness
- Encourage students to maintain food diaries to introspect their decisions regarding food and food waste



Our Inquiry Process

Food Waste Audits

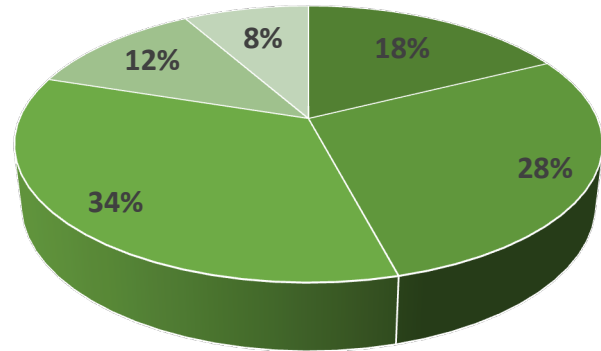


Food Audit - November 2022

Food Diaries

Exercise with students at RHUL to maintain daily food diaries, documenting purchase, consumption, preparation, ordering, and waste.

What did you do with the food?



- Purchasing - Ingredients
- Preparation - Cooking, Processing, Storing
- Consumption of Outside Food
- Recycling - Food Waste Recycling and Composting
- Waste - Discarded, Unused

* Study eliciting 53 responses

8% food wasted, discarded, or unused

“

Ordering out usually implies that there is very little food waste, as all the food is already cooked and there is nothing extra to discard. The only problem is consuming the whole quantity of food ordered. This is as sometimes you might order more than what you actually want and intend to eat.

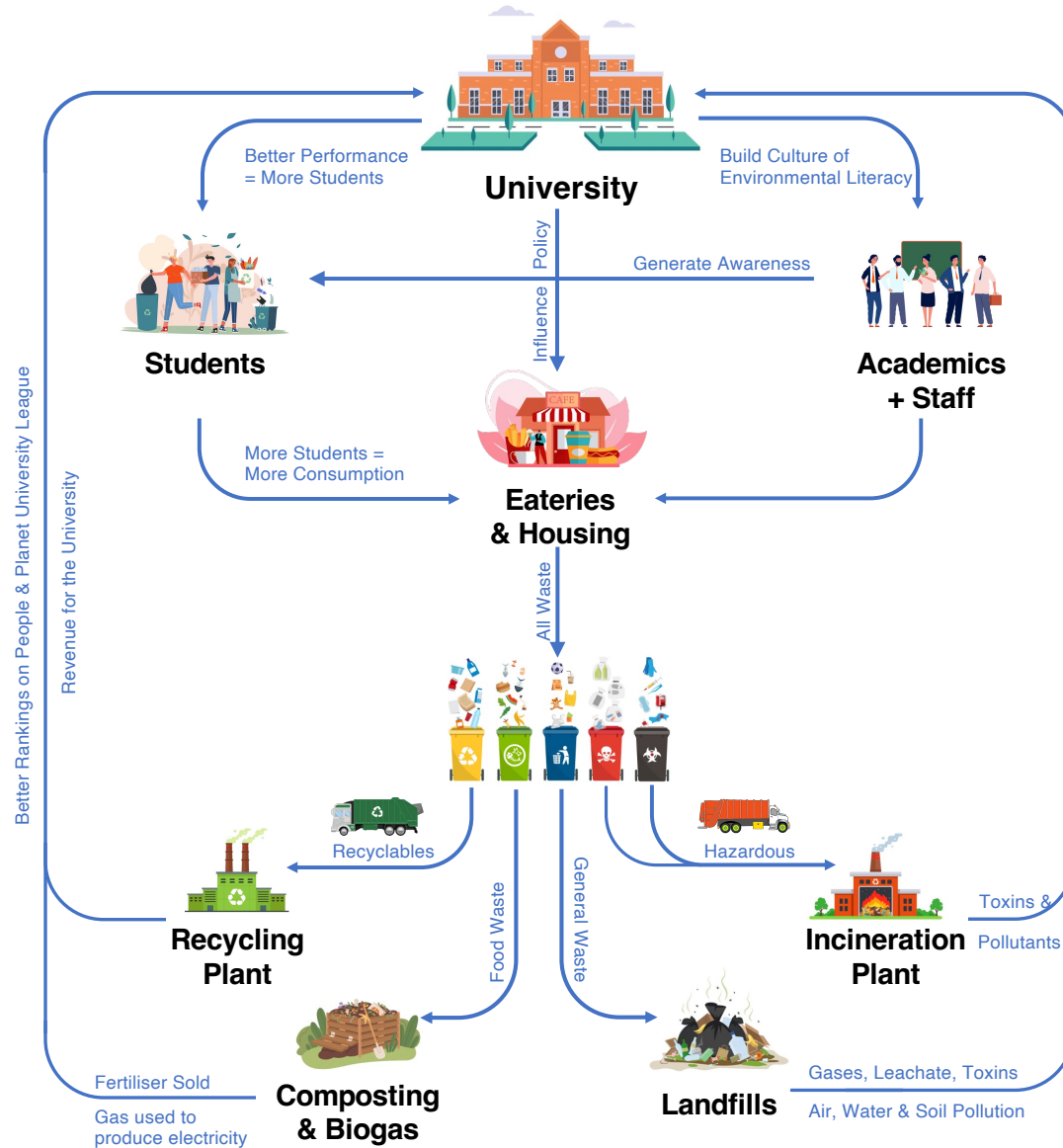
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Simply distributing the vegetables scraps in the garden can also work, as after a couple hours they were being eaten by snails and other small insects. That is also a part of the composting cycle.

”

Conceptualising the Waste Processes



RHUL is ranked **104 out of 153** universities in the People & Planet University League 2022-23.

Students lose **£5.75 per week** due to wasted food

66g of food per meal was wasted in Term 1

58% of General Waste was Food Waste

A Campus Map of the Future



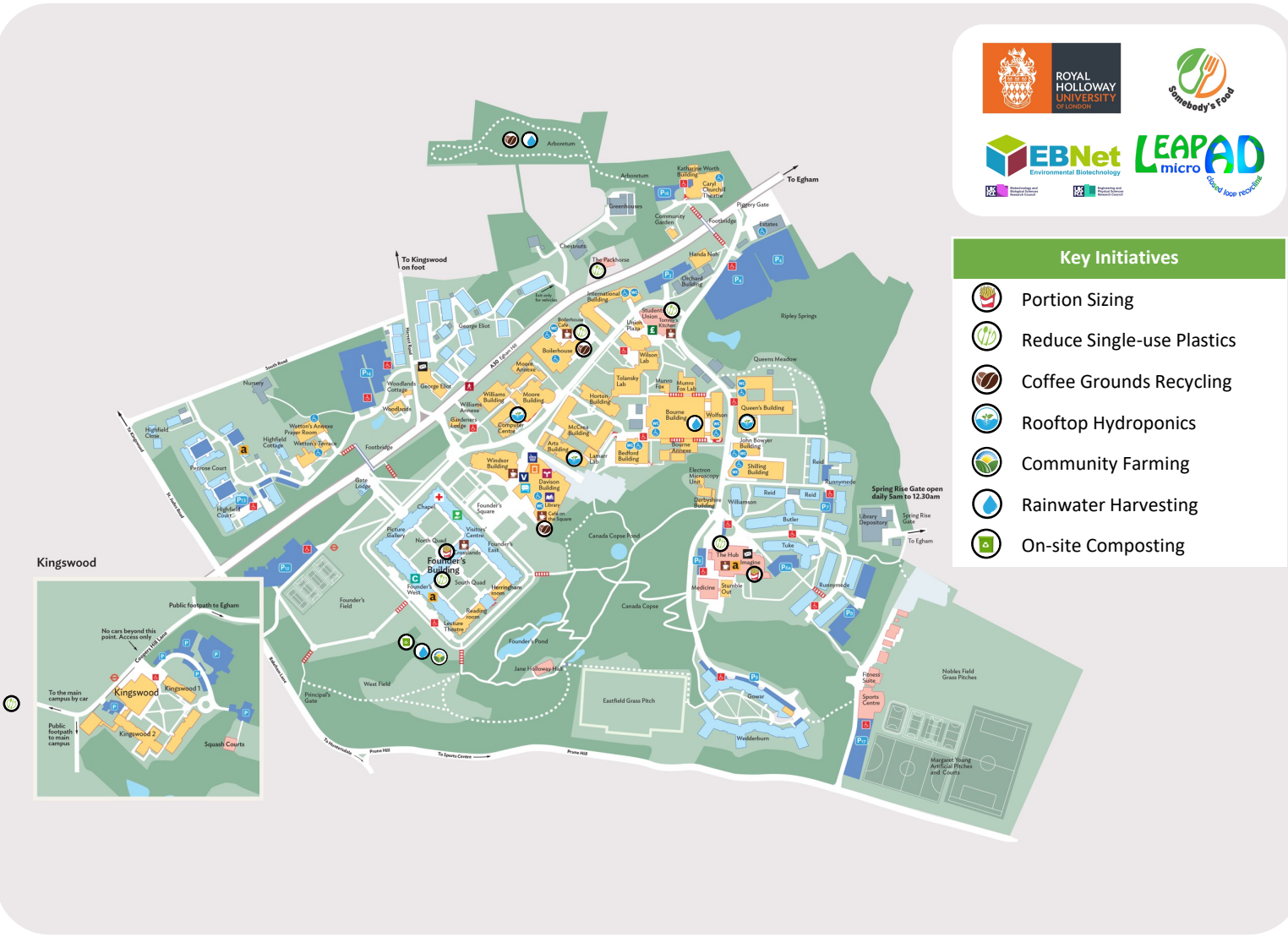
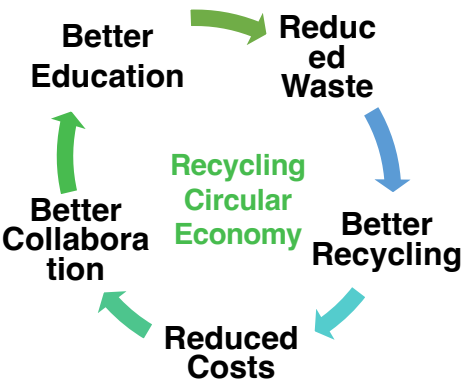
Key Initiatives

-  Portion Sizing
-  Reduce Single-use Plastics
-  Coffee Grounds Recycling
-  Rooftop Hydroponics
-  Community Farming
-  Rainwater Harvesting
-  On-site Composting

Composting can save up to **33.33%** of waste management costs

Garden plots can be **15x** more productive than rural holdings

1 coffee sold = 50gm of coffee waste that can be used as fertiliser



How can you start?

Mindful Consumption, Food Waste Diaries, and Correct Recycling Practices

FOOD WASTE DIARY

— A science-based hack a day, keeps food waste away! —

when	what & how much	why	how to avoid it next time


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MEAL PLAN

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W E D
T H U
F R I
S A T
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Joining Hands

Inter-function and inter-department collaborations on events, activities, and initiatives





Thank you

