

Minimising Consumer Food Waste

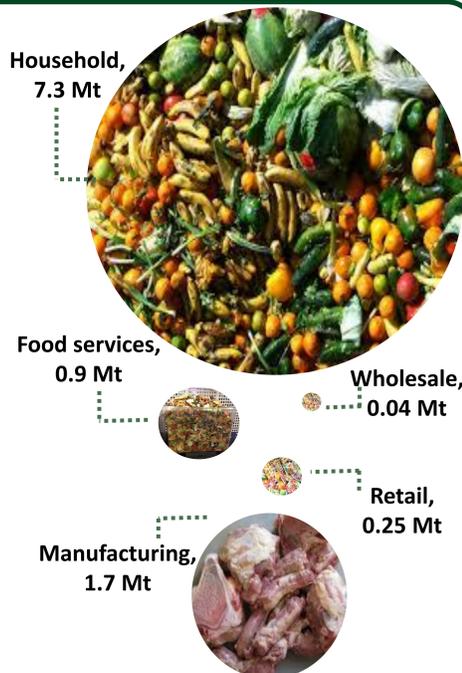
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Background

- In the UK, 72% of post-farm food waste is generated at household level.
- 78% of consumer food waste can be avoided.
- Consumer food waste is not just a behaviour issue, it is a symptom of an unsustainable production and consumption system that relies on oversupply, consumerism and competition on cheap prices.



Research Aim and Objectives

The overall aim is to improve integration of food production and consumption to facilitate minimisation of consumer food waste. To achieve this four specific objectives have been defined:

- Strategically analyse the UK food provisioning system and reasons for generation of consumer food waste;
- Explore system level innovations that could lead to significant minimisation of consumer food waste;
- Design the most viable food Product Service System (PSS) from an environmental, economic and social perspective;
- Evaluate the designed PSS against the current food provisioning system.

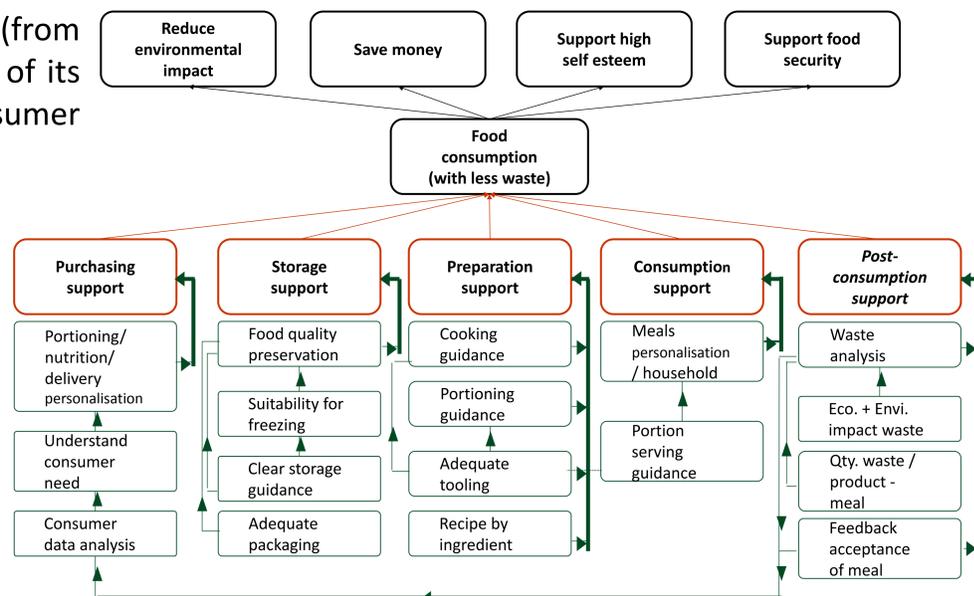
Stage 1: Strategic analysis

This stage aims to analyse the current UK food provision system (from manufacturer to consumer, including retail and logistics) in terms of its characteristics that could lead to or encourage a reduction in consumer food waste.

SWOT analysis

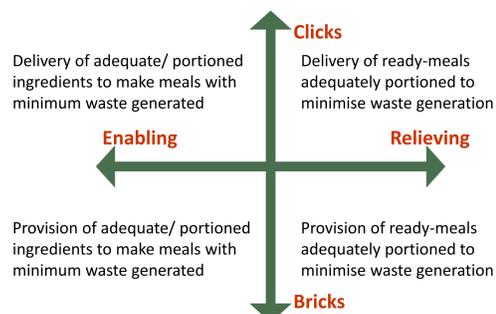
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| Strengths | Flexible manufacturing, ICT, Efficient delivery |
| Weaknesses | No personalisation, Standardised portioning |
| Opportunities | Smart factories, Better service level, Courtauld |
| Threats/ challenges | Increase in urbanisation/ disposable income, price war |

Consumer needs analysis



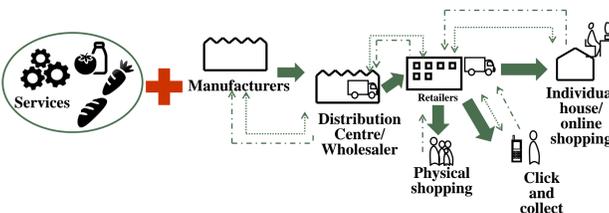
Stage 2: Exploring opportunities

Aims to identify feasible opportunities for converting the food provision system into a PSS that could lead to reduction of consumer food waste.



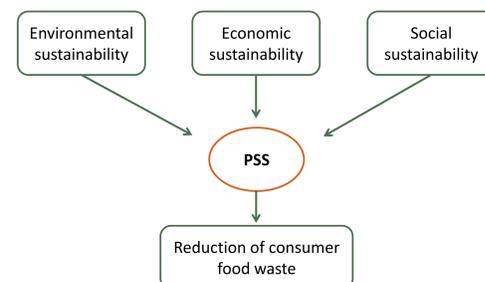
Stage 3: Designing food PSS

Aims to design the most promising product service system (from economic, environmental and social points of view) to significantly reduce consumer food waste.



Stage 4: Evaluating PSS

Aims to evaluate the new PSS against the current food provision system in terms of consumer food waste reduction as well as other potential environmental, economic and social implications.



Conclusion

Minimisation of consumer food waste is likely to require a more adaptive, bi-directional relationship between food providers and consumers. Such a step change in the UK food supply chain requires long-term planning, implementation and consumer acceptance.



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