Food Waste Transitions

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Food waste poses a significant challenge to the sustainability of food systems. In addition to the environmental and economic impacts of the food we waste, there are significant social costs that need to be addressed as a matter of urgency. The burden of responsibility for making the necessary changes is often placed on households and consumers. However, successful responses require collaboration across the supply chain. This must-read report shows that consumption matters, but highlights its relationships with the component parts of the food chain and the organisation of societies more generally. It acknowledges that the United Kingdom is leading the way in collaboration for waste reduction and notes that retailers are starting to take their responsibilities seriously. The authors identify the conditions that need to be addressed as a matter of urgency. The burden of responsibility for food waste engages with the food waste issue has the potential to push forward the broader issue of a sustainable food system to a more mature stage. The success of household food waste reduction in the UK draws our attention to the importance of 'issue lifecycles'. Our research suggests the maturity of the wider issue enabled a rapid engagement with food waste. Widespread engagement with the food waste issue has the potential to push forward the broader issue of a sustainable food system to a more mature stage. The enabling conditions of the 'food waste coalition' are instructive for thinking about the transition towards a sustainable food system. A sustainable food coalition must recruit allies and mobilise against industry and political resistance. The role of progressive businesses is crucial here. And so too is that of organisations that can play the roles of honest broker and trusted intermediary. An important lesson is that we shouldn’t overemphasise responsibility at the level of households and individual consumers. We must move beyond ‘behaviour change’ and recognise, and advocate for, distributed responsibility. Culturally, we need to reconnect with the food system. The good news is that we do have an existing moral and cultural repertoire around food to draw upon, which comes to the fore in debates around food waste. The success of household food waste reduction in the UK draws our attention to the importance of ‘issue lifecycles’. Our research suggests the maturity of the wider issue enabled a rapid engagement with food waste. Widespread engagement with the food waste issue has the potential to push forward the broader issue of a sustainable food system to a more mature stage. The enabling conditions of the ‘food waste coalition’ are instructive for thinking about the transition towards a sustainable food system. A sustainable food coalition must recruit allies and mobilise against industry and political resistance. The role of progressive businesses is crucial here. And so too is that of organisations that can play the roles of honest broker and trusted intermediary. An important lesson is that we shouldn’t overemphasise responsibility at the level of households and individual consumers. We must move beyond ‘behaviour change’ and recognise, and advocate for, distributed responsibility. Culturally, we need to reconnect with the food system. The good news is that we do have an existing moral and cultural repertoire around food to draw upon, which comes to the fore in debates around food waste.

Baroness Scott of Needham Market
Chairman, House of Lords European Union Sub-Committee on Agriculture, Fisheries, Environment and Energy (2013–15)
INTRODUCTION

This report considers food waste reduction in relation to the broader ambition of fostering a more sustainable food system. Of course, it is not a straightforward matter to specify precisely what we mean by ‘sustainable food system’ and so we adopt a broad definition that acknowledges the task of producing sufficient safe and healthy food to meet the demands of feeding the world’s growing population, in a manner that respects environmental limits. In addressing the significant social, economic and environmental challenges that this entails, both now and in the future, the case for reducing food waste is not difficult to plead. We do not suggest that tackling food waste is sufficient, in isolation, to solve the problems currently facing the food system. We do however think that it is a necessary condition. Thankfully, the issue is high on the political agenda and there has been a swell of activity, involving a range of stakeholders, geared towards reducing waste throughout the food chain. The UK has been at the vanguard of these developments, thanks in no small part to its Waste and Resources Action Programme (WRAP), both in terms of raising awareness of food waste and identifying innovative solutions to this global problem.

Against this backdrop, the Sustainable Consumption Institute (SCI) at the University of Manchester has carried out a number of studies on household food waste reduction. The SCI conducted 33 interviews with 38 stakeholders in order to explore the ways in which the challenge of food waste reduction is being framed, interpreted and responded to by engaged constituencies (including businesses, policy makers, third sector organisations, campaigners and consultants) with a specific focus on the interface of households and retailers. This was complemented by our observations at a number of food waste conferences, and by hosting our own multi-stakeholder workshop, in which over 40 delegates came together to discuss the relationship between research and policy, and evidence and action, and to reflect on collaborative responses to the imperatives of food waste reduction. The second part of our analysis reports on the multi-stakeholder coalition that has rapidly developed around the issue of food waste alongside the widespread recognition that food waste is a systemic problem requiring attention across the different parts of the system.

The report ends with consideration of the enabling conditions that underpin the observed food waste coalition. Our conclusions focus on what these can tell us about facilitating changes towards a sustainable food system more generally. Particular attention is paid to the role of retailers as agents of change, alongside the potential for transferring learning from the food waste experience to engage with the various sustainability challenges currently confronting the food system.
HOUSEHOLD AND CONSUMER FOOD WASTE

Despite current levels of activity around food waste reduction, the issue received comparatively little attention prior to the publication of WRAP’s landmark report The Food We Waste in 2008. The first study of its kind, it estimated that UK households at the time were throwing away one third of the food that they purchased.

This startling figure – coupled with global estimates of how much waste arises at different points in the food chain – served to position food waste as a matter of encouraging changes in behaviour at the level of households and consumers. As the issue gained momentum, a narrative emerged in which current levels of waste generation were attributed to consumers not caring about the food that they throw away, ignorance (and ambivalence) towards the consequences of doing so, and deficiencies in cooking and household management skills.

While WRAP’s solutions (such as the Love Food Hate Waste campaign) and the suggestions of prominent commentators such as Tristram Stuart were refreshingly well-intentioned, they were still very much in keeping with the vaguer to address complex global challenges by appealing to the choices made by individuals. In this view policy and intervention is the task of presenting individuals with information and incentives intended to make them behave better.

SCI research on food waste seeks to bring waste policy and research into closer dialogue with contemporary social science perspectives on consumption. We offer a different account of why people waste food, which in turn leads to a re-framing of questions about how to change domestic practices.

WHY DO CONSUMERS WASTE FOOD?

The imperative to cook and eat ‘properly’ places food at risk of going to waste.

In the UK, eating properly is commonly understood to involve cooking meals from scratch using a variety of fresh ingredients. This is seen as important in terms of being healthy and taking care of significant others. However, a lot of ‘proper’ food is perishable and so at risk of wastage if it is not eaten within a narrow timeframe.

Our survey data demonstrates that leftovers are more likely when meals are made from ‘fresh’ ingredients and when they are prepared on the hob or in the oven. Meals containing ‘ready to eat’ items are less likely to result in leftovers.

Family meals are not necessarily the answer.

The family meal is a cultural ideal that many of us consider a good thing. However, ensuring the family eats together and eats ‘properly’ means both the continuous effort to push suitable meals on unwilling household members, and having to buy ‘fail safe’ ingredients as back up. Negotiating these conflicting imperatives can often lead to food waste.

Fridges and freezers can enable food waste.

Fridges allow for surplus food to be quietly forgotten whilst keeping open the possibility that it might be used for something. In the meantime, of course, it decays and people can feel less guilty about throwing away food that is no longer fit for human consumption.

Surplus food is often a result of the portions in which it is sold.

Households have little control over the quantities in which they purchase food and end up buying more than they want to. If a recipe requires a single green pepper, consumers are often faced with the choice between buying a packet of three or else leaving them out of the meal that they are preparing.

Surplus food is not the same as food waste.

Surplus food could be handed down to children or pets, handed around (given to friends and neighbours) or otherwise saved from wastage (composting). In actually, the vast majority of surplus food is disposed of through the waste stream via the bin. More optimistically, and contrary to common misconceptions about the relation between over-consumption and food waste, we found that when a larger percentage of a meal is leftover, the less likely it is that the surplus will go to waste. The caveat here is that we are talking specifically about the leftovers of meals and this says nothing of the fate awaiting unused ingredients.

The social significance of meal occasions is important.

Our survey data suggests that when more time is spent preparing and eating meals, the more likely they are to result in leftovers.

Furthermore, we found that the likelihood of food being left over, and so at risk of going to waste, is affected by the people with whom we eat our meals. A quick microwave meal eaten alone is less likely to result in leftovers than an elaborate dinner party with family and friends.

Compared to meals eaten alone, meals eaten with other household members are twice as likely to result in leftovers, and meals eaten with friends or family who are non-household members are over three times as likely. When a combination of people eat together, the likelihood of leftovers increases fivefold.

IT STRESSES ME OUT, AND WE END UP WITH EASIER CONSCIENCE. Throw it out with an eaten and then I eat it until it can’t be used for it so I just being able to find a way for it.

Tamsin, 25

“IT STRESSES ME OUT, KNOWING THERE IS FOOD THERE BUT NOT BEING ABLE TO FIND A USE FOR IT SO I JUST PUT IT IN THE FRIDGE AND FORGET THAT IT’S THERE UNTIL IT CAN’T BE EATEN AND THEN I THROW IT OUT WITH AN EASIER CONSCIENCE.

Julie, 33

HEATHER 37

LIKE AUBERGINE.’

I’LL SAY TO PHIL – I GOING UNUSED ‘CAUSE THAT THEY JUST DON’T...

I’LL SAY TO PHIL – I GOING UNUSED ‘CAUSE THAT THEY JUST DON’T...

THEM AND HE COMES BACK WITH ‘I DON’T LIKE AUBERGINE’...
FROM INDIVIDUAL BEHAVIOURS TO THE CONTEXT OF BEHAVIOUR

Taken together, the insights on the previous page demonstrate that current volumes of household food waste cannot be viewed as a simple matter of consumer choice or irresponsible behaviour. Our analysis suggests that the behaviours giving rise to waste are not necessarily waste-related, and that food waste arises as a consequence of households managing the complex and contradictory demands of everyday life. Conventions generally seen as positive – cooking from fresh ingredients, the nuclear family meal, and eating with friends and extended family – give rise to surplus food, which may become waste.

A NUMBER OF KEY LESSONS CAN BE LEARNED FROM OUR RESEARCH

Consumers care

Most people care about the food that they waste and the consequences of doing so. However, they also care about a lot of other issues and they care for people – particularly their significant others. Consumers have to negotiate a lot of food-related concerns – think of the tensions arising when trying to eat properly, eat as a family, and reduce waste – as well as a range of other pressures ranging from erratic working hours to finding time for shopping and leisure activities. Without denying the negative impacts of letting food go to waste, it is important to remember this very ‘bad’ household behaviour often arises from the very best of intentions.

Household dynamics matter

Individuals do not make ‘food choices’ in a vacuum. Patterns of household consumption are not a straightforward expression of the tastes, values and desires of the individuals who assume responsibility for feeding the family. The preferences, concerns and schedules of other household members need to be taken into account. In order to manage this, households very often develop routines of food consumption where they purchase food at relatively fixed intervals, buy roughly the same things each time, and have a fixed culinary repertoire. However, things can ‘come up’ (parents’ evenings, spontaneous nights out) which throw these routines out of balance meaning that what would normally be used up between shopping trips goes uneaten. It is important to remember that if people struggle to find a use for these leftover ingredients, it may not be a reflection of their attitudes towards waste and the environment, or their culinary skills. It could well be a result of other household members having a preference for ‘tried and tested’ recipes instead of ‘improved’ meals that would use things up and prevent their wastage. This means that even if a campaign is successful in changing individual attitudes or behaviours, it is not guaranteed to shift deeply entrenched household habits.

The social organisation of consumption is key

Going a step further, patterns of household consumption and waste are shaped by forces outside of the home. We have already suggested that cultural conventions and meanings – such as the importance of the family meal – influence the ways in which we eat. While we may have degrees of choice in the food we consume and waste, it is important to recognise the role of infrastructures (such as existing arrangements for accessing food) and institutions (such as the requirement to be at work for a large part of the day) in constraining our autonomy. In this view, household food waste can be explained – at least in part – by factors as diverse as retailer practices, changes in the labour market, technological development, global food prices, cultural expectations of ‘good food’, and the historical shift from a producer to a ‘consumer society’. Viewed as such, the task of intervention appears rather more complex than persuading individuals to behave differently.

UNFORTUNATELY THERE IS NO SILVER BULLET. HOWEVER, WE CAN OFFER A NUMBER OF THINKING POINTS ON MAKING THE SHIFT FROM ASKING THE QUESTION ‘HOW DO YOU INFLUENCE THE CHOICES OF INDIVIDUALS?’ TO ‘HOW DO YOU CHANGE THE BROADER CONTEXT IN WHICH HOUSEHOLD FOOD WASTE ARISES?’ We also give a number of overlapping suggestions and reflections on what interventions in the social organisation of consumption and everyday life might involve.

<table>
<thead>
<tr>
<th>WHY</th>
<th>WHAT ABOUT THIS ISSUE?</th>
<th>HOW MIGHT THIS HAPPEN?</th>
<th>WHAT ARE THE PARKING LOT</th>
</tr>
</thead>
<tbody>
<tr>
<td>FOOD WASTE cant be viewed as a simple matter of consumer choice or irresponsible behaviour.</td>
<td>Not all waste in households is caused by households, e.g., the quantam of food in which the food industry makes ingredients available to consumers.</td>
<td>Promoting the purchase and use of pre-made packets of mixed vegetables.</td>
<td>Retail campaign endorsed by NGOs and credible celebrity chefs to promote their use as ‘proper cooking’ for ‘modern’ or ‘busy’ lives.</td>
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<tr>
<td>The pressure to cook and eat ‘properly’ leads to food waste.</td>
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<td>Shifting the main meal of the day to lunch time and for to be eaten outside the home.</td>
<td>Retailers offering greater variety in portion sizes to reflect differences in household composition, e.g., half leaves of bread.</td>
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<tr>
<td>The pressure to cook and eat ‘properly’ leads to food waste.</td>
<td>People tend to eat their main meal in the evening and at home. Time pressures and the quantities in which food is made available can lead to food waste.</td>
<td>Subsidising workplace canteens and a campaign to promote eating ‘simpler’ meals in the evening.</td>
<td>This is already happening!</td>
</tr>
</tbody>
</table>

While the table above is largely speculative, it is instructive to note that debates about household and consumer food waste have come a long way from where they were when they started gathering momentum in 2008. From where we are standing in 2015 we can see that significant departures have been made from conventional approaches to behaviour change, encompassing a more nuanced approach to consumers and household practice. More generally, there is widespread recognition that food waste is a systemic issue requiring collaboration between actors and throughout the value chain. It is to these issues that we now turn.
THE PERFECT STORM
Austerity, food price inflation, food poverty and food banks, concerns about food security, environmental sustainability and climate change come together in food waste reduction, as one of our interviewees put it, as “a perfect storm of issues”.

DISTRIBUTED RESPONSIBILITY
Whilst households are major contributors to the UK’s food waste, stakeholders recognise the causes of household food waste are complex. They recognise, as our evidence suggests, it isn’t all about individuals’ behaviours. We found a consensus that responsibility for food waste reduction is distributed throughout the food production-consumption system. This is because “where food is wasted is not necessarily where the causes and drivers are” (NGO representative).

I THINK WE WOULD DEFINITELY SEE IT AS A SYSTEM-WIDE ISSUE. IT’S MORE AROUND WHAT’S THE INTERACTION BETWEEN THOSE DIFFERENT STAGES IN THE SYSTEM.
Policy representative

WE’RE NOT SAYING THE PROBLEM IS ELSEWHERE, SO EVEN THOUGH THE WASTE IS PHYSICALLY HAPPENING AT EITHER END OF THE VALUE CHAIN, WE ARE WORKING IN PARTNERSHIP WITH PRODUCERS, SUPPLIERS AND HELPING CUSTOMERS AS WELL.
Retailer representative

THE FOOD WASTE COALITION
IT QUICKLY BECAME APPARENT THAT THERE IS A DENSE NETWORK OF STAKEHOLDERS AROUND THE ISSUE, TO WHICH WRAP IS CENTRAL. WE CALL THIS THE ‘FOOD WASTE COALITION’.

Unlike many contentious social and environmental issues, in which there are rival problem framings, we found a broad consensus around an ensemble of shared ideas and understandings. Key informants from across constituencies suggested that there had been a co-production of the issue.

“LOTS OF OTHER ORGANISATIONS – UN FAO, UNEP – CAME TO THE SAME POINT AT ROUGHLY THE SAME TIME. A SORT OF CRITICAL MASS.”
NGO representative

“I’M NOT SURE THERE IS A CLEAR LEAD. ALL OF THE STAKEHOLDERS, ALL OF US ARE TALKING ABOUT THE ISSUE.”
NGO representative

“There are all those different voices coming together at a time when the economic situation dictates that being less wasteful is good.”
Retailer representative

HOW DO STAKEHOLDERS UNDERSTAND THE ISSUE OF FOOD WASTE?
We wanted to understand how the challenge of food waste reduction has come to be framed, interpreted and responded to as an issue, focusing particularly on household food waste and the interface between supermarkets and households. The way in which problems are framed shapes perceptions of plausible solutions, whilst excluding other possibilities. We also wanted to know how the different stakeholder constituencies concerned with food waste reduction relate to one another. Are there rival interpretations of the issue? Does any single constituency ‘own’ the issue of food waste reduction?

We conducted interviews with 38 stakeholders concerned with food waste – retailers, consultants, policy makers, campaigners and civil society organisations.

How do stakeholders understand the issue of food waste?
We wanted to understand how the challenge of food waste reduction has come to be framed, interpreted and responded to as an issue, focusing particularly on household food waste and the interface between supermarkets and households. The way in which problems are framed shapes perceptions of plausible solutions, whilst excluding other possibilities. We also wanted to know how the different stakeholder constituencies concerned with food waste reduction relate to one another. Are there rival interpretations of the issue?

“We’re not saying the problem is elsewhere. So even though the waste is physically happening at either end of the value chain, we are working in partnership with producers, suppliers and helping customers as well.”
Retailer representative

While responsibility is distributed, however, retailers were seen as having a key role to play, because “they sit at a pivotal point [and] have an upstream and a downstream influence” (NGO representative).
FROM FOOD WASTE TO A SUSTAINABLE FOOD SYSTEM

BEYOND BEHAVIOUR CHANGE

We’re all familiar with debates about who is responsible for addressing environmental issues – individuals, business, government? These are often framed in terms of the appropriateness of behaviour change strategies directed at individuals’ behaviour.

This is important because framing complex problems in terms of individuals’ behaviour change has two key effects.

• Firstly, it systematically underestimates the constraints of conventions, institutions and infrastructures on individuals’ behaviour, and fundamentally overestimates the degree to which much routine behaviour is the result of voluntary deliberation. In other words it misunderstands behaviour.

• Secondly, it obscures systemic issues – as with food waste, where the problem occurs in often not where the causes and drivers lie – and thus where the solution is best sought.

An important lesson from the SCI’s food waste research is that we shouldn’t overemphasise responsibility at the level of individual consumers. We must address the context of behaviour.

Agenda setting: ‘the consumer’ as proxy

However, we also recognise the crucial importance of awareness raising campaigns – such as Love Food Hate Waste – in agenda setting. When ‘the consumer’ is addressed or evoked in campaigns this does not always have the effect of individualising responsibility for the issue. Using ‘the consumer’ as a tactical, rhetorical device can be important. Not least because business ‘buy-in’ to an issue rests, in part, on the sense that there is a problem that their consumers want them to solve.

From behaviour change to distributed responsibility

Our research shows that approaches to food waste reduction have moved beyond behaviour change to embrace distributed responsibility. This is another important lesson for the transition to a sustainable food system: recognise, and advocate for, distributed responsibility.

Mobilising a coalition for change

We think the story of the issue of food waste reduction in the UK is a positive one. Positive because of the multi-stakeholder coalition around the issue, positive because of the constructive search for solutions, and positive because the results speak for themselves – avoidable household food waste is down 21% since 2007. What are the key conditions that have enabled this and what might we learn from them?

The Value of Food

Food is too cheap for some – and too expensive for others. In the UK the retail cost of food has been driven down to the level that for many it doesn’t matter if good food is thrown away. And, at the same time, children of some working parents don’t have enough to eat. Consumers in the Global North waste almost as much food as is produced in the whole of sub-Saharan Africa. And yet globally millions go to bed hungry.

Food waste draws inequalities into stark relief.

A sustainable food system cannot be for the few: it must address inequalities, both globally and within the wealthier countries.

Many of our stakeholder interviewees felt that food has become culturally de-valued.

"People are beginning to realise just how alienated society is become from the sources of food and any concept of where it comes from and what it takes to produce it." (Consultant)

Culturally, we need to reconnect with the food system. The good news is that we do have an existing moral and cultural repertoire around food to draw upon, and it is coming to the fore in debates around food waste. There is a strong, widely held sense that wasting food is morally wrong because there is "something really fundamental about food that goes right to the human soul" (NGO representative). It is important to capitalise on these repertoires and ensure that they spill over into thinking about the broader sustainability challenges facing the food system.

Issue Lifecycles

Food waste as an issue arose to prominence at a point when wider issues of waste had already reached a level of maturity. Household recycling is now the norm, and is supported by a well-developed waste management infrastructure. This is undoubtedly an enabling condition of the success in domestic food waste reduction.

Food waste draws our attention to the importance of ‘issue lifecycles’. Widespread engagement with the food waste issue has the potential to push forward the broader issue of a sustainable food system to a more mature stage.

Counter-constituencies

Crucial to the emergence of the food waste coalition has been the lack of a counter-constituency advocating a radically different, competing framing of the issue. This was not inevitable. As one of our interviewees commented: "If you imagine a situation where significant retailers were against the agenda, I think it would have been much harder to get messages out and get consumers to act. I think it might have played out quite differently." (NGO representative)

For transition to a sustainable food system it would be naive not to recognise counter-constituencies’ vested interests.

A sustainable food coalition must recruit allies and mobilise against industry and political resistance. The role of progressive businesses is crucial here.

Vehicles for coalition building

The ‘Food Waste Coalition’ in the UK would not have been possible without WRAP. WRAP has facilitated the process of coalition building, not just through expert advice but through acting as a trusted intermediary. This is all the more important when we need to find ways to help competitors co-operate.

Key factors in WRAP’s central role are:

• Credibility with business – an honest broker

• Commitment to evidence – a trusted intermediary

• Arms length connection to government – a neutral forum

Part of this lesson is to recognise the creative role that the state can play in institution building and in actively constructing public-private partnerships. More broadly, it highlights the importance of organisations that play the role of trusted intermediaries in coalition building.
The following is a list of selected project outputs, sources used in the report and some suggestions for further reading:


