

A tool in the toolkit: Can true cost accounting remove siloed thinking about food loss and waste?





Authors:

Bernd Bonfert (Cardiff University)

Miranda Burke (Lancaster University)

Aoife Caffrey (Ulster University)

Siobhan Maderson (Aberystwyth University)

Amy Molotoks (Stockholm Environment Institute, University of York)


Justine Pearce (Royal Veterinary College)

Mehroosh Tak (Royal Veterinary College)

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Executive Summary

Food loss and waste (FLW) is a global economic, environmental, and ethical problem which has been specifically targeted within the United Nations Sustainable Development Goals (SDG's); goal 12.3 aims to "halve per capita global food waste at the retail and consumer level, and reduce food losses along production and supply chains by 2030". While most efforts to decrease FLW focus on the individual consumer or householder, FLW is generated at all points throughout the food system, including production, processing, distribution and consumption. Since FLW is exacerbated by long and complex supply chains with many different stakeholders throughout the food system, efforts to decrease it must engage with all stakeholders and all of their impacts on FLW, rather than simply focussing on individual stakeholders or processes.

In this think-piece, True Cost Accounting (TCA), a method for measuring and quantifying the true social, economic, and environmental impacts of different food production systems, was explored to assess how it could help to overcome siloed thinking and support collaborative efforts to reduce FLW throughout the whole food system. To do this, a literature review was conducted, followed by a series of focus groups leading to the formation of 6 policy recommendations that could support stakeholder collaboration across the food system to reduce FLW.

Key Findings

- **Barriers to reducing food waste** at the household level include a lack of time, knowledge and skills for purchasing and preparing food. Use-by dates on packaging and large portion sizes exacerbated this issue. Almost unlimited accessibility to inexpensive, globally produced food disconnects consumers from the true value and impact of their food, and the value lost when wasting it. The **barriers to food loss** from producers and suppliers, include large, complex supply chains resulting in overproduction and overstocking. Unavoidable waste, as well as spoiled or damaged food is usually sent to landfill, due to current regulations on repurposing FLW.
- **Collaboration across the food system** was demonstrated to be a vital solution in reducing FLW as responsibility for food waste is frequently passed between stakeholders and no single actor is held responsible for FLW, although most frequently measured at the end of the supply chain. To encourage a collaborative approach, changes to supplier-retailer contracts, shorter, localised supply chains, closed-loop systems and communal storage facilities within food systems are discussed.
- **Benefits and opportunities of TCA** included providing a wider system-level and collaborative perspective for decision makers and using TCA as a tool within a toolkit of other initiatives to reduce FLW. TCA could aid the co-production of policies between policy-makers and other stakeholders, making them more widely accepted and effective.
- **Challenges of TCA** included the complexity and impracticality of applying TCA to the complex food system and how TCA metrics would be accurately measured, collated, and analysed across the many processes involved within the food system.



Report Recommendations

Policy Recommendations:

- Ensure supplier-retailer contracts address FLW at all points of the supply chain and mandate stakeholders to measure, state and reduce FLW in their contracts.
- Hospitality, supermarkets and local authorities should be required to disclose all FLW and set mandatory annual targets to decrease FLW.
- Review current rules and regulations regarding use and processing of FLW, and consider options for repurposing FLW, for example, as animal feed.
- Address supply chain inefficiency: supporting public procurement directly from suppliers could decrease FLW, while simultaneously strengthening local economies.
- Incentivise suppliers, retailers, and hospitality to address social, economic and environmental food system externalities, potentially offering incentives and rewards to do so via lower business rates.
- Clear definitions of terminology including: food loss, food waste, surplus, inedible parts and destinations of food loss and waste. Development of government recognised language for system-wide standardisation of data recording.

Further Research and Development:

There are several areas that we feel need further development and research to support our policy recommendations. We have emphasised the need for effective measures of data reporting, especially in FLW. Currently, there is more focus on recording and reporting food waste, which has led to an underrepresentation of food loss. To support our policy recommendations surrounding data reporting, we suggest that data on FLW should be measured across the whole food chain to represent a balanced and more accurate view of the FLW issue.

The infrastructure for FLW can be strengthened and supply chains supplemented through support for centralised FLW distribution hubs within local areas, allowing surplus food and food not fit for sale, to be stored, managed, and distributed appropriately within local food systems.

The simplification of information could be addressed with the creation of a central database that contains sustainability, health and environmental schemes and metrics. This would help provide consistency and inform consumers, for example; the creation of a simple labelling system encompassing metrics within the SDGs to incentivise positive change throughout the food system.

Further research is needed to explore if food pricing could reflect external social and environmental costs and what the implications on food poverty and affordability would be. There should be further work employing TCA to investigate if healthy food produced with low environmental impact is ultimately more economical overall, compared to foods that have negative public and environmental health impacts.



The full report will be released in November 2021, published at:
www.foodsecurity.ac.uk/publications