

Smart Cities: Affordable, Healthy Foods and Food Waste

Key Messages

- Food waste is a **complex and significant** problem, with negative economic and ecological impacts.
- Food waste occurs at **all parts of the food system** and **there are many causes**.
- There is a **lack of reliable data** on food waste to identify opportunities and measure progress.
- The greatest opportunities to **reduce** food waste are in **preventing** food waste at its source.
- Solutions **should not compromise health, equity, social justice, dignity, and self-reliance**.

The Problem

An estimated **\$31 billion** of food is wasted annually in Canada.¹ If associated costs such as water, energy and labour are included then the estimate balloons to **\$107 billion annually**.¹

Wasting food wastes natural resources, such as clean water and energy, and can pollute the natural environment. Wasting food plays a role in global warming through greenhouse gas emissions associated with the wasted energy needed to process, store and transport food, as well as food decomposition.

Wasting food is a significant negative impact on revenues and profitability. Canadian farmers are already struggling to meet the multiple challenges of farming in the era of climate change, while responding to changing demographics and market pressures. A grocery store retailer may have to sell 15-20 more items to breakeven on the loss of one “wasted” product.¹ With margins so tight, loss in revenue due to wasted food represent a loss of resilience and competitiveness in the sector.

Wasting food happens at all levels of the value-chain and there are many sources. Nearly two-thirds of the value of food is wasted by commercial food businesses and consumers.¹ On-farm, processing and transportation make up the remaining third of wasted food.^{1,4}

What is Food Waste?

Food waste can include:

- *food loss (related to process-based factors, such as weather related events impacting crops on farmers or spoilage during transportation); and*
- *food waste (related to decision-based factors, such as purchasing and consumption patterns).³*

The costs of food waste are passed along to consumers, impacting food affordability.¹ This in turn impacts millions of Canadians struggling to put healthy food on the table² and has significant, negative impacts on health. In addition, wasting food in our public institutions (hospitals, military, prisons, schools, etc.) increases the costs of buying, storing, preparing, and disposing of food.¹ The added costs put pressure on tax dollars and contributes to the tendency to source cheaper, less healthy foods to meet the demands of many meals on a budget.

Addressing Food Waste Locally

There are several challenges to addressing food waste locally. **We lack reliable food waste data at the municipal and provincial level.** While there are some good estimates of food waste in Canada, there is not enough accurate and detailed data at a local level or within different sectors (e.g., business and government) to effectively inform practice and policy decisions.

Misaligned policy and jurisdictional issues yield uncoordinated interventions that can have unanticipated consequences.⁴ We need a holistic and food-systems thinking approach to addressing food waste. For example, one way to prevent food waste is to prevent food spoiling during long-distance transportation through plastic packaging. While this may prevent the loss of food, it also increases non-compostable waste that households and municipalities have to manage with all the associated costs and environmental implications. This shows the importance of localized food systems, which have potential to prevent food waste and reduce negative environmental impacts.

Using a holistic approach that considers ecological and social dimensions of food and is aligned with Indigenous teachings of balance and respect⁵ will help us move towards food systems with zero waste. This approach begins with exploring what we need first, preventing loss, and considering the next best use.

Food Insecurity

While charitable and community food programs are seeking to increase the amount of healthy, fresh foods available to individuals experiencing food insecurity, preventing food waste should not be positioned as the solution to food insecurity through these programs. This approach has the potential to download the problem of food waste from the entire value chain to those most vulnerable. These groups become responsible for transporting, storing, ensuring food safety, and disposing of foods at a cost to them and within a sector that is at the limits,⁶ so any solutions need to be in consultation with these groups.

Several multi-national chains donate unsold, perishable items (e.g., pastries) that are low on nutrition to charitable and community food programs for individuals experiencing food insecurity.

<http://fortune.com/2016/03/22/starbucks-foodshare-donate-unsold-food/>

Food insecurity is rooted in income poverty and to address this issue we need social policies that enable all people to have adequate livable incomes to meet their basic needs, including food.

“From a public policy perspective addressing widespread food insecurity in Canada is essentially a matter for income security and income distribution not food distribution and increased aid.”⁶

In addition to supporting individuals experiencing food insecurity, we also need to support a long-term transition to a **healthy, just and sustainable food for all**. Any initiative should meet the critical principles of ensuring availability of and access to culturally appropriate and personally acceptable foods that support healthy, active lives, social justice, dignity, equity, and self-reliance.

Key Opportunities

There are opportunities to prevent food waste while increasing access to healthy, affordable foods.

Solutions need to be inclusive and involve food producers and businesses, community members, food program organizers, and Indigenous communities in consultation, design, and implementation.⁵

All solutions to address food waste should be a part of a comprehensive food strategy to minimize unintended impacts through leveraging existing resources and assets, harmonizing policies and programs, and coordinating efforts across the region.

Key opportunities that can prevent food waste and increase access and availability of health, affordable foods include:

- Creating a virtual food hub to connect producers, processors and processing infrastructure, storage, and markets to strengthen opportunities to add value and prevent waste (e.g., freezing, preserving, and preparing foods), which can support local economic development.
- Collecting new and compiling existing data within the municipality and across sectors about food waste to identify specific and targeted opportunities to prevent food waste.
- Supporting community-driven and community-based programs (e.g., community freezer programs).

The Food Bank Tax Credit for Farmers (2016) can prevent wasting healthy, fresh produce and increase the availability of healthy foods for those accessing food banks. This is a non-refundable income tax credit for farmers who donate agricultural products to eligible food banks in Nova Scotia.

https://www.novascotia.ca/finance/PDFs/Food_Bank_Tax_Credit_Guidelines.pdf

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