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Beyond the food waste crisis

In Canada only, 33.5 million tons of food is wasted annually, the loss of over 30% of which could have been avoided. This represents \$49.5 billion, nearly 51.8% of what Canadians spent on food purchases in 2016 or 3% of Canada's GDP that year. Still, the impact of food waste goes way beyond monetary losses. As most food waste will end up in landfills producing methane, the greenhouse gas footprint of food waste is equivalent to 56.5 million tonnes of carbon dioxide released into the atmosphere, the blue water footprint of avoidable food waste alone in Canada represents 1.4 billion tonnes while the total food waste accounts for 60% of the food industry's blue water footprint (Gooch et al.).

Rare are the environmental issues which apparently bring people across different political spectrum together like food waste can. The Food and Agriculture Organization of the United Nations (FAO) distinguishes "food loss" occurring at the production, postharvest and processing stages in the food supply chain from "food waste" which occurs at the retailer and consumer level. Many reports have repeated this narrative of distinguishing food loss and food waste and have built it into a biased global narrative according to which unlike developing countries where food is primarily lost at earlier stages of the supply chain as a result of poor technical

infrastructure, rich countries primarily produce food waste due to wasteful consumer habits (Bowman).

According to studies, retail food waste in developed countries is relatively small compared to food lost during the other steps of the food supply chain. In the UK for example, consumer food waste amounts to around 0.26 million tonnes while manufacturing accounts for 1.85 million tonnes of losses and production for 2.5 million tonnes. Overall, in developed countries, only 30% of food waste comes from consumers (Bowman). In Canada, retail accounts for 4% of the total food production wasted, households account for 14% and hotels, restaurants and institutions (HRI) account for 9%. So a total 27% of the food production is wasted in Canada postproduction which is on par with other developed countries. This is equivalent to around 9.6 million tonnes of waste (Nikkel et al.; Gooch et al.). Therefore, it is absolutely misleading to say that in developing countries most food waste is caused by consumers. This questionable distinction between food waste and food loss implies that supply chain 'losses' are not caused by human socio-economic arrangements which can be acted upon through considerable institutional and systemic changes but shifts the responsibility onto the consumer side. This distinction has disastrously been embedded even into international efforts to tackle the food waste crisis (Bowman). For example, the United Nations' 2030 Agenda for Sustainable Development set the target to "halve per capita global food waste at the retail and consumer levels and reduce food losses along production and supply chains, including post-harvest losses", target to which Canada has committed itself to in 2015 (Canada). Although it is generally accepted that reducing food waste and loss can help minimize climate change and lead to more efficient and sustainable resource management (Soma et al.), we see that while the target for the consumer and retail side is specific and measurable, there is a lesser emphasis on production and supply chains whose target can only be described as vague at most (Bowman).

Actually, there is currently a gap in food loss studies in the global North and this issue is less well understood there than in developing countries. Farmers' opinions are specially underrepresented in food loss studies resulting in policies and solutions which might undermine their interests (Soma et al.). It is likely that food loss at the production stage might be connected to subsidies "encouraging over-production, financial risks, and various imbalances in market power and volatility". Unfair trading practices like short notice cancellations and unilateral contract changes by buyers have been identified as a major cause of food loss in the European Union, which is a similar economic situation as Canada where only 5 big multinational corporations command 80% of the market (Soma et al.; Bowman).

In this project, I would like to approach the food waste crisis through an activist web intervention challenging the concept of food waste reduction efforts focusing mainly on consumer efforts which is the approach adopted by the Canadian Federal government. As such, I will create a website which will be mainly informative in nature and present both interactive data visualizations on the scale and impact of the global food waste crisis but also dissect and critique the Canadian government's policies to reduce food waste and loss at every stage of the supply chain.

Works Cited

- Bowman, Martin. "Challenging Hegemonic Conceptions of Food Waste: Critical Reflections from a Food Waste Activist." *Routledge Handbook of Food Waste*, Routledge, 2020.
- Canada, Environment and Climate Change. *Taking Stock: Reducing Food Loss and Waste in Canada*. 28 June 2019,

https://www.canada.ca/en/environment-climate-change/services/managing-reducing-was te/food-loss-waste/taking-stock.html.

- Gooch, Martin, et al. *The Avoidable Crisis of Food Waste: Technical Report*. Value Chain Management International and Second Harvest, 2019, p. 122. *Zotero*, https://secondharvest.ca/wp-content/uploads/2019/01/Avoidable-Crisis-of-Food-Waste-Technical-Report-January-17-2019.pdf.
- Nikkel, Lori, et al. *The Avoidable Crisis of Food Waste: The Roadmap*. Second Harvest and Value Chain Management International, 2019, p. 32.
- Soma, Tammara, et al. "Tilling Food under: Barriers and Opportunities to Address the Loss of Edible Food at the Farm-Level in British Columbia, Canada." *Resources, Conservation and Recycling*, vol. 170, July 2021, p. 105571. *ScienceDirect*, https://doi.org/10.1016/j.resconrec.2021.105571.