

## Abstract to

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**Relevant for the following topic:** Sustainability

## Title: Food retailers' motivation and barriers for donating surplus food to schools

### Introduction

The world is facing a food crisis that could affect millions of people worldwide. The newest reports estimate that that 811 million people go to bed hungry every night, and that the number of those facing acute food insecurity has more than doubled since 2019- from 135 million to 276 million [1]. Conflicts are the main driver for hunger. The war in Ukraine illustrates how conflicts force people out of their homes and wipes out their sources of income. The climate changes destroy lives, crops and livelihoods, weakening people's ability to feed themselves. The economic consequences of the COVID-19 pandemic are driving hunger to unprecedented levels as well. Prices for food is increasing, and we all have to use more of the household income to put food on the table.

This situation is in large contrast to all the food which are wasted globally. About one third of all food produced for human consumption is wasted [2]. Food waste does not only impact the environment negatively, but it also represents loss of resources which could limit hunger. Food waste represents one of our most prevalent global challenges we have today [3, 4], and halving food waste by year 2030 is one of the most important goals of the UN [5].

Norway is a developed country in Northern-Europe. According to the government, Norway has eradicated hunger, and food security is generally good. However, the eight food banks, which distribute surplus food to people in need, recently reported an all-time high for the number of recipients of food [6]. Food distribution have increased by 70 percent since 2020, and they are asking for more food donations from the food industry. Donation of surplus food from the food industry to charity is one of the main strategies to reduce food waste [7].

Norway is a long country with a scattered population. This is the main explanation to why Norway is among the countries in Europe with the most grocery stores per capita [8]. Most of these stores are small stores, which gives consumers access to groceries independently if they live in central areas or districts. This is one of the explanations to why grocery stores represents the third sector which waste most food after private households and food industry [9].

However, grocery stores in rural areas, especially those in the northern regions, do not have food banks or other charity organizations which can redistribute surplus food to people in

need. Tromsø Matsentral, which is Northern-Norway's largest food bank, are not able to redistribute all surplus food which is available in the region to their users [10]. In addition, the region has less agriculture which may use surplus food for animal feed, than other regions have.

This situation have given Tromsø municipality the opportunity to test a new redistribution model of surplus foods [10]. They use surplus food from local stores to prepare and serve for their children at the after-school program for children in first to fourth grade. These children come from families with all kinds of socioeconomical background. One of the primary schools in this municipality began this model in 2013, and more schools want to adopt this model. The intention is to improve the schools food offer, give all children equal starting point for learning and health, and teach the future generation to limit food waste.

To make the municipality's project successful, they are dependent of the retailer's goodwill to have access to their surplus foods. No study that we know of have investigated which attitudes retailers may have to donate surplus foods to public organizations, because such model implies that schools receive free food and may buy less food from the retailers. Thus, limiting the retailers sales.

The aim of this research project was to explore the perceived motivations and barriers the three main food chains in Norway have, as well as other stakeholders, to donate and receive surplus food to primary schools.

## Method

We conducted in depth interviews with 13 persons from private and public organizations. The participants were strategically recruited, by how relevant they were the project. Thus, we interviewed merchants, wholesaler, distributors and food producers which potentially could donate food to the municipality's schools, as well as the local food bank to explore a possible collaboration with the municipality. Employees at schools responsible for the food offer were interviewed as well.

In addition, we also analyzed relevant regulations, reports, guidelines and websites illuminate important factors that may influence the actors' motivations and barriers. All interviews were conducted by and recorded by the software Teams, and transcribed by a professional agency. Transcripts and documents were content analyzed by the software NVivo [11].

## Results

Findings on the drivers for food donation, indicate that two of the three retail chains did not differentiate between whether the surplus food goes to charity or public schools. They did not see any economic benefit to choose one over the other. Three of the informants emphasized the importance of educating children, the consumers of the future, to reduce food waste from private homes and daring them to eat less "perfect" food with spots etc. Thus, inviting them to prepare surplus food at school, may teach them to evaluate the food security of food, and make better use of the food, such as making French toast of dried bread.

One interesting finding was that the wholesalers have their own expiration date, which implied that food cannot be commercially sold in stores but could be redistributed to charity or schools with a longer expiration date than food donated from grocery stores. Such donations would be of larger quantities than food donations from groceries.

When discussing how we may prevent schools and charity organisations to compete for the same surplus foods one of the retail chains suggested that schools could buy surplus foods with 40-50% discount. In that way charity organisations could receive whatever is left. The local food bank emphasised that they did not have enough recourses to redistribute large packagings for commercial kitchens, such as 5 kilograms with cheese, because their users needed consume packings. Such products would fit better to the use of schools.

The main barriers for donating food to schools was the retailer's hesitation to invite one more actor to handle the surplus foods. The collaboration with the local food bank was perceived as efficient, because they collected food on a regular basis from the groceries and wholesalers. They also claimed that selling surplus food themselves at their discount counters was considered more profitable than donations. One of the retailers expressed that they would prioritize donation to charity over schools, because it is not the retailers obligations to support public organisations which had their own financial system.

One interesting finding was that neither of the merchants, wholesaler, distributors and food producers knew that they could get a VAT exemption when they donated food to charity, but not to public actors, such as schools. In their consideration, it was all loss, and registered as waste in their systems.

Interviews with employees at the schools revealed several barriers, such as limited food knowledge and motivation amongst those preparing food, as well as difficulties picking up food from the groceries and storing food, especially freezing food at the schools.

The document analysis revealed that the food banks statutes does not allow for collaboration with schools on a permanent basis. Thus, changes are needed if schools and food banks want to collaborate.

## References

1. WFP. *A hunger catastrophe*. 2022 [cited 2022 11.04.2022]; Available from: <https://www.wfp.org/hunger-catastrophe>.
2. Morone, P., et al., *Food waste: Challenges and opportunities for enhancing the emerging bio-economy*. *Journal of Cleaner Production*, 2019. **221**: p. 10-16.
3. Crippa, M., et al., *Food systems are responsible for a third of global anthropogenic GHG emissions*. *Nature Food*, 2021. **2**(3): p. 198-209.
4. Williams, H. and F. Wikström, *Environmental impact of packaging and food losses in a life cycle perspective: a comparative analysis of five food items*. *Journal of Cleaner Production*, 2011. **19**(1): p. 43-48.

5. United\_Nations. *Bærekraftsmålene*. 2021 [cited 2021 25.03.2021]; Available from: [https://globalcompact.no/barekraftsmalene/?gclid=CjwKCAjw6fCCBhBNEiwAem5SO1YIQlo2N12-LVdtFs4h2VujVDdWBkklLqOjOe3utMHXD60XIUtEjhoCFA4QAvD\\_BwE](https://globalcompact.no/barekraftsmalene/?gclid=CjwKCAjw6fCCBhBNEiwAem5SO1YIQlo2N12-LVdtFs4h2VujVDdWBkklLqOjOe3utMHXD60XIUtEjhoCFA4QAvD_BwE).
6. Matsetralen. *Januar, 2022 -rekordmåned!* 2022 [cited 2022 11-04-2022]; Available from: <https://www.matsentralen.no/post/januar-2022-rekordmaned>.
7. Stensgård, A., K. Prestrud, and P. Callewaert, *Food Waste in Norway: Report on Key Figures 2015-2019*, NORSUS, Editor. 2020, NORSUS: Fredrikstad. p. 62.
8. Wifstad, K., et al., *Konkurranse i dagligvaremarkedet. Konkurranse i alle ledd*, M. economics, Editor. 2018. p. 49.
9. Stensgård, A., K. Prestrud, and P. Callewaert, *Sektorrapport for matbransjen, offentlig sektor og husholdningsleddet*, NORSUS, Editor. 2021, NORSUS: Fredrikstad. p. 104.
10. Alm, S. *Kan butikkenes overskuddsmat gi næring til SFO-enes spikersuppe?* 2021 [cited 2022 08.02.2022]; Available from: <https://blogg.forskning.no/fra-fjord-til-bord/kan-butikkenes-overskuddsmat-gi-naering-til-sfo-enes-spikersuppe/1935486>.
11. QSR\_International, *Nvivo 10 qualitative data analysis software*. 2012.