

Session 2: Food Banks Reimagined:

Effective Redistribution Strategies for Impact

Moderators:

- Lisa Van den Bossche, ILVO
- Yael Meroz, GD-SO (Green Deal Call Projects Support Office)



Photo by Mirella Sicilia



Which type of stakeholder do you represent?



**What benefit you think food banks
are more effective in delivering?**

The Session's Agenda

- **Balazs Cseh** - Introduction - Food bank organisations in different countries
- **Balazs Cseh** - How are social norms influencing the decisions on corporate food surplus donations
- **Frans Cruijssen** - Reducing food waste with donations to food banks
- **Etienne Rubens** - Effective Redistribution Strategies for Impact
- **Panel discussion**



PRESENTERS



Etienne Rubens

Coordinator at the Belgian
Federation of Food Banks



Balazs Cseh

Senior Network
Development Advisor at
European Food Banks
Federation – FEBA and
President of the Hungarian
Food Bank Association



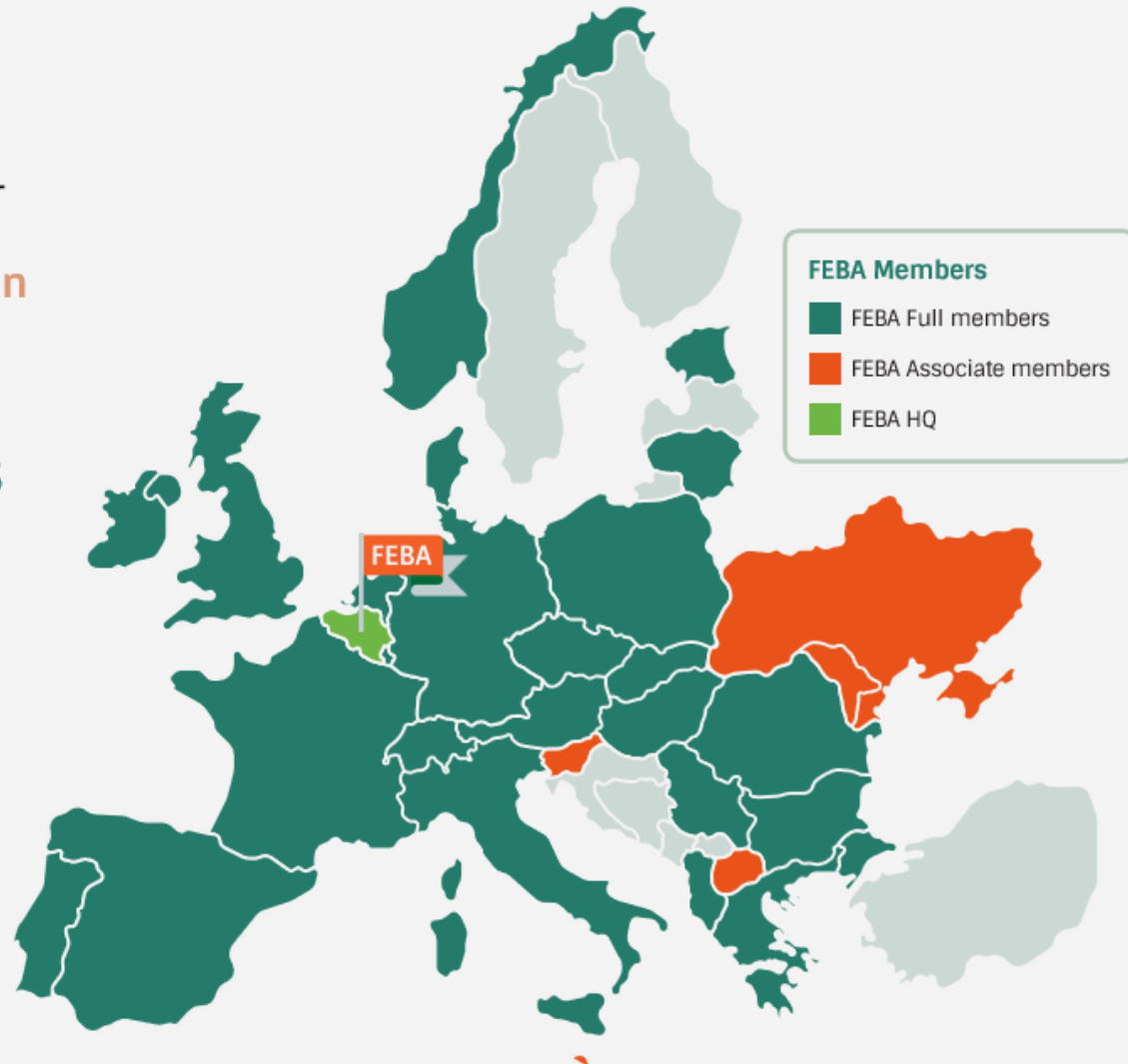
Frans

Cruijssen Professor
of Analytics for Sustainable
Development at Tilburg
School of Economics and
Management, Department of
Econometrics and
Operations Research

FEBA

The **European Food Banks Federation** is the leading European non-profit members-driven organisation **based in Brussels** and **was established in 1986**.

In 2024 Food Banking network worked in collaboration with **25 Full Members** and **5 Associate Members** in 30 European countries.



FEBA impact



Social Value and SROI as Measured by FEBA Members

Category	UK	Belgium	Netherlands
SROI Ratio	£5.72 : £1	€8.89 : €1	€12 : €1
Net Social Value	£225,230,009 total social value	€443.908.669 total social value	Not explicitly quantified
Food Redirected	64,282 t	25,900 t	25,268 t
Beneficiaries served	960,513 people	208,925 people	144,750 people
Cost Savings Split	£117.6M (52%) to state; £107.7M (48%) to beneficiaries	Not split, but includes -€2,179/household (expense) and -€9,971/person (health) savings	Savings on food, healthcare, mental health, waste management
Carbon Avoided	10,698 t CO ₂ avoided	Embedded in SDG 'Climate Action' (avoided waste)	Not explicitly quantified

HOW ARE SOCIAL NORMS INFLUENCING THE DECISIONS ON CORPORATE FOOD SURPLUS DONATIONS

Balázs Cseh
president
Hungarian Food Bank Association

Main research questions

- How do the different perceptions in relation to food safety and other risks effect food surplus donation?
- What is the relationship between economic interest and social return and their relationship on the decision making process?
- What is the relationship between individual preferences and company strategy?



Case study methodology

- In-depth interviews
 - Retail, Processing, HORECA, NGO (30)
- Analysis
 - Manual
 - IT assisted (NVIVO)
- Development and testing of various interventions

TOP3 outcomes of the interviews

1. Avoiding/limitation of risks is a very strong norm in the corporate decision making process
2. Companies cannot well measure and do not really understand the social impact of the donation, therefore economic interest is often overriding social impact
3. The personal attitude, „social way of thinking” of company managers significantly influences the decision on food surplus donation

Outcome 1 – Fear of risks

- Perceptions:
 - Non-profits are non-professional
 - Food donation is a high risk activity
- We have to reassure our donors – make them feel safe!
 - Provide a “safety net”



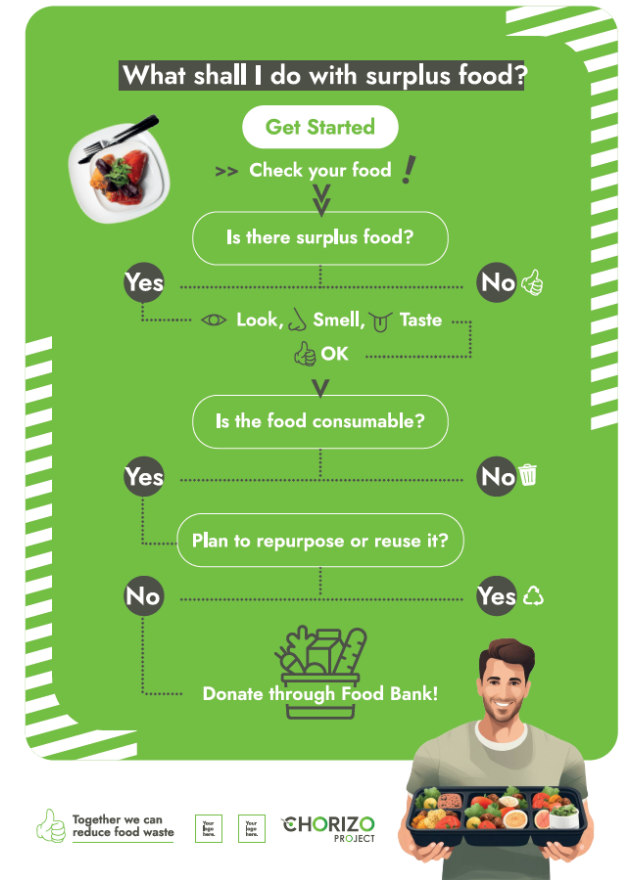
Be professional – and show it!

- Understand well food safety regulations and specialities/flexbilites
- Quality Assurance – limitation of the risk of fraud - let's show our processes, rules, and systems.
- Show volumes and references
- Seeing helps believing - invite donors to the food bank and show them our food safety measures, and control processess



Guidances – create a public reference

- Create and use donation guidelines
 - Highlighting processes (cold chain, traceability, etc)
 - Include the whole redistribution chain
 - Issued or accepted by the Food Safety Authority
 - Communicate about it



Outcome 2 - Economic vs social impact

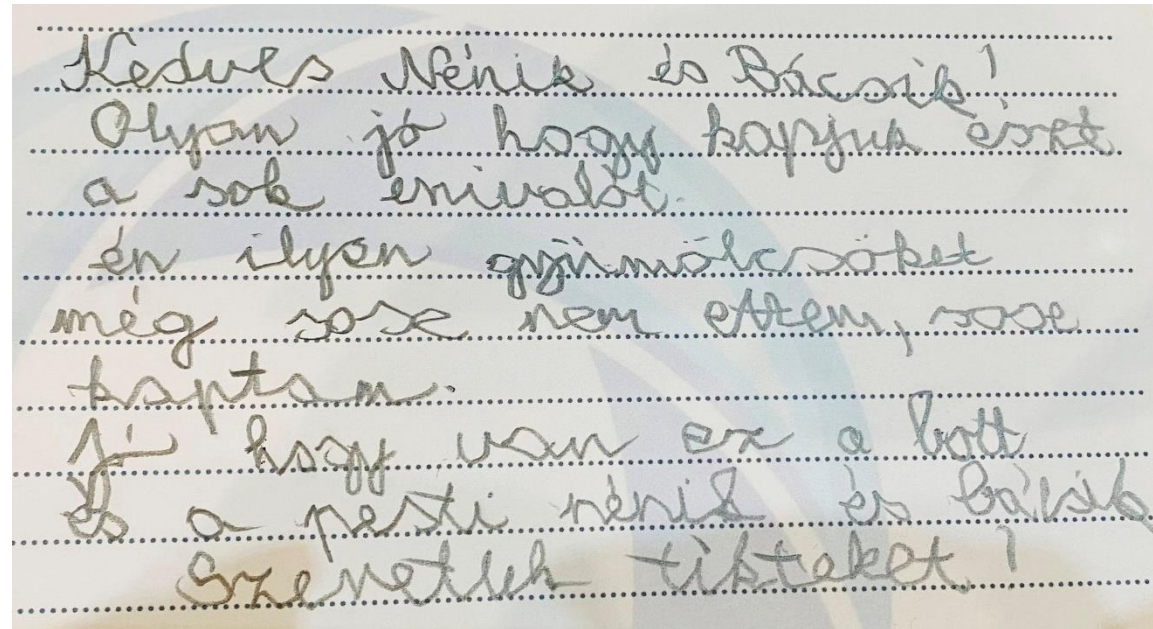
- Financial cost and benefits of donation are balanced, „0+” is often not enough for raising top management interest...
- Our competition (discounting, animal feed) offer higher direct financial ROI
- Social impact is hard to be measured and corporate managers often do not see and understand the scale of it



We have to make them „feel good”

Making social impact more understandable

- ESG / impact reporting – the „quantified way” - necessary but not sufficient...
- Demonstrating social impact by photos, stories, and other communication tools



Dear Aunties and Uncles! It's so nice we get all this food. I never eaten fruits like these before, never got them. It's so good there's this shop here and the aunties and uncles in Budapest. I love you all! (Sandra, 9 years old)

Making social impact more enjoyable

- HFBA best practice: corporate charity cooking - a combination of volunteering and warehouse visit with storytelling



Making social impact more visible

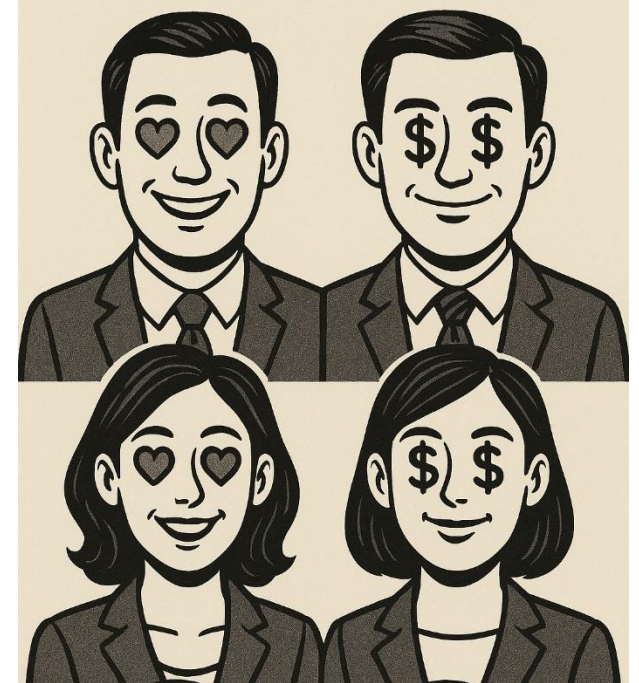
- Support corporate branding towards customers and employees
- Also helps strengthening the social norm



Outcome 3 – Impact of personal social norms

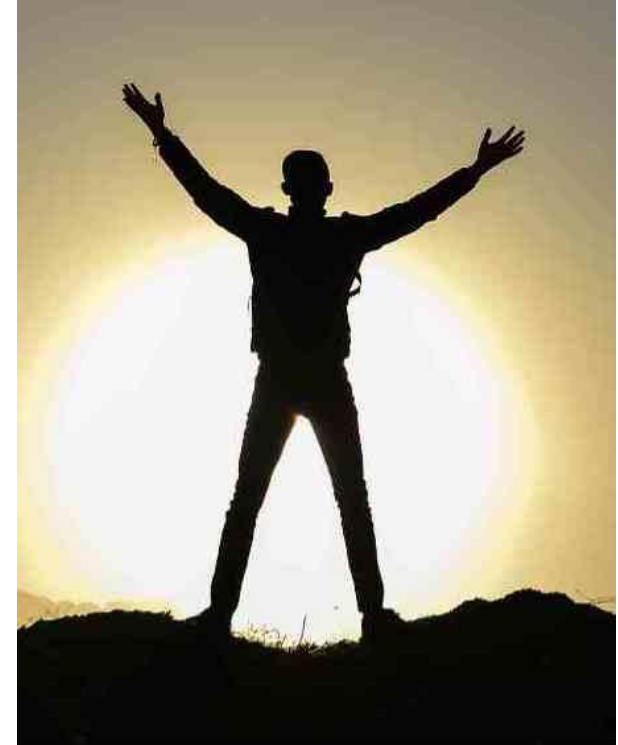
- Strongly connected to Outcome 2
- The different “translation” of the “0+ balance”
„Why should we do it?” vs „Why not?”
- Don’t try to change people... → adapt:
 - Find the “good guys” and forget about the “bad guys”...

**Find the “champions” and “agents”
and make them feel proud**



Make them feel proud

1. Sense of belonging – “Them” → “Us”
 - Build and maintain personal relationships
 - Provide insider info
2. Reassure their personal contribution
 - Provide feedback on impact
 - Give titles, prizes



Conclusion

Understanding social norms and using the right interventions can help food banks building stronger relationships with food donors – leading to greater supply.

**It is essential to recognize:
where change is possible, we have to create interventions,
where it is not, we have to learn how to adapt.**



THANK YOU FOR YOUR ATTENTION



Reducing food waste with donations to food banks

ZeroW SILL 7

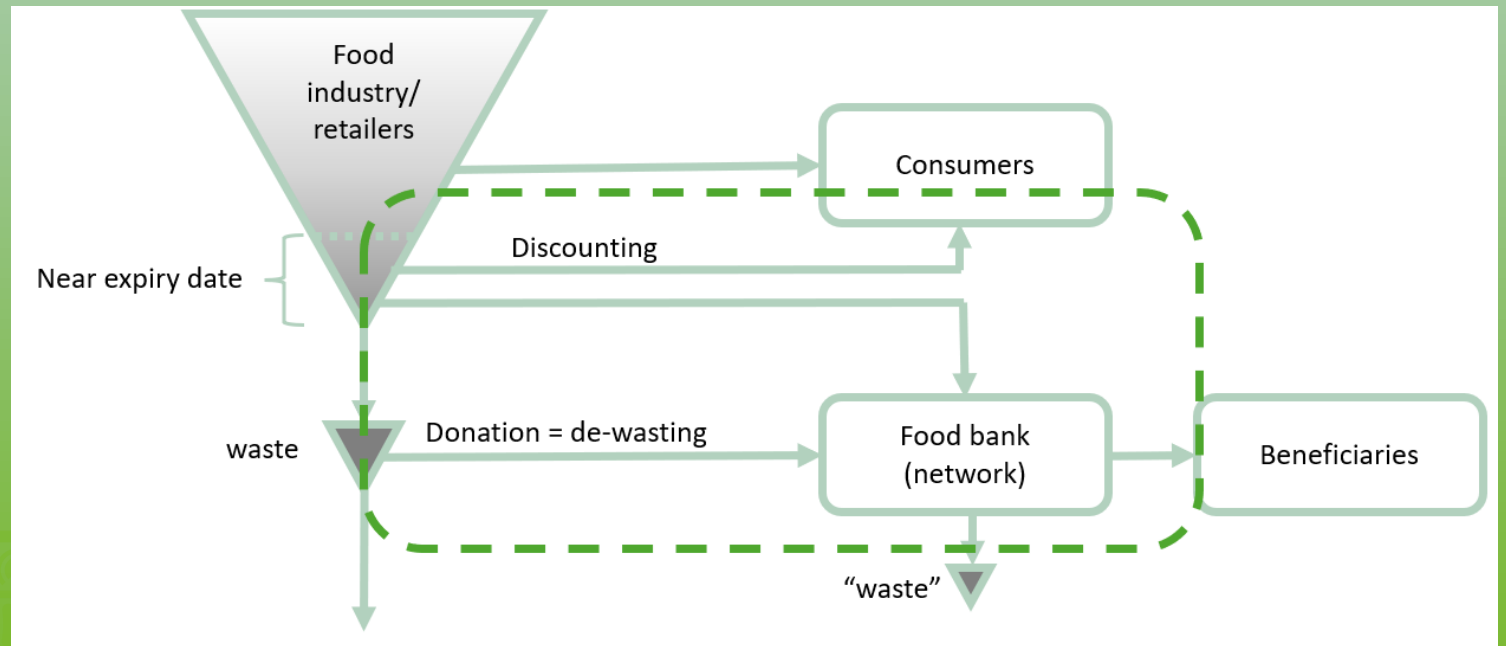
Main contributors

Wageningen University:

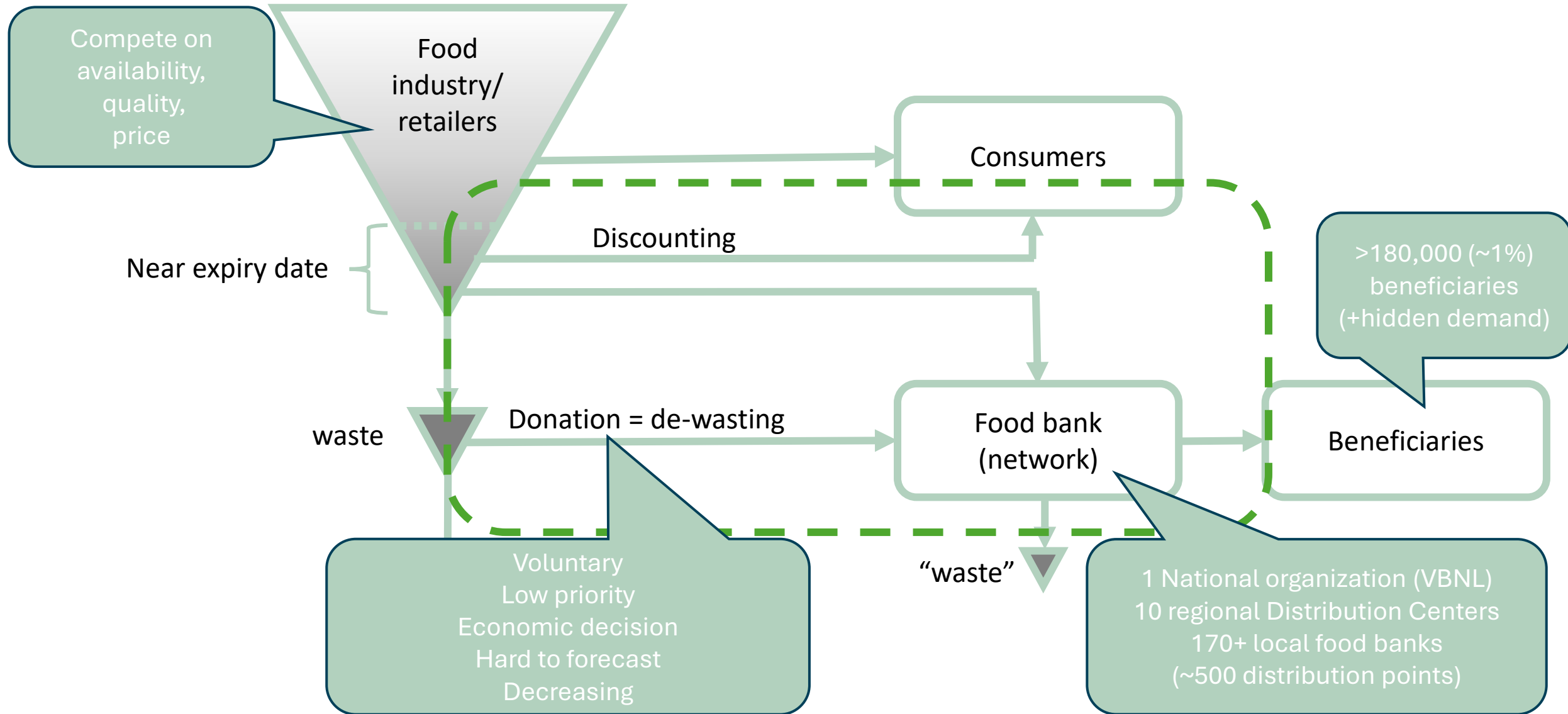
Rene Haijema, Renzo Akkerman

Tilburg University:

Frans Cruijssen, Meike Reusken



INTRODUCTION – SILL 7 focus area + Dutch context



Main contributions – Food bank perspective

Dashboards: predict demand and supply

- Make VBNL more resilient & responsive
- Drive to innovate information infrastructure

"Under the radar" project: reveal hidden demand

- Make FBs more accessible

Research papers

- Overview of supply chain challenges for food banks
- Capacity analysis and modelling to support investment decisions
- Transportation planning for collection activities



Main contributions – Retail (donor) perspective

Waste-Donation Dashboard (Retailer)

- Identify donation potential + Track FLW
- Select stores for interventions

Impact

- Many more items donated to food banks
- FLW reduction by (dynamic) discounting

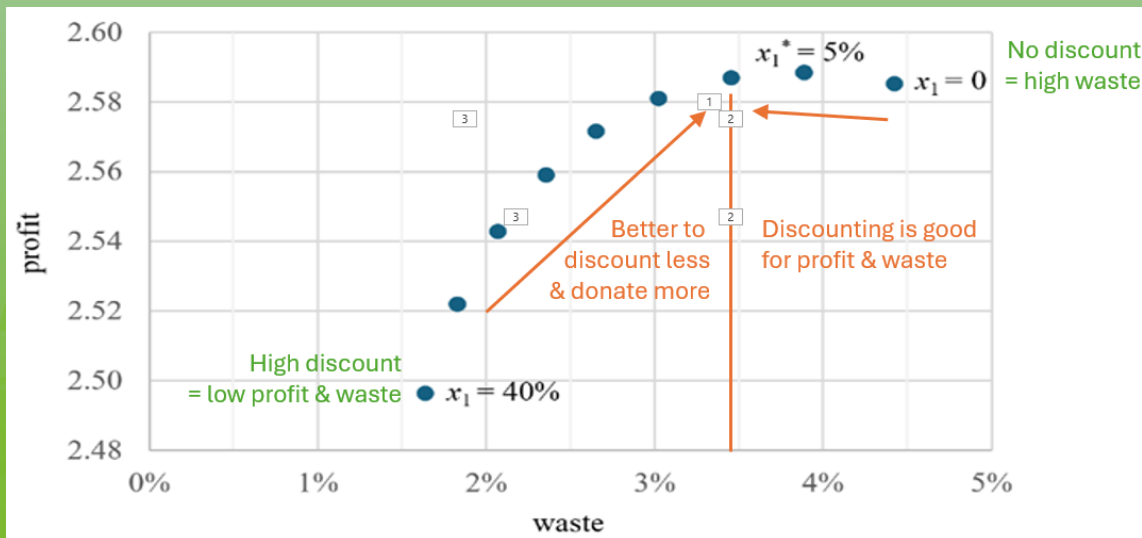
Research Papers

- Crowd-sourced waste reduction initiatives
- Discounting vs donating decisions in retail



Project highlight

Retailer donation vs discounting



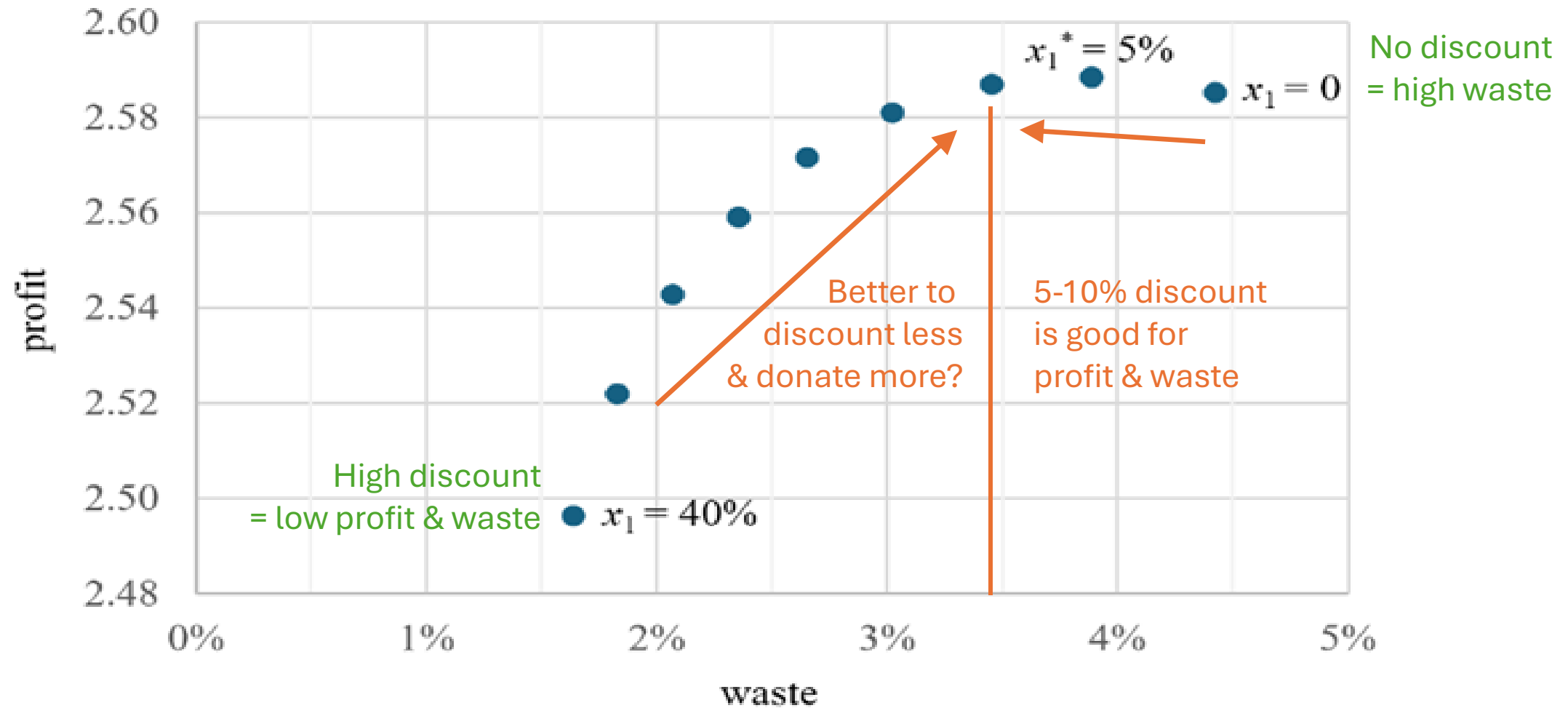
Decision making at the donor (retail) side is a complex process trading off discounting, donating, or wasting perishable products. In our work, we modelled and analyzed the retailer's decision process to better understand the dynamics in this essential trade-off.

Donation vs discounting

- Retailers sell and waste fresh products
 - Many consumers pick freshest items first
 - Older items get wasted (pass expiration date)
- Discounts make old items more attractive
 - Pick discounted instead of freshest item
 - But reduces profit margin
- What is impact on waste and profit?
 - Optimal discounts by mathematical optimization & simulation
 - Could donating for free to Food Banks be better?



To donate or to discount (on last-day, apply fixed discount)



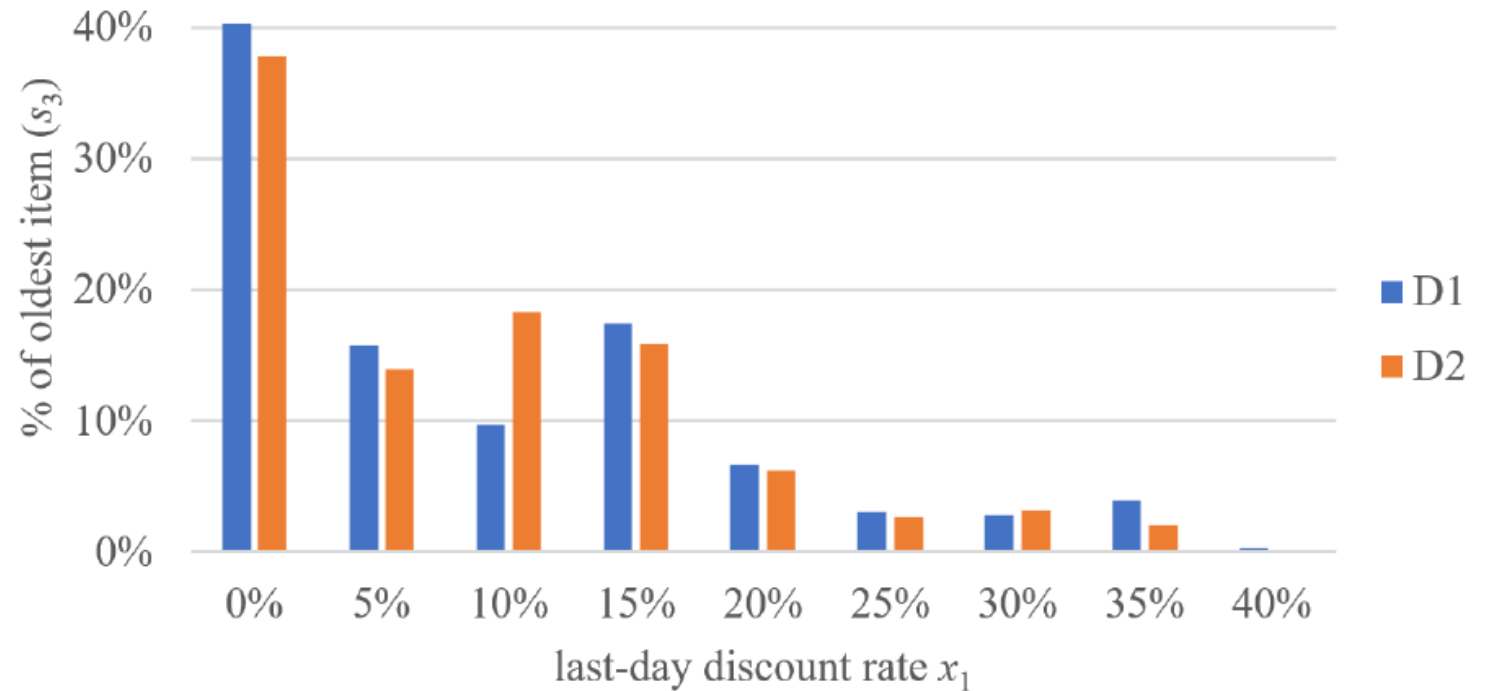
Smarter: Dynamic Discounting policies

- Dynamic discounting
 - only if needed
 - Depending on # items in stock, and expiration dates
 - Daily adjust discount %
- Last-2-days discounting (D2)
 - Two days before expiration apply low discount %
 - If unsold apply deeper discount on last day



Optimal discount %

- Average 9% on last day, and 2.8% on next-to-last day
- Dynamic:
often 0%, rarely > 20%



- Are discounts in practice (often 30%) too deep?

Smarter: Dynamic Discounting policies

- Compare 4 discounting strategies
 - NO No discount always 0%
 - FO Last-day always fixed optimal %
 - D1 Last-day dynamic single %
 - D2 Last-2-days dynamic two %'s

3.8% more profit

- D2
highest profit
lowest waste

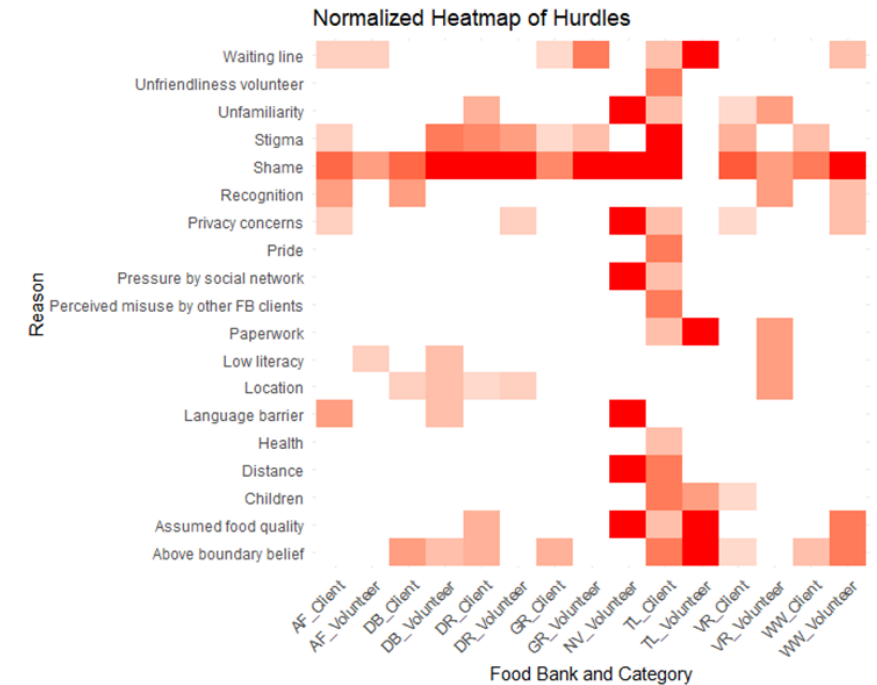
- Cannibalization?

	NO	FO	D1	D2
Profit	2.50	2.54	2.56	2.58
# sold	3.88	3.94	3.95	3.97
% fillrate	97.27%	97.25%	97.25%	97.15%
% waste	5.61%	4.23%	3.98%	3.60%

36% less waste

What's next for us?

- Retail:
 - Continu research on discounting vs donating
 - Crowd-sourced food waste interventions
- Food bank:
 - Continue 'Under the radar' programme
- New project SCOPE (2026-2028)
 - Collaboration with FB, food industry and food services
- Contact: Rene.Haijema@wur.nl



Frans.Cruijssen@tilburguniversity.edu





THANK YOU FOR YOUR ATTENTION



Food Banks Reimagined

Effective Redistribution Strategies for Impact

ZeroW SILL4

Contributors:

Belgian Federation of Food Banks

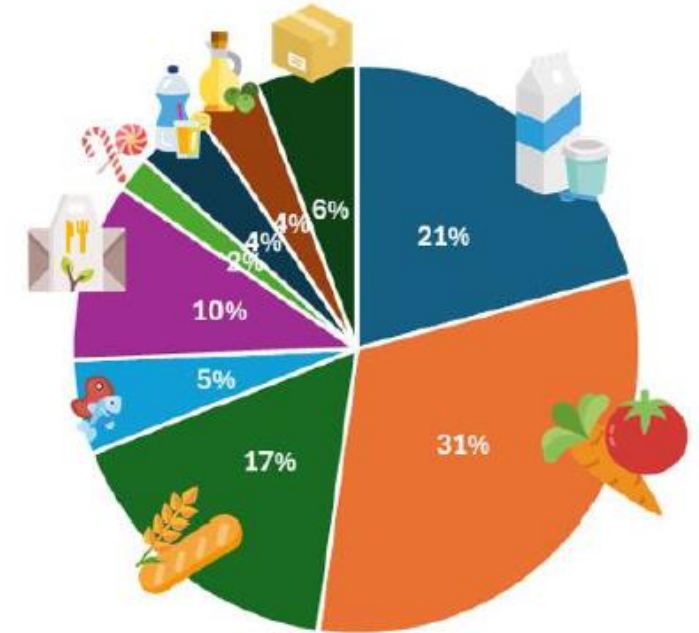
Etienne Rubens

ILVO

Bart Van Droogenbroeck , Anna Twarogowska

Our Goal In The Project

- Piloted a mobile processing unit at a Food Bank
- Explored the potential of processing surplus fruits & vegetables on-site
- Assessed whether Food Banks could adopt this model long-term
- Increase the availability of nutritious food for member associations
- Help improve access to healthy food for people facing food insecurity



Where fr & veg.:

- canned: 27%
- fresh: 67%
- frozen: 7%

Two-Step Approach for Food Banks

1. Prioritise Fresh Distribution

- Maximise the direct distribution of fresh fruit and vegetables
 - Volumes received by Food banks from auctions dropped by **40% between 2021 and 2024**

2. Reprocess Surplus Peaks

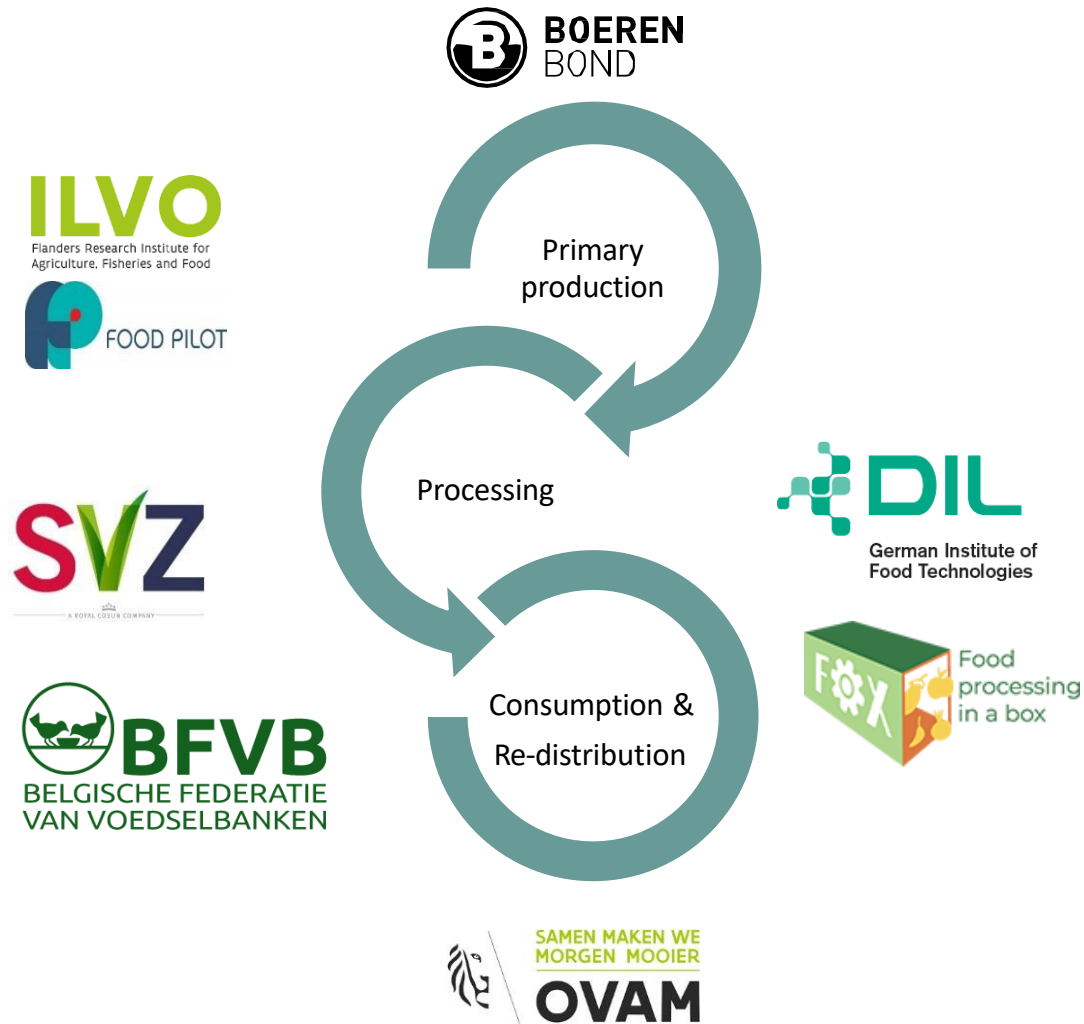
- Explore how mobile units or local hubs can help manage large donation peaks
- Convert surplus into shelf-stable products (e.g. juices, soups)

Aim: Reduce waste and extend availability of nutritious food

Fresh Distribution

CHALLENGE	→ ACTION TAKEN
Few info-exchanges between the Food banks	Weekly information exchange between food banks about incoming fruit & vegetable deliveries from auctions: <ul style="list-style-type: none">• Enables better coordination and distribution of balanced and varied produce• Facilitates more efficient and equitable redistribution to local partner associations
Collection concentrated on Mondays	<ul style="list-style-type: none">• Explore pickup options at auctions on additional weekdays e.g. Wednesdays, Thursdays, or Fridays• Increases flexibility and reduces missed redistribution opportunities
No fresh fruit (apples) received	Plan meeting with fruit auction Borgloon

ZEROW - SILL 4 = A Strategic Partnership !



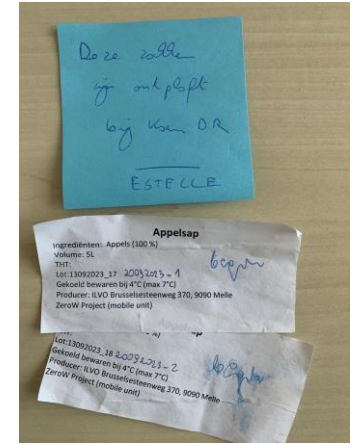
Reprocessing of Peak Volumes



Conclusions

“Everyday use reveals practical hurdles”

- Limited utilities (power, water)
- Too little space for clean workflow
- Safety risks: cables, humidity, ventilation
- Legal hurdle: wastewater permission



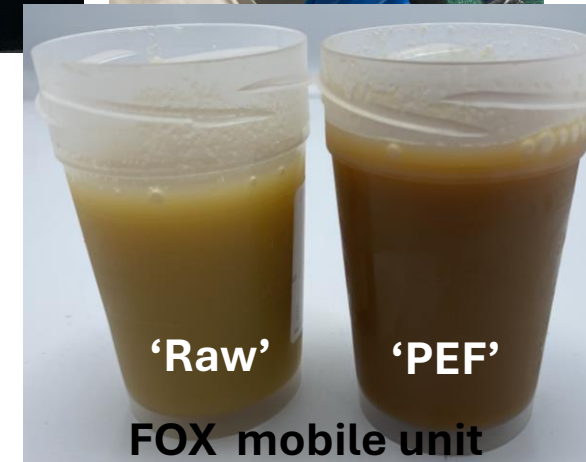
“Fixes exist, but we can’t implement them all now”

- Technical solutions identified
- Constraints: prototype design, budget, time



“We know how to improve quality, but must prioritize”

- Quality challenges are known
- Not all solutions can be applied yet
- Examples: vacuum vessels, pasteurization vs. PEF



Reprocessing of Peak Volumes

- **Successful Demonstration**

- Juices & blends from diverse fruits & vegetables
- Same technology applied in different setting (Fructus Juice, Limburg)

- **Realistic Simulation**

- Fixed installation mimicked inside
- Showed feasibility under operational conditions

- **Diverse Inputs, Different Outputs**

- Broad variety of raw materials processed
- Clear differences in juice yields

- **Consumer Perception**

- End-user appreciation still to be explored
- Example: tomato juice with basil and tomato soup



Reprocessing Surplus Peaks: A Policy Perspective

BE Flanders:

What is allowed

- Small-scale processing of withdrawn fruit & veg into meals

What is not allowed

- Large-scale processing into juice by external processors
- Strict control systems enforced by local authority

What is missing

- No government funding for processing

Why it matters

- Limited options to reduce waste
- Less support possible for Food Banks

ES Catalonia:

What is allowed

Large-scale processing of surplus by external processors

What is supported

- Regional authorities cover processing costs

Why it matters

- Food Banks can rescue & reprocess more withdrawn fruit into juice



Key Lessons from Reprocessing Peak Volumes

Operational Insights

- Processing needs **expertise & major investment**
- Food Banks prefer **outsourcing to external partners**
- Core role of Food Banks = **(re)distribution**

Policy Barriers & Opportunities

- Policies must **enable** safe **processing of surplus**
- Need **financial support for processing costs**
- Viable model = **permission + funding**
- Fragmented responsibilities → **inaction**

Reprocessing works, but only if supported by the right expertise, funding, and policies.



THANK YOU FOR YOUR ATTENTION

SPEAKERS



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