



Changing practices and Habits through Open, Responsible, and social Innovation towards ZerO food waste

EU Platform on Food Losses and Food Waste – 27 November 2025

Coopmans Isabeau (ILVO – Flanders Research Institute for Agriculture, Fisheries and Food)



**BUDGET:**  
6,095,569.00 €



**OCTOBER 2022 -  
SEPTEMBER 2025**



**DURATION: 36  
MONTHS**



**Nº OF COUNTRIES: 9  
14 PARTNERS**

**CHORIZO  
PROJECT**



# The CHORIZO project

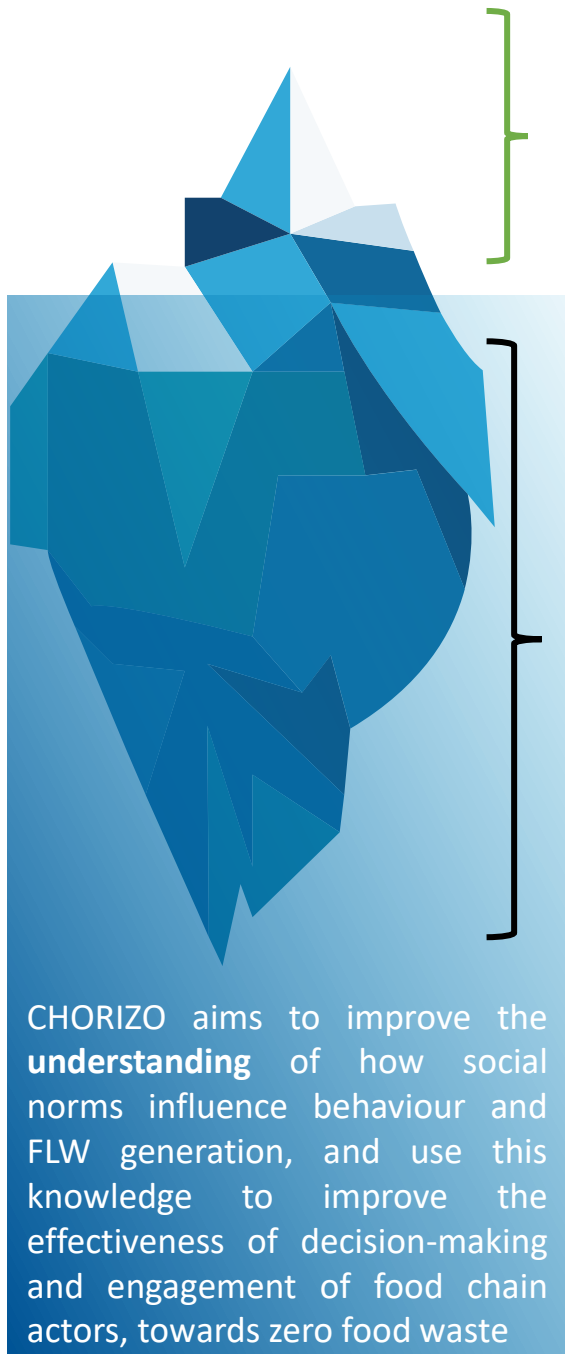


Changing practices and Habits through Open, Responsible, and social Innovation towards ZerO food waste



ALMA MATER STUDIORUM  
UNIVERSITÀ DI BOLOGNA





What is the impact of existing FLW actions?

Which are the social norms responsible for FLW ?

How can we change social norms?

CHORIZO aims to improve the understanding of how social norms influence behaviour and FLW generation, and use this knowledge to improve the effectiveness of decision-making and engagement of food chain actors, towards zero food waste

## What we do

### RESEARCH

Gathering & sensemaking of existing evidence

+

generating new evidence and understanding on social norms, behaviour & FLW

+

### ACTION

fostering change in social norms & FLW behaviour

=

accelerating progress towards zero FLW

## What we deliver

Evidence-based analysis of FLW actions & tools

FLW prevention/reduction index

Sector-specific guidance, on high-potential actions

### Real-life case studies

 Consumers/  
Households FW

 Hospitality  
FW

 Food  
Services FW

 Schools FW &  
obesity/malnutrition

 Date marking &  
packaging FW

 Food banks  
mediated FW

MOA - HUMAT behavioural framework

Empirical evidence sensemaking

FLW modelling & predictive analytics

Chorizo FLW Insider

FLW rapid appraisal tool

### Actors' guidance towards changing social norms

Social norm-focused communication

Social norm-focused science education

Social norm-focused capacity building

### Dissemination, Exploitation, Communication

CHORIZO FLW Insider's upscaling strategy

Innovation impact synergies with the EC & EU projects

Results' leveraging to FW Associations

Impacts



### Scientific

- IP1: Creating high-quality **new knowledge on the impact of FLW prevention/reduction actions**
- IP2: Creating high-quality **new knowledge on how SNs influence FLW behaviour**
- IP3: Fostering **diffusion of knowledge & Open Science**

### Societal

- IP4: **Changing social norms** towards OFW
- IP5: **Strengthening the uptake** of R&I in society

### Economic / Technological

- IP6: **Generating innovation-based growth** from FW prevention and reduction activities

Outcomes



**More timely and responsive decision-making in FLW prevention & reduction**

**Increased & more effective engagement of food actors in FLW prevention/reduction**

**R1.** Evidence-based analysis of FLW actions & tools

**R4.** Case Study Strategic Plans

**R8.** FLW modelling & predictive analytics backbone

**R11.** Sector-actor-context guidance to change social norms

**R15.** Chorizo Insider's upscaling

**R18.** Dissemination, Exploitation, Communication

**R2.** FLW prevention/reduction index

**R5.** FLW 'Insighter' Datahub

**R7.** Integrated MOA - HUMAT behaviour modelling framework

**R10.** FLW rapid appraisal tool

**R12.** Social norms-focused communication products

**R16.** Innovation impact synergies

**R3.** Sector-specific guidance on FLW actions

**R6.** Empirical evidence sensemaking

**R9.** Correlations of social norms, FLW & identification of change levers

**R13.** Social norms-focused science education package

**R17.** Project results sustainability strategy

**R14.** Social norms-focused capacity building & helpdesk

WP1

WP2

WP3

WP4

WP5

WP6

Key results

# OBJECTIVES → OUTPUTS

1

## Comprehension of existing FLW actions

a comprehensive evidence-based analysis of previous/ongoing FLW prevention/reduction interventions and tools

→ FLW interventions inventory + sector-specific guidance

2

## Empirical Datahub

- Develop a Datahub to include insights from existing evidence + new empirical case study evidence
- with “ChatFLW”

3

## Modelling backbone

- Develop predictive analytics and develop a modelling backbone for changing social norms towards OFLW, based on CSs data
- → CHORIZO Visualizer / **Rapid Appraisal Tool** with FW scenario’s

4

## Fostering change

Foster change in social norms and behaviours by embedding the new evidence and taking into account actor, context, and gender aspects

- Social-norms focused **education package** (eg, board game)
- Social-norms focused **communication** products (e.g. zero waste host apron)
- Social-norms focused **capacity building** activities

5

## Upscaling strategy

Effectively manage the Project’s innovation upscaling

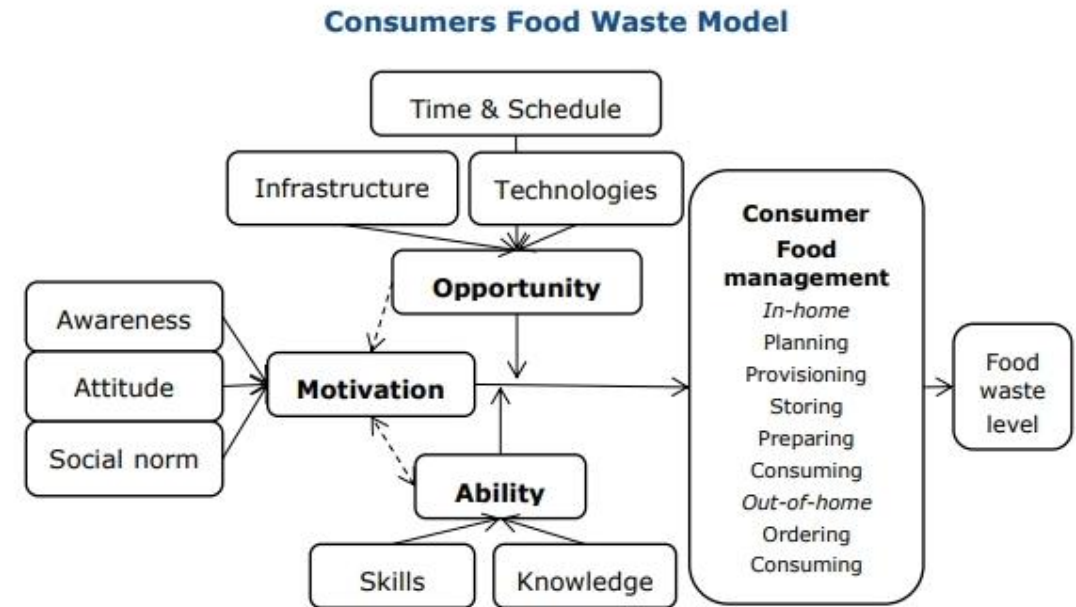
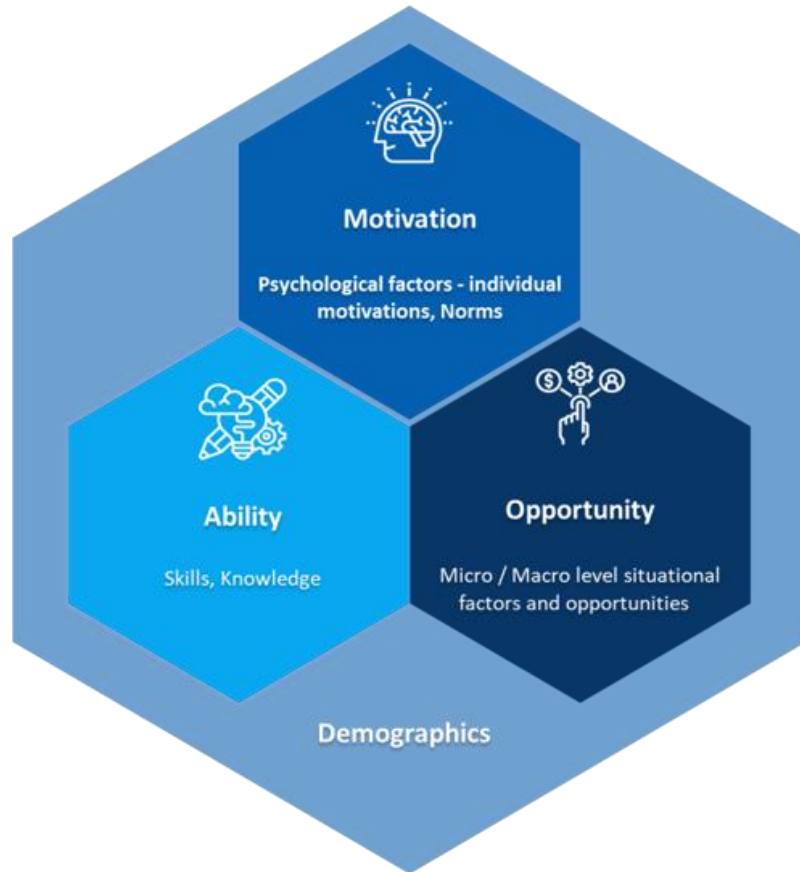
6

## DEC - Engage

Engage with national EU, and global initiatives for proper dissemination, exploitation and communication of actions


- **Joint final event with ZeroW project**

## MOA framework




**Figure 3: Consumer Food Waste Model.** Motivation, ability and opportunity to engage in food waste prevention predicts the amount of consumer food waste generated. Black and dashed lines indicate influence on.

# What are social norms?

A photograph of a group of people dining at a restaurant. The scene is captured from a slightly elevated angle, showing several tables with people seated. In the foreground, a man in a grey shirt and a white cap is seen from the back, looking towards a woman with long brown hair who is smiling and talking to another woman. The table is set with various dishes, including what looks like a salad and some bread, along with several glasses of beer. The background shows other diners and the interior of the restaurant, which has a warm, wooden atmosphere with string lights hanging from the ceiling.

“Social norms are unwritten rules which influence people’s everyday behaviour.”

# How do social norms work?

A group of people are seated at a long table outdoors, likely at a festival or fair. They are engaged in conversation and eating. The table is set with various dishes, including what appears to be a pizza, and several glasses of beer. The background shows a wooden structure and other people, suggesting a social gathering.

Conform with what you think is expected (injunctive)



# Injunctive social norms

---

- Social norms are rules/guides for actions expected by others, as perceived by individuals belonging to the norm's target group.
- In other words, what you think others expect you to do
- **E.g. hosting a party – provide an abundance and variety of food (good provider identity)**
- **E.g. when you are a guest at your friend's house, you might feel obliged to finish your plate to be polite**
- unconscious, habitualized, automatic (Kahneman System 1)
- unquestioned, natural
- breaking the norm makes us realize there was a norm in the first place

# How do social norms work?



Conform with what you think is expected (injunctive)



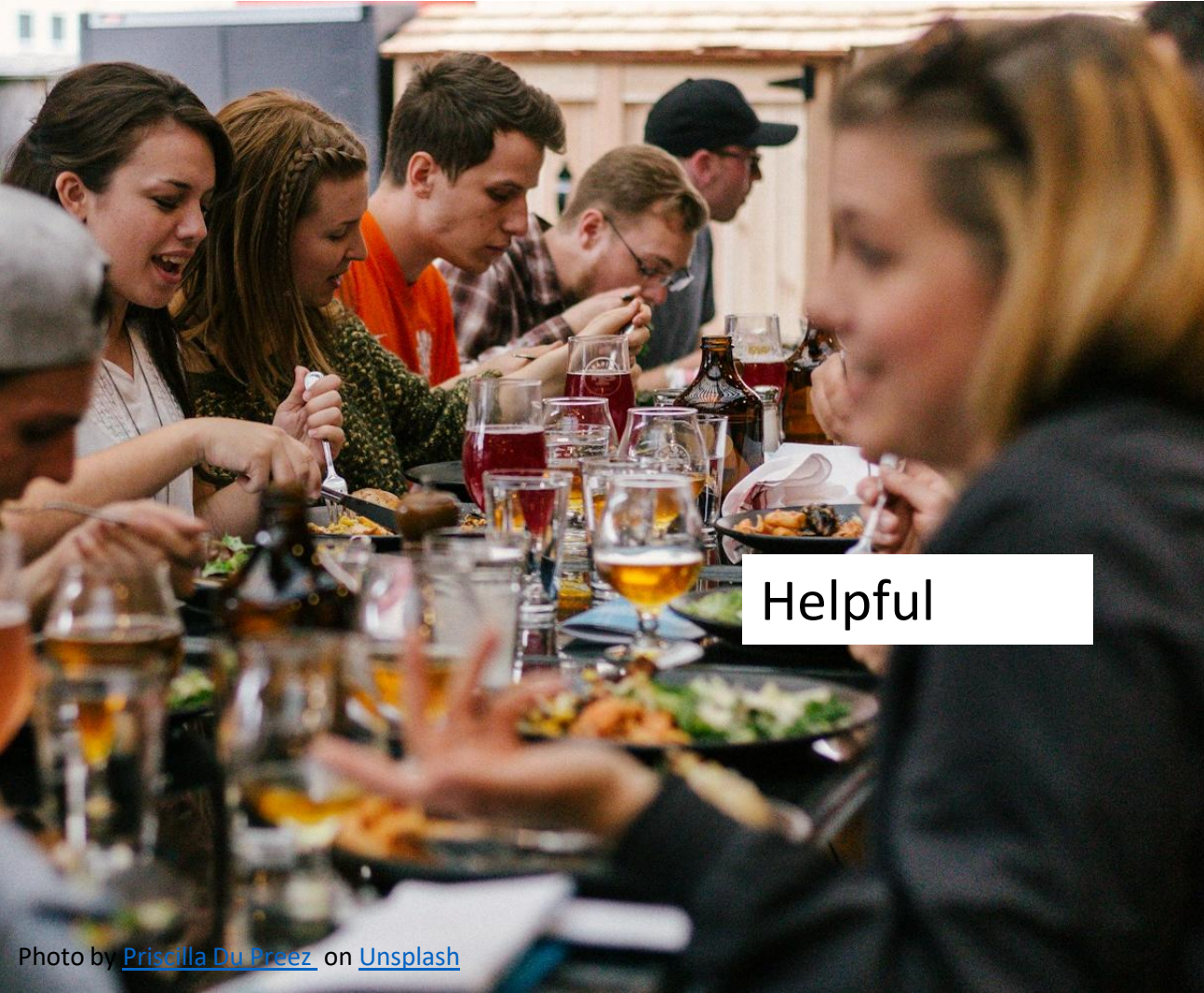
Copy observed behaviours (descriptive)

# Descriptive social norms

---

- Copy others' behaviours
- Based on observability of actions of others, that serve as a reference for what is appropriate in a given setting
- Play an important role **when faced with uncertainty** (novel settings), when uniform actions of others can signal successful strategies
- **E.g. others take their containers to a party to take leftovers home. If you see this, you might feel encouraged to do the same**

# What can be effects of social norms?



Helpful



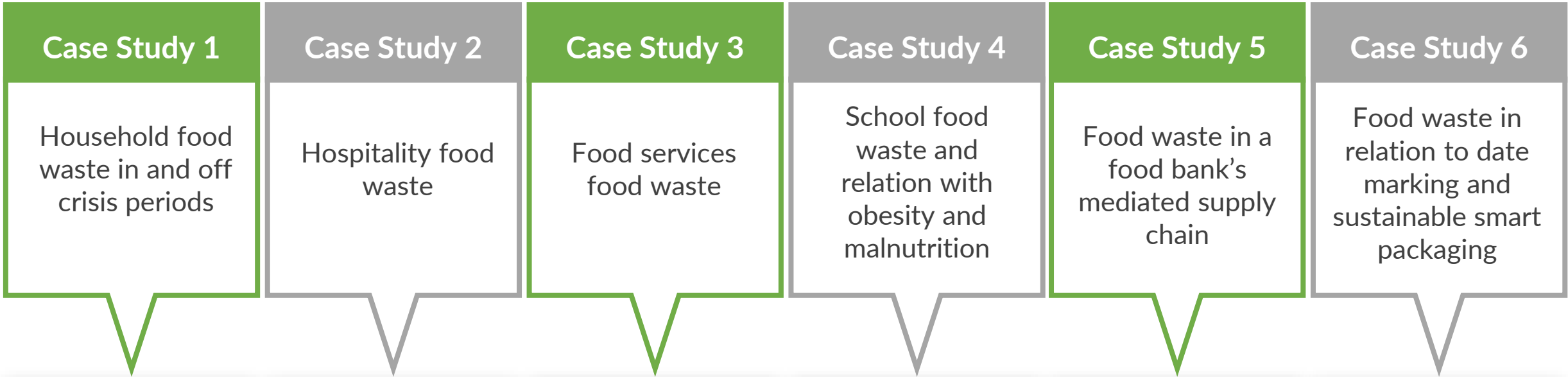
Unhelpful

# SOCIAL NORMS in CHORIZO

---

- We investigated which social norms are in place, and how they work
- Investigation: using existing data + gathering new data in our Case studies
- Important: there are many different social norms in different contexts. That's why we conducted our research in 6 different case studies (from households, to schools, to restaurants and hotels, to food banks context)

## CHORIZO CASE STUDIES



### Data collection methods

Interviews, Focus groups, Surveys, Behavioural experiments

# CHORIZO: context of behaviours driven by social norms



# CHORIZO: context of behaviours driven by social norms



# Normative influences on FLW behaviour

## ✓ Suboptimal food / undesirable food quality

- ✓ People accept or reject food based on looks, taste, or texture.

- Fruits and vegetables with unusual appearance are viewed as of inferior quality

- Second level quality food is “still good for the needy” versus people in need deserve same quality as others

## ✓ Good provider identity

- ✓ Wanting to be seen as a good parent or host often leads to offering more food than needed.

- Head of household purchasing variety and plenty of foods when doing groceries

- abundant buffets for premium image

## ✓ Portion size & food affluence

- ✓ Larger portions symbolize status and hospitality in wealthier cultures.

- Prepare/serve more than what you expect your guests/household members will eat

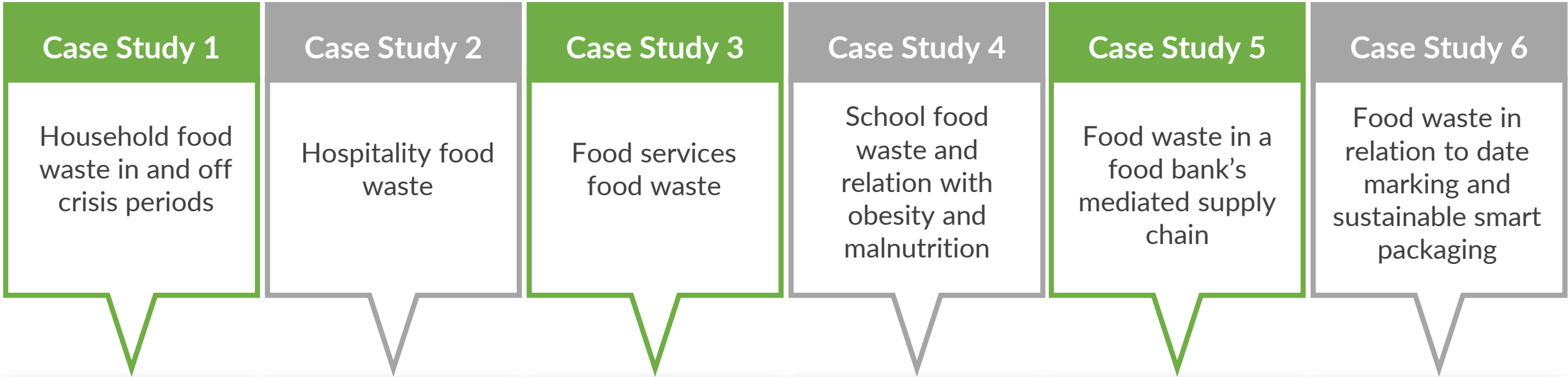
- FW is considered unavoidable in large scale food services and therefore it is socially accepted

## ✓ Associations between FW behaviour and socio-economic status

- ✓ Socio-economic status shapes attitudes and habits related to food waste and value.

- Taking leftovers home is making the consumer look poor

# CHORIZO CASE STUDIES



### Data collection methods

Interviews, Focus groups, Surveys, Behavioural experiments

# Which message is more effective?



## Setting:

Test in Norwegian 8 Strawberry Hotels

The influence of various messages relating to social norms at the breakfast buffet was tested.

# CHORIZO confirms: The positive message is more effective!

- **Positive** messages **reduced food waste by 11%.**
- **Waste increased by 24%** for **provocative** messages.



It is proven also by other studies that positive framing is more effective, than a provocative one.

Also: dynamic rather than static framing

## Setting:

- Test in Norwegian 8 Strawberry Hotels
- The influence of various messages relating to social norms at the breakfast buffet was tested.

# Campaigns or interventions based on SNs:

- Which framing works best depends on many factors, such as:
  - The norm itself
  - The target group
  - The environment of the behaviour
  - Competing social norms
- Therefore, different target groups will respond differently on the same interventions. Therefore, always test test test
- But generally:
  - Use positive rather than negative, and dynamic rather than static framing
  - Emphasize the changing trend, not the current established behaviour
  - Visual cues work well

# DATAHUB with chatFLW

- [Welcome - Chorizo Project](#)
- With chatFLW function. Don't forget to indicate your persona group. It will adapt its answer to your interests
- Data
- Papers
- Deliverables, publications
- [Food-Waste-Guidance-for-Cities final.pdf](#)
  - This guide equips cities with practical instructions on how to work with social norms in the context of urban food waste prevention, to make plans and interventions more impactful.

# CHORIZO VISUALIZER / RAPID APPRAISAL TOOL

- **Explore how different behaviours and interventions impact food waste.**
- Based on advanced modelling method that incorporated the MOA analytical framework into the HUMAT Agent Based Model
- But very inviting way to present modeling results to wider public, via the interactive tool. You do not need modelling skills to be able to interpret the results of the simulations.
- This interactive tool shows the results of simulations in households and food service settings. Use it to discover what works, compare scenarios, and find inspiration for action. No modelling skills needed — just select, explore, and learn.
- You can also download the scenario booklet
- [CHORIZO PROJECT | SCENARIOS](#)

# Rapid Appraisal tool - The Home Cook model

- presents simulation results of household-level food waste, investigating food management, from grocery shopping to meal preparation. The scenario's help you to **understand the relative importance of different household habits and strategies in FW generation**
  - → properly storing food and respecting expirations dates are key to minimize FW



# Rapid Appraisal tool - Establishment Diner model

- Curious about how personal, social and environmental factors influence decisions from approaching the buffet to finishing the meal?
- The Establishment Diner model presents the simulation results of **how different types of guests choose, eat, and waste food in a breakfast buffet setting**. It focuses on portion selection, consumption, and waste.
  - **combination of guest awareness, plate size, and message tone influences fw amounts**
  - When **awareness** is low (e.g. in case of many leisure guests and few business guests), neither communication presence nor tone produce meaningful change
  - **Tone** matters: supportive, inclusive language complements the mindset of structured business travelers.
    - → Consider structured interventions like waste visibility, guided serving, or staff engagement.
    - → Internal motivation and message framing work together to achieve the lowest waste levels.



# THANK YOU!



**Isabeau Coopmans**  
Onderzoeker | Researcher

**ILVO**

**Flanders Research Institute for Agriculture, Fisheries and Food**

**Instituut voor Landbouw-, Visserij-, en Voedingsonderzoek**

Landbouw en Maatschappij | Social Sciences Unit

Burg. Van Gansberghelaan 92

9820 Merelbeke-Melle (Belgium)

T +32 9 272 23 87

[isabeau.coopmans@ilvo.vlaanderen.be](mailto:isabeau.coopmans@ilvo.vlaanderen.be)