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# FOOD LOSS AND CONSUMER BEHAVIOUR IN FLEMISH HOUSEHOLDS

DEPARTEMENT  
LANDBOUW  
& VISSERIJ

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# context

- ▶ 2015 , **Food Waste Chain Roadmap 2015-2020**.
- ▶ Nine action programs aim to **reduce food waste by 15% by 2020** .
- ▶ Zero measurement 2015
- ▶ The **Flemish Monitor Food Waste and Food Losses** (2017) showed that households are among the three largest sources of food waste (in tonnage) throughout the chain.
- ▶ Study on the impact of “cosmetic quality standards” on food losses in the Flemish fruit and vegetable sector
- ▶ New research commissioned by Flemish Department of Environment and carried out by GfK Belgium in 2016-2018.
- ▶ Purpose:
  - to get a more accurate picture of the food losses generated by Flemish households
  - to gain a better insight into the key drivers underlying household losses, which is indispensable for setting up wellconsidered future actions towards this target group.

# Food losses and residues (zero measurement)

3/4 of food waste are residues, just 1/4 is food loss

Flow→  Indicator →  Link ↓	Food losses (= edible food waste)			Residues (= inedible food waste)	
	Absolute quantity (tonnes)	Proportion in chain (%)	Food loss (tonnes in relation to total production in the link (%))	Absolute quantity (tonnes)	Proportion in chain (%)
fisheries	5,201	1%	21%	5,201	0%
Agricultural production	330,319	36%	4%	119,033	5%
Auctions f&v	14,629	2%	1.4%	647	0%
Food industry	225,481	25%	1.5%	2,123,964	82%
Retail	43,391	5%	2.6%	21,437	1%
Hospitality sector	19,108	2%		48,342	2%
Catering	57,070	6%		3,005	0%
households	211,858	23%	5,9%	256,447	10%
Total chain	907,077	100%		2,578,076	100%

# Monitoring 2017-2018



- ▶ positive signals in the monitored chain links.
  - donating food surpluses is on the rise.
  - size of food waste flows and food losses is decreasing
  - cascade index scores increase (more valorising food residual flows.
- ▶ food loss remains limited compared to total production and consumption.
- ▶ increased attention and targeted efforts by chain links and the government to avoid food losses and to valorise food waste streams.
- ▶ the results prove that progress can be made.
- ▶ we will achieve the target of -15% food losses and an increased valorisation of food waste flows by 2020.



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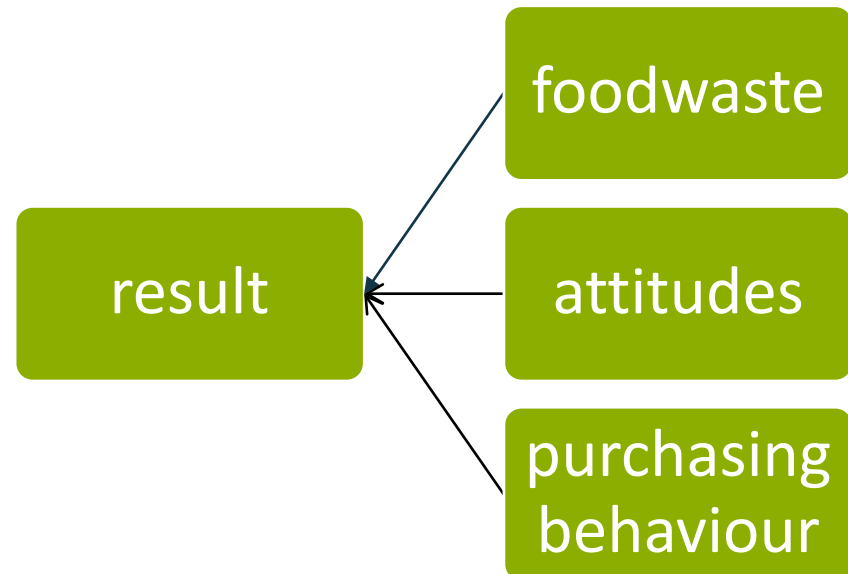
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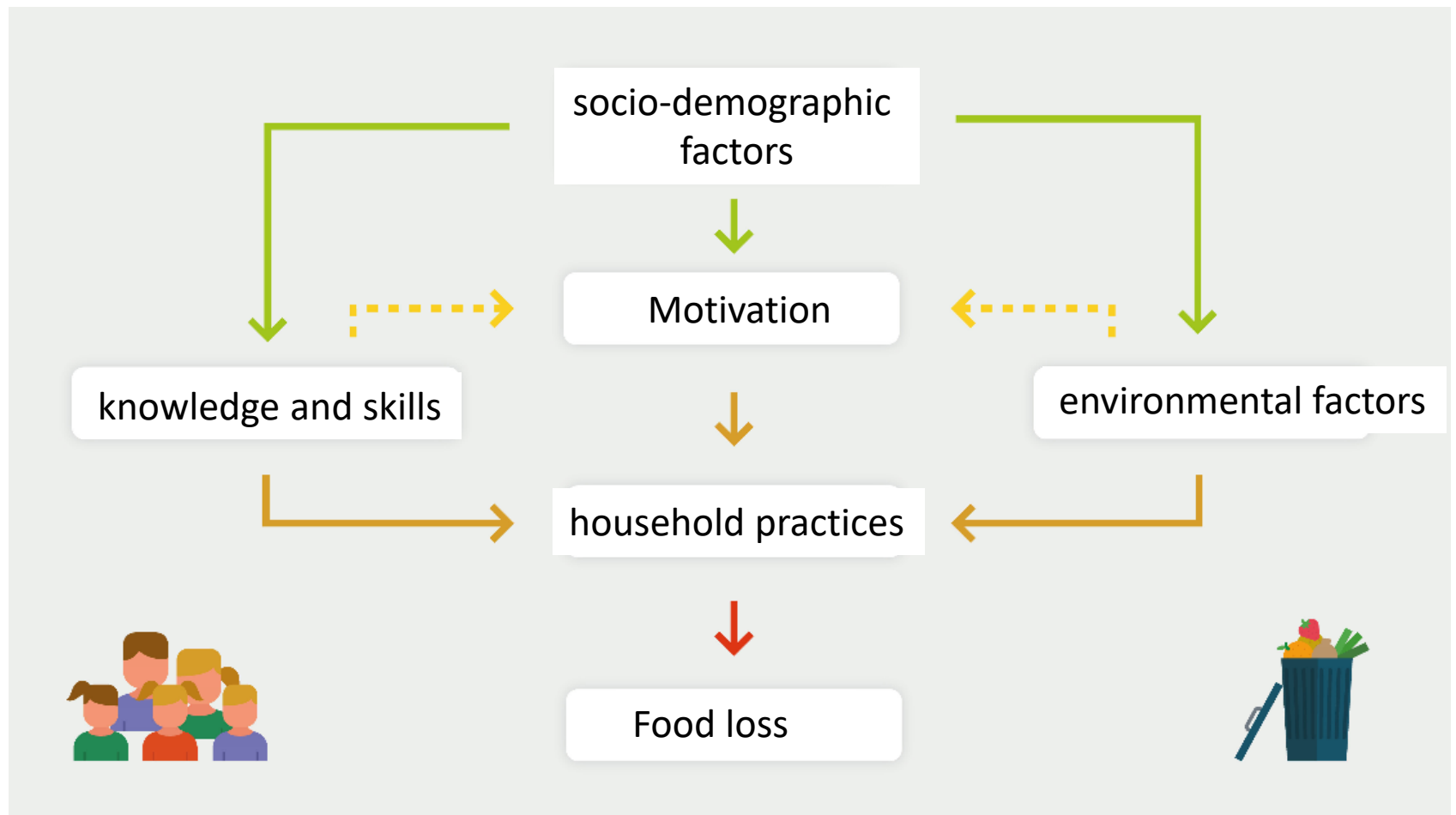
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# methodology

1. **Literature review** of relevant studies and policy documents
2. **Journal study** about the food thrown at home. (1023 households)
3. **Online survey** about attitudes and perceptions about food loss, storage habits and eating patterns.
4. **Real purchasing behavior**
5. **Data fusion and weighting**





# Facts and figures



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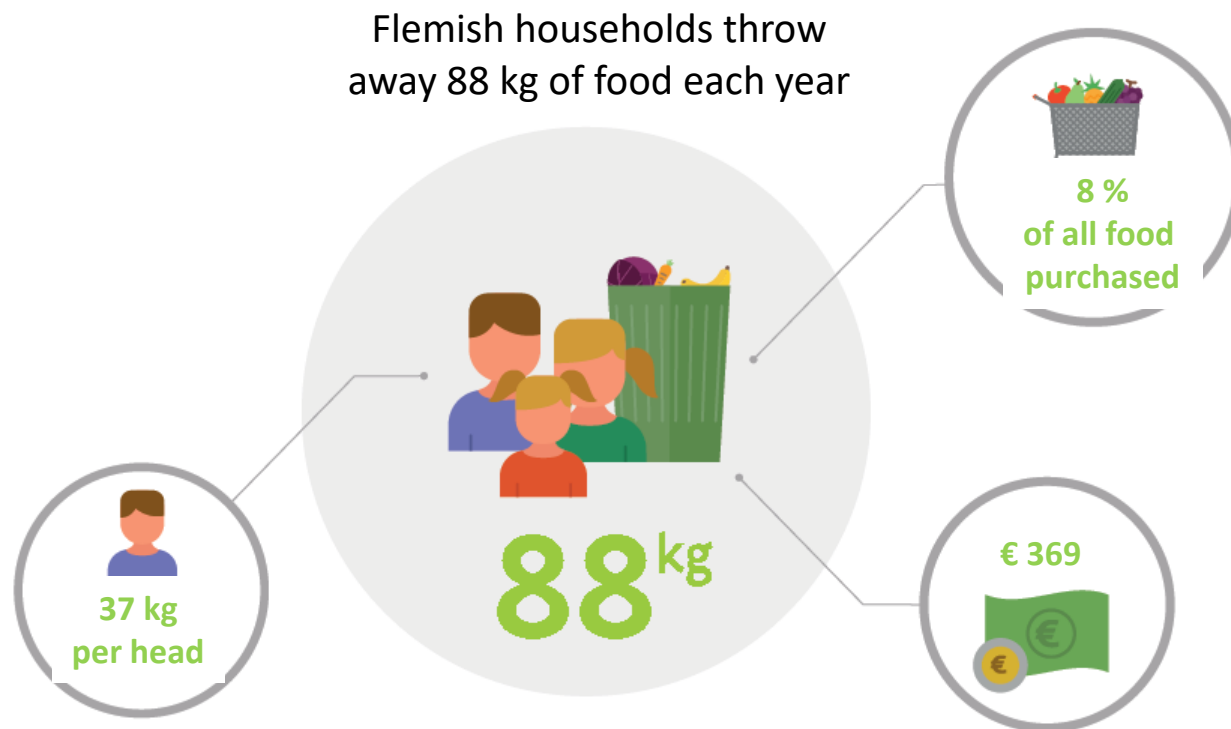


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# HOW MUCH FOOD DO FLEMISH HOUSEHOLDS WASTE?



# WHAT KIND OF FOOD DO FLEMISH HOUSEHOLDS WASTE?



# WHAT IS THE IMPACT ON THE ENVIRONMENT OF FOOD LOSS IN FLEMISH HOUSEHOLDS?



Impact of annual food consumption of an average Flemish household

Impact of annual food loss of an average Flemish household

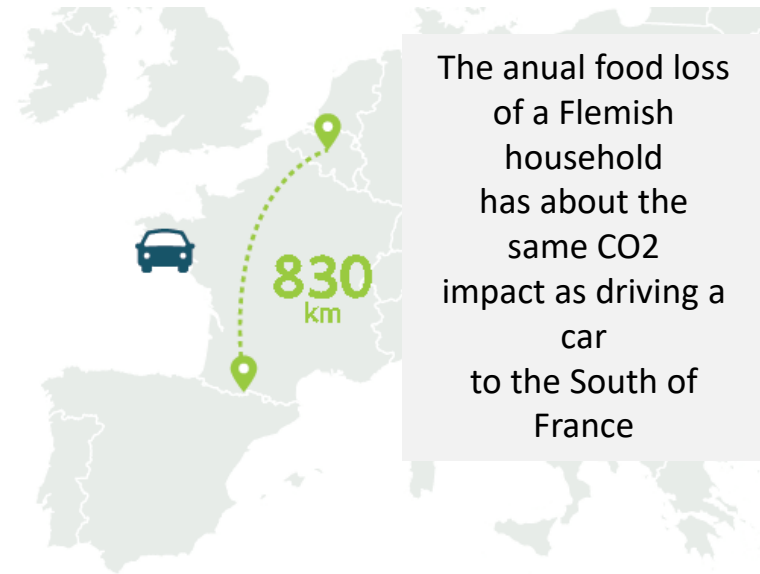
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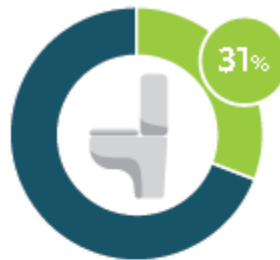
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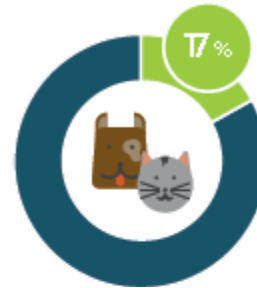
# WHERE DOES THE WASTED FOOD END UP?



Residual waste



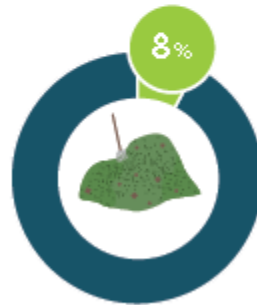
Sink or toilet



Pet feed



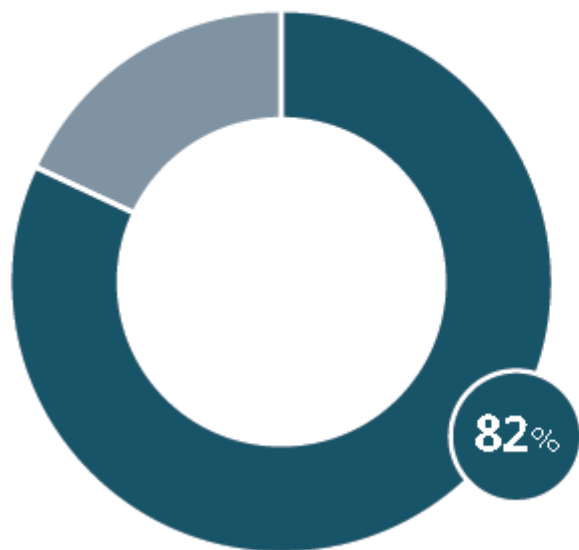
Containers for  
vegetables, fruit  
and garden waste



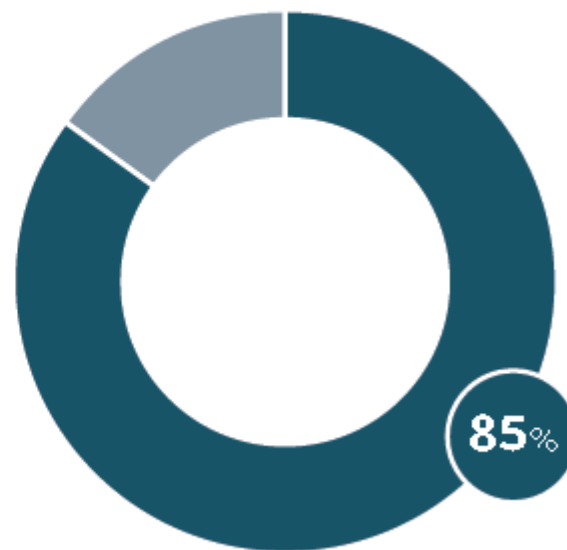
Home  
composting

# Food loss in Flemish households: **attitude, motivation and social norm**

Throwing away food  
is irresponsible



Throwing away food  
causes a feeling of guilt



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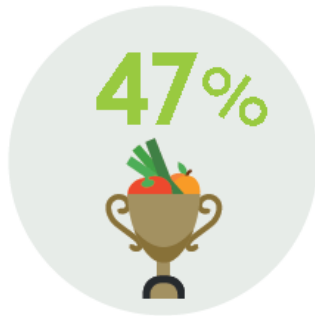
# WHAT MOTIVATES FLEMISH HOUSEHOLDS TO REDUCE FOOD LOSS?



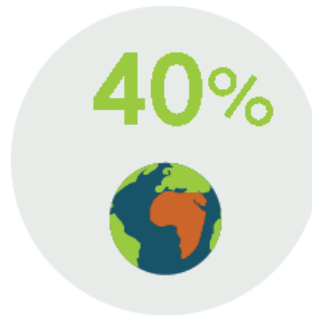
Dislike of  
wasting food



Money-saving



Respect for food






Worldwide food  
shortages



Environmental  
Impact reduction




# WHY DO FLEMISH HOUSEHOLDS THROW AWAY FOOD?

	<b>30%</b> Because they <b>prepared</b> or <b>poured</b> too much
	<b>29%</b> Because the <b>products</b> are <b>spoiled</b> and/or no longer tasty
	<b>11%</b> Because they <b>don't</b> feel like eating/drinking it anymore
<b>8%</b> Because the <b>expiry</b> <b>date</b> has passed	<b>7%</b> Because they <b>bought</b> too much
<b>6%</b> Because they <b>forgot</b> they had the food in the house	<b>6%</b> Because the vegetable or the portion in the <b>package</b> is too large
<b>4 %</b> other reasons	



# KEY DETERMINANTS

# KNOWLEDGE AND SKILLS

		
<p><b>Cooking skills</b></p> <p>➤ The better the cooking skills, the less food a household wastes.</p>	<p><b>Being able to portion correctly</b></p> <p>➤ The better households can estimate how much food they need, the smaller the amount of food they waste.</p>	<p><b>Being able to accurately estimate the shelf life</b></p> <p>➤ Households which find it easy to assess whether food is still safe to eat, generate less food loss.</p>

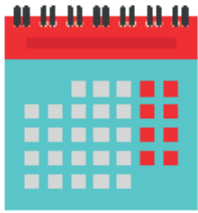


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# HOUSEHOLD HABITS AND PRACTICES 1



## **Planning purchases and meals**

Better planning reduces food loss.



## **Measuring portions**

The more often households use a cup, measuring jug or scale to determine the right quantity of pasta or rice, the less food they waste. Relying on intuition to determine the right portion size does not have any impact.



## **Dealing with leftovers**

The more often households store chopped vegetables and leftovers and use them at a later stage, the less food they waste.

# HOUSEHOLD HABITS AND PRACTICES 2



## Frequency of household food purchases

The less frequently households purchase food products, the smaller the generated food loss.



## Checking the expiry date

Households which look at the date only occasionally to check the shelf life generate less food loss. Using the senses to assess the shelf life does not have any impact.



## Impulse purchases

The less frequently households are tempted to buy on impulse, the less food they waste.

# Additional information

► <http://www.voedselverlies.be/en>

- Foodloss and consumer behaviour in Flemish households
- Monitoring food loss in Flanders
- The impact of cosmetic quality standards on food losses in the Flemish fruit and vegetable sector
- Food supply chain roadmap on food loss 2020
- Declaration of commitment



Food industry



Hospitality industry



Social organisations



Local authorities



Health care



Education

# Data → policy priorities

- new government policy note (over different ministries, agriculture, environment, social affairs...)
  - Fighting food waste is an absolute priority.-50% 2030
  - the chain is viewed in an integral, sustainable and circular way (including attention to food loss)
  - encouragesustainable food use. Food surplusesare collected via the most optimal distribution channels and delivered to people who are financially vulnerable or who live in poverty.
  - strive for a fully circular economy (raw materials and water) and to maximize our well-being with a smaller ecological footprint. and reduce our GHG emissions in a sustainable way
  - focus on the collection of organic-biological waste, which is processed as high as possible
  - develop a circular society

# Concrete action plans

- Interdepartmental working group (agriculture, environment, economy, education, welfare)
- Food loss prevention plan
- Improve our plans for selective collection and valorisation of food waste streams
- Plan on other biomass residues
- Development of a platform for the use of residual flows (incl. farm level)
- Platform for surpluses of unsold food (food banks and NGOs)
- ▶ Local food strategies (cities)



# Contact:

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