

Reducing food waste is no pipe dream

The Amsterdam Produce Show and Conference

November 3, 2016

Joost Snels



Message

- Food waste is more than just wasting food: it appeals to the World's Biggest Problems!
- The Food Waste issue can't be ignored. We have to address it!
- Reducing food waste is not a '*one man's job*'!
- Reducing food waste is not easy, but can be done!

Trafo House

To Transform (*træns'fɔ:m*): to **change completely** the appearance or character of something or someone, especially so that that thing or person is **improved**

<http://dictionary.cambridge.org/dictionary/english/transform>



Picture: [https://upload.wikimedia.org/wikipedia/commons/f/fa/Amsterdam_transformatorhuis_512961_\(2\).JPG](https://upload.wikimedia.org/wikipedia/commons/f/fa/Amsterdam_transformatorhuis_512961_(2).JPG)

3 main issues: sum = food security

Shutterstock



Climate change

Shutterstock



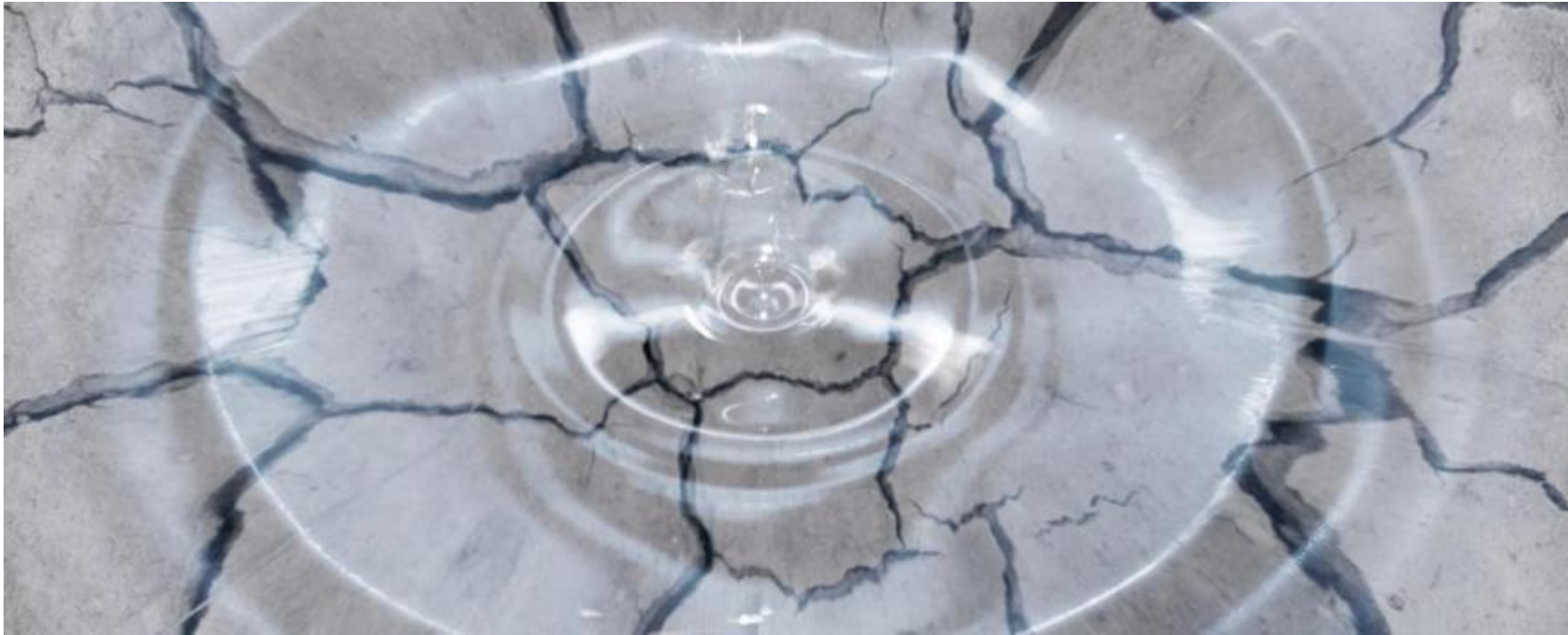
Growth world
population

Shutterstock



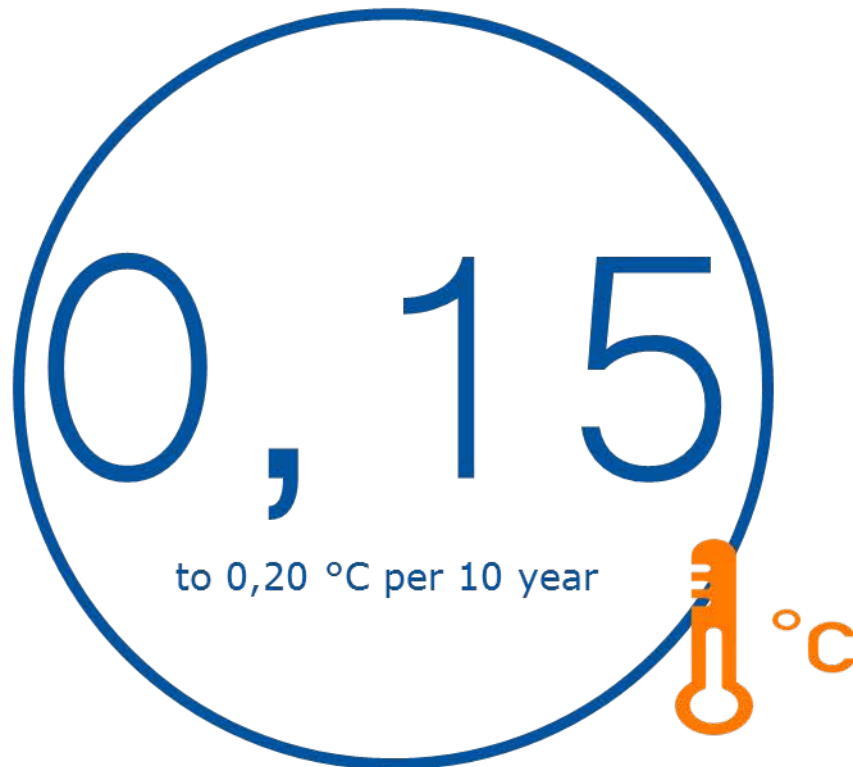
Food Waste / Food
Losses

Climate Change

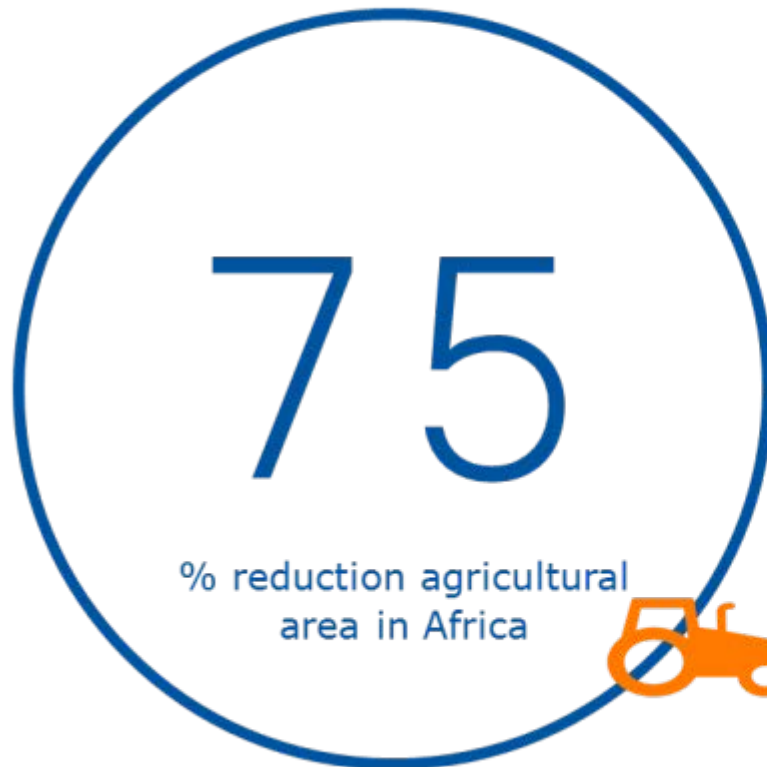


Shutterstock

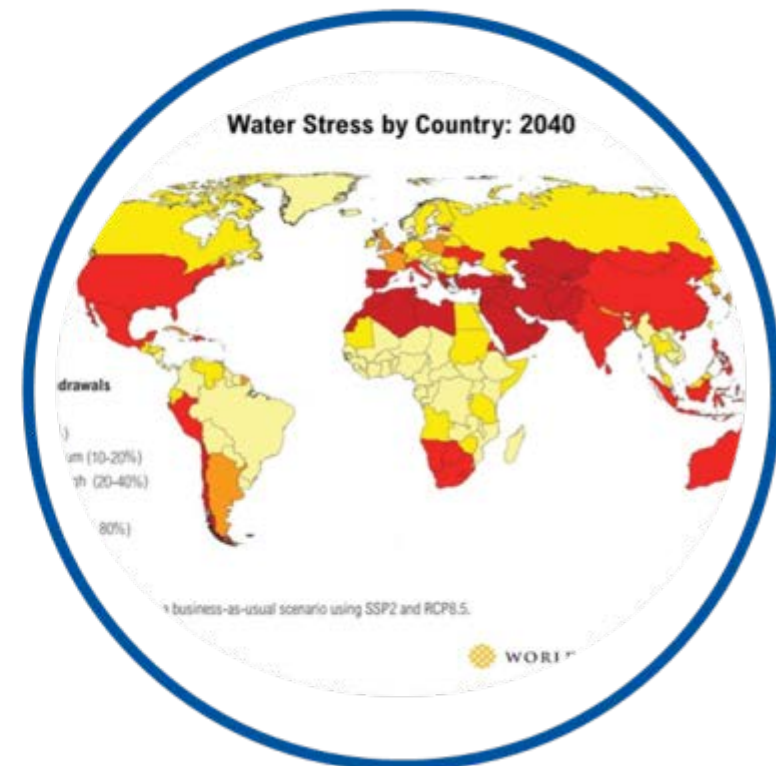
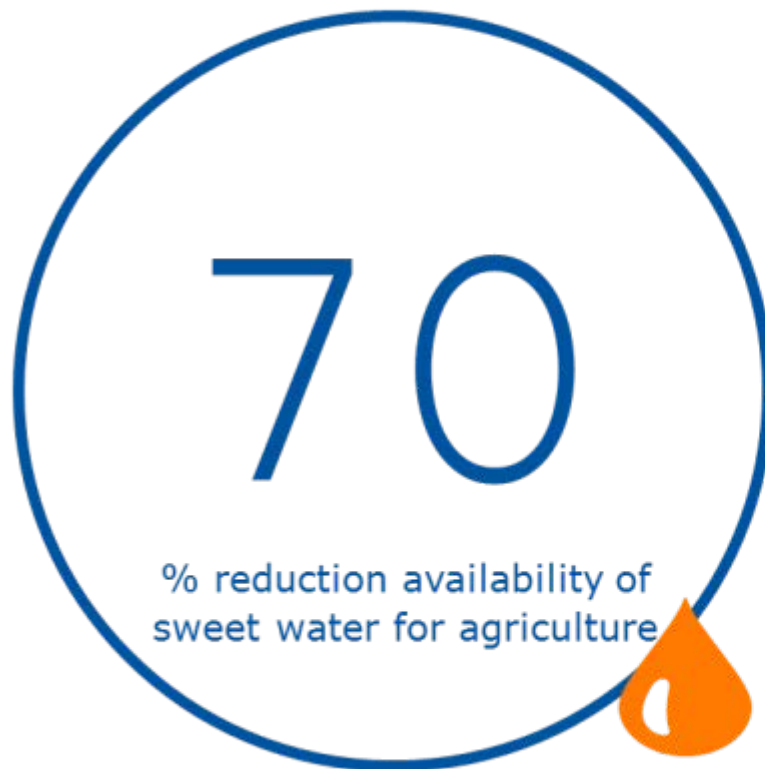
Climate Change and world food prices



Climate change and agricultural area



Climate change and water stress



Climate change and land grabbing

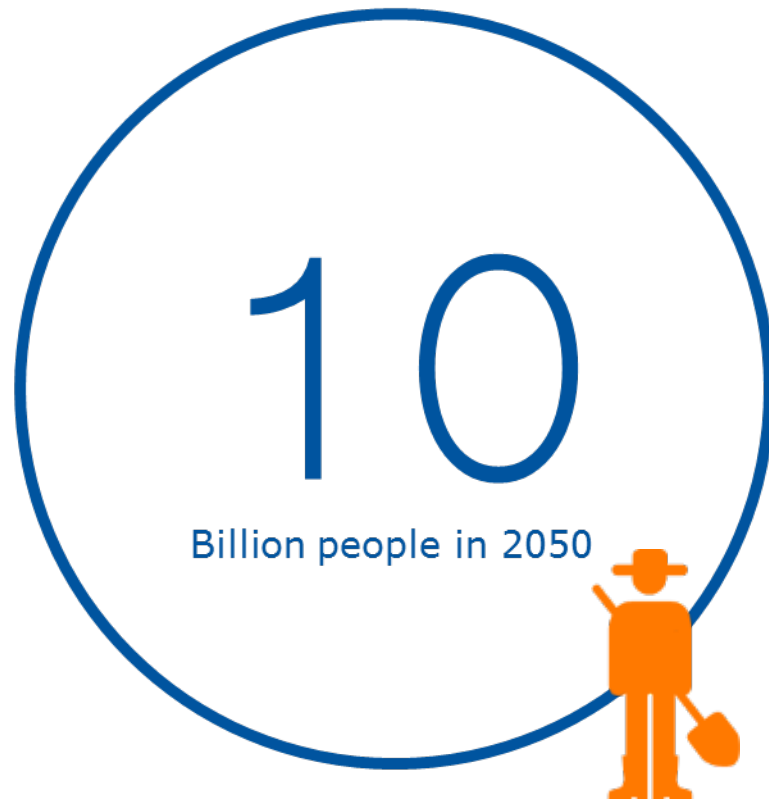


Growth world population



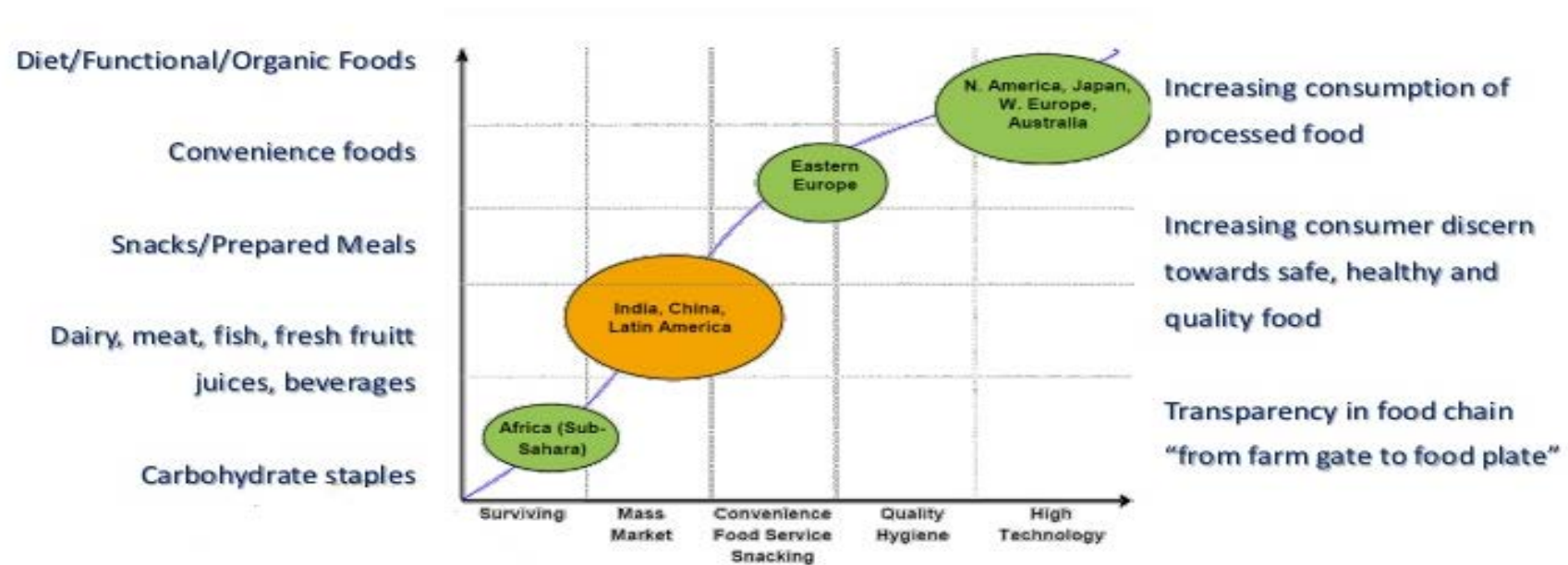
Shutterstock

Crowing demand for food



Changed consumption pattern

- More meat, more processed food



Source: Peter Smeets

Food waste / Food losses

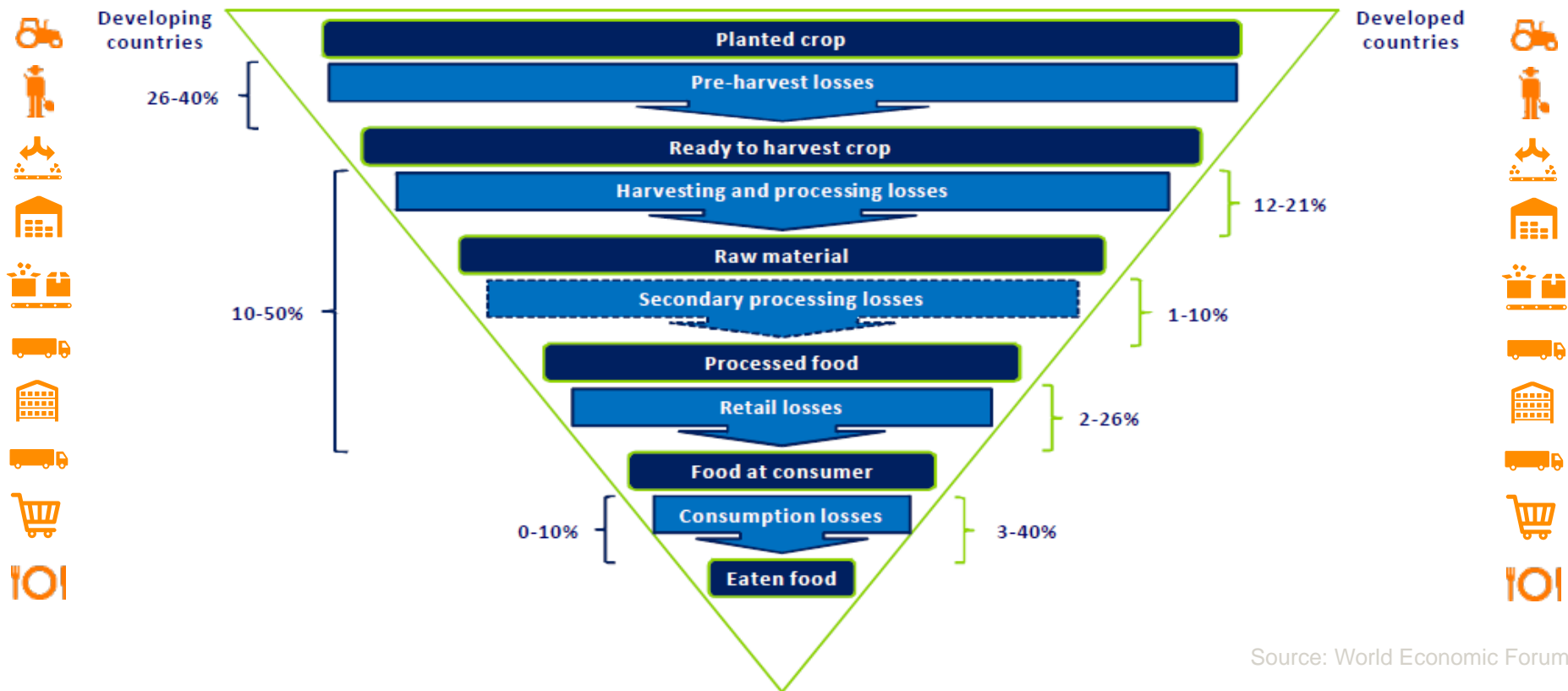


Shutterstock

Food produced but not eaten



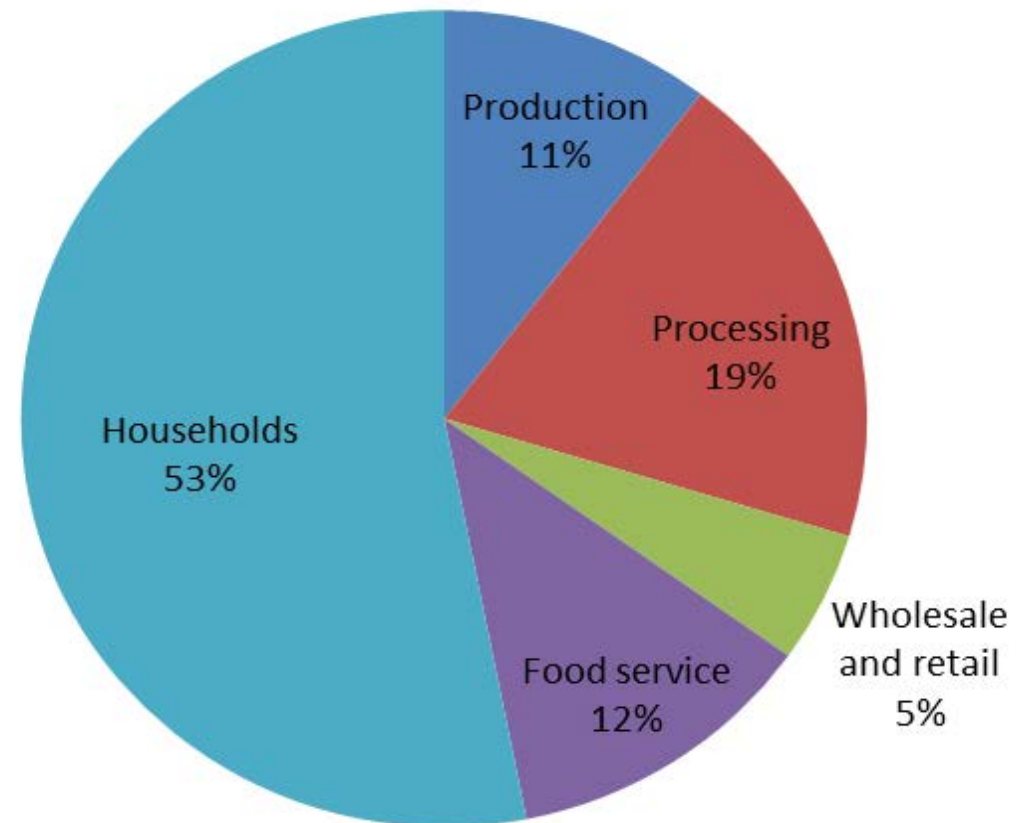
Food Waste in the Chain



Food Waste (EU-28)

88 million tons

143 billion Euros per year
(= €143.000.000.000)



Source: https://www.researchgate.net/publication/301216380_Estimates_of_European_food_waste_levels

Households in The Netherlands

- 14% of food ends up in the bin
- This is 50 kg. and more then € 150/person/year
- 25-40% of the total waste is food

- A real waste!?



Food Waste is more than wasting food

Climate change + Growth world population + Food Waste = Food Security

Consider these estimates of the resources dedicated to food that never gets eaten in the United States:



Source, U.S. EPA

Why?

Planning of purchase / ordering by consumer / customer is tricky

- Balancing out-of-stock vs waste (empty shelves, service level)
- Focus on best-before and use-by date
- Production errors (packaging, quality issues entry, logistics, cold chain interruption, etc.)



Why?

- Over production, interventions by (bad) pricing
- Limited insight and often unclear where responsibility lies for loss & lack of control mechanisms
 - Pain & Gain sharing, lack of trust and transparency
- Legislation leads to restrictions (by-products, sales)



Yes we can (just some examples)



Households: what will help me

	EU	Netherlands
Better estimate of portion size (how much you cook)	62	60
Smaller portions available in stores	58	57
Better information on best-before / use-by	61	48
Better planning	58	57

Source: Flash Eurobarometer, 2011

Households: food battle (20% reduction)

- The combination of opportunity, commitment, measurement and information creates awareness and **behavioural change**
- The ideal opportunity to provide group / employees / members / **practical tips** to prevent food waste
- This 'ready to use' measurement & information **tool** is available providing an easy start, with plenty of room for additions



Source: www.foodbattle.nl.

Production: Mushroom stems – 'Child apples'



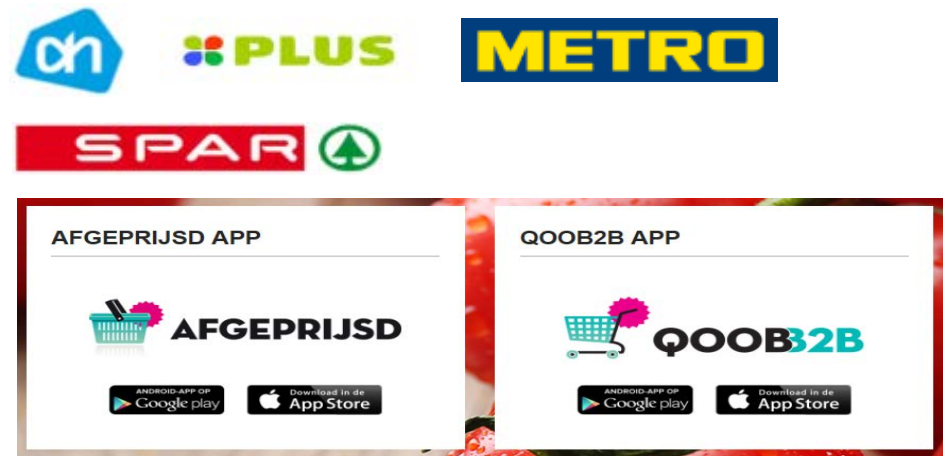
Retail: Awareness & Portion size / Quantity

- Albert Heijn and Nutrition Centre (= Voedingscentrum): 'eetmaatje' for consumers [at home]
- Lidl and Nutrition Centre: promotion sales '1 now & 1 later' [in store]
- Bag&Buy (NL) like "Original Unverpackt" (Bonn) and "Zero Waste" (Antwerpen): consumers choose the amount of products they need



Retail: discount 2.0

- App that connects products with a short shelf life with consumers / businesses (Like FoodLoop & PareUp)
- Retailers involved:
 - Albert Heijn
 - Spar
 - Plus
 - Metro



Out of Home: Awareness

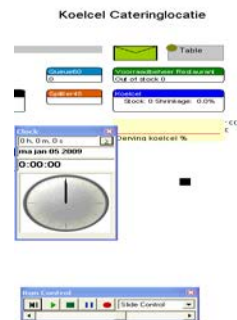
'Waste is not appreciated. So, only order what You can eat. Leftovers will be charged. Sushi's €1,00 per piece, hot meals €3,00 per dish"

SHABUSHABU
Sushi & Japanese Grill Café



Out of Home: technology

- Tools to reduce losses (nebulizer, display strategy, reuse)



Chain-wide Solutions!

■ Examples:

- Transparency
- Longer shelf life / packaging
- Ordering system / order unit
- Consumer buying selection



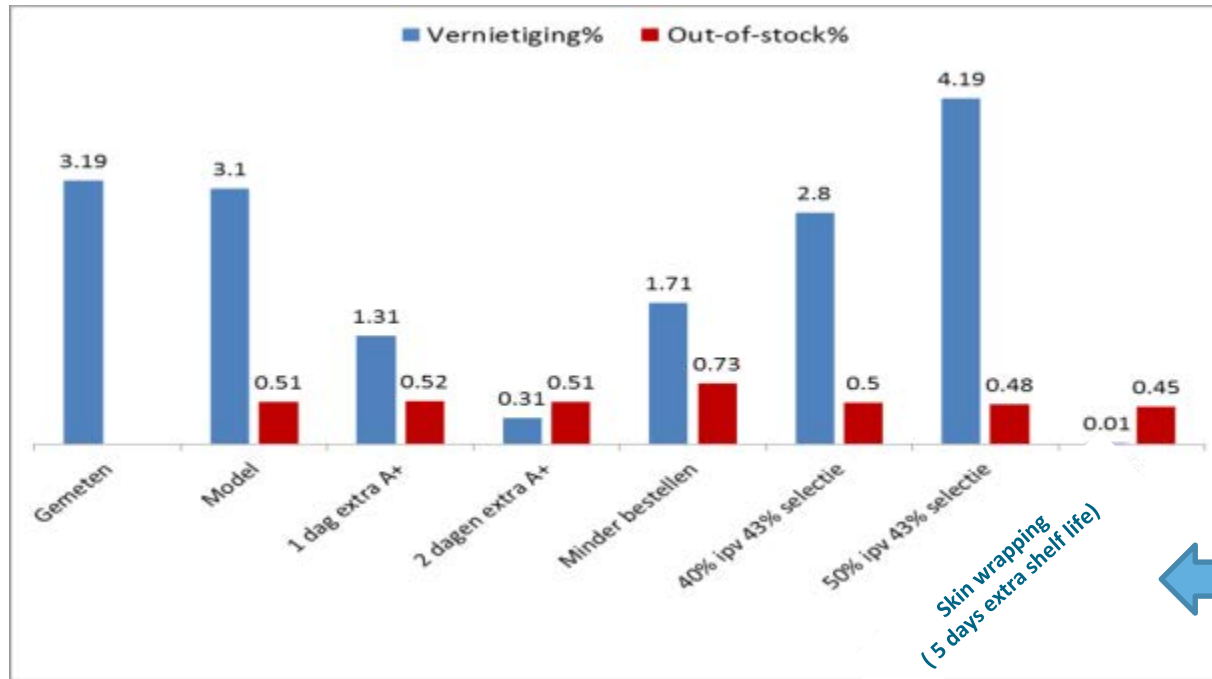
Longer shelf life



- Innovative packaging / mild preservation



Consumer behaviour / shelf life



Re-use: Surplus in the food supply chain

- Restaurant *Instock*: surplus that otherwise would be wasted is turned into meals in restaurant setting



- A lot of Foodbank initiatives with most of the Dutch retailers. Lidl started a structural cooperation for DC surplus



- *Plus Retail* and *Hutten Catering*: re-using surplus from retail stores in new products (verspillingsfabriek / Source Shakers)



Message

- Food waste is more than just wasting food: it appeals to the World's Biggest Problems!
 - Climate Change, Growing World Population & Food Security
- The Food Waste issue can't be ignored. We have to address it!
 - The numbers are massive
- Reducing food waste is not a 'one man's job'!
 - Big issues come with big (food chain) challenges
- Reducing food waste is not easy, but can be done!
 - sometimes "*That's one giant leap for man, one small step for mankind*"

Thanks

joost.snels@wur.nl

