



17th European Roundtable on Sustainable Consumption and Production

Research | Experience | Development

14.-16. October 2014 | Portorož, Slovenia



# Too precious for the bin

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HOW TO MOBILIZE POTENTIALS FOR THE REDUCTION OF FOOD WASTE

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# Structure of our WS

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## 1. Introductory presentations

- Garette Clark, UNEP: Think.Eat.Save – Global Food Waste Prevention Initiative
- Maria Kalleitner-Huber, AIE: Reasons for & local strategies against food waste

## 2. expert discussion and group work

-> sketch basic conditions of foodsharing initiative

# Glimpse on food waste

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FAO study: 1/3 of food produced for human consumption is lost or wasted globally, which amounts to about 1.3 billion tons per year.

- > does not reach customer
- > not used for its origin purpose
- > inefficient use of natural resources
- > environmental impact

-> ethical/social, ecological and economic dimension of the problem

Source: Gustavsson et al.: Global food losses and waste, 2011

# Avoidable food waste, is food which...

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- = at the time of disposal was still eatable
- = would have been eatable when consumed earlier
- = has not expired/exceeded minimum durability date MDD or best before date BBD
- = was not marketable by different reasons (production, industry, trade)
- = has not been eaten by different reasons (gastronomy, households)

and therefore has been disposed.

# Food waste globally in kg/per person and year

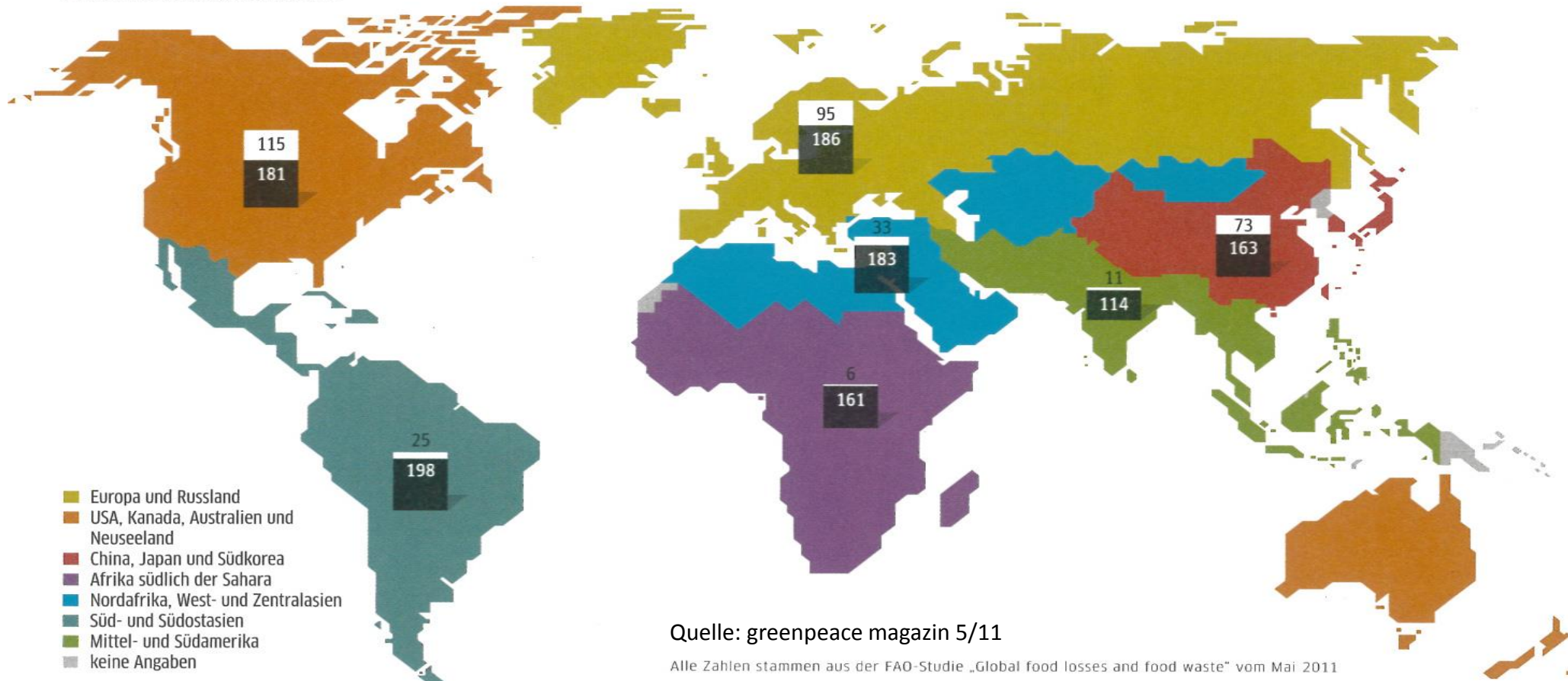
## Verschwenderischer Norden

Weggeworfene Lebensmittel pro Kopf und Jahr (in Kilogramm)

- Verbraucher
- Produktion, Transport und Handel

□ Consumer

■ Production, transport and trade



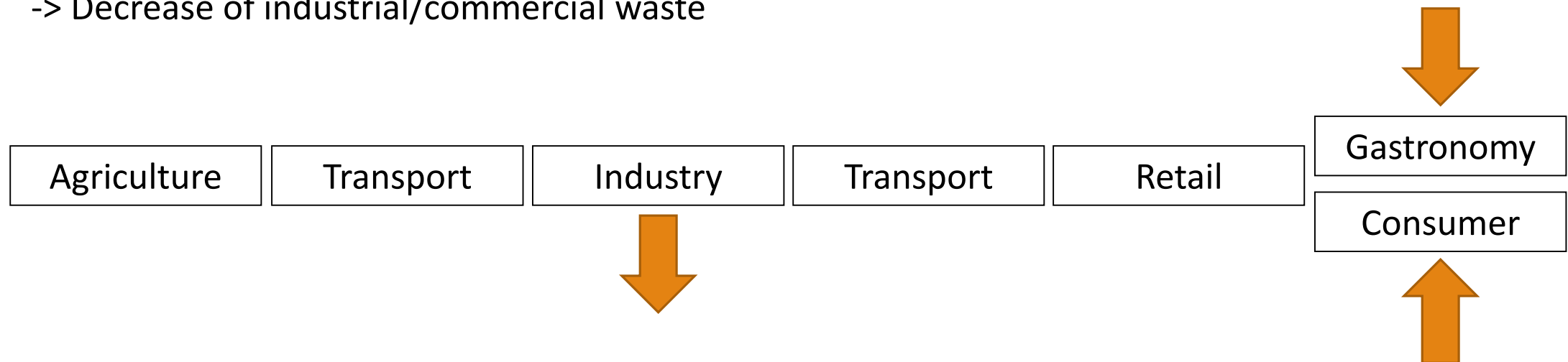
Quelle: greenpeace magazin 5/11

Alle Zahlen stammen aus der FAO-Studie „Global food losses and food waste“ vom Mai 2011

# Where does food waste occur?

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- Each step along the value chain processes food waste!
  - amounts are divided equally between production and consumption
  - Trend food waste Austria:
    - > raise of residual waste/households
    - > Decrease of industrial/commercial waste



# Food waste in EU/year

- In the EU 89 mio. tons of food waste

Main sources:

-> 95 kg/p.y on consumer level

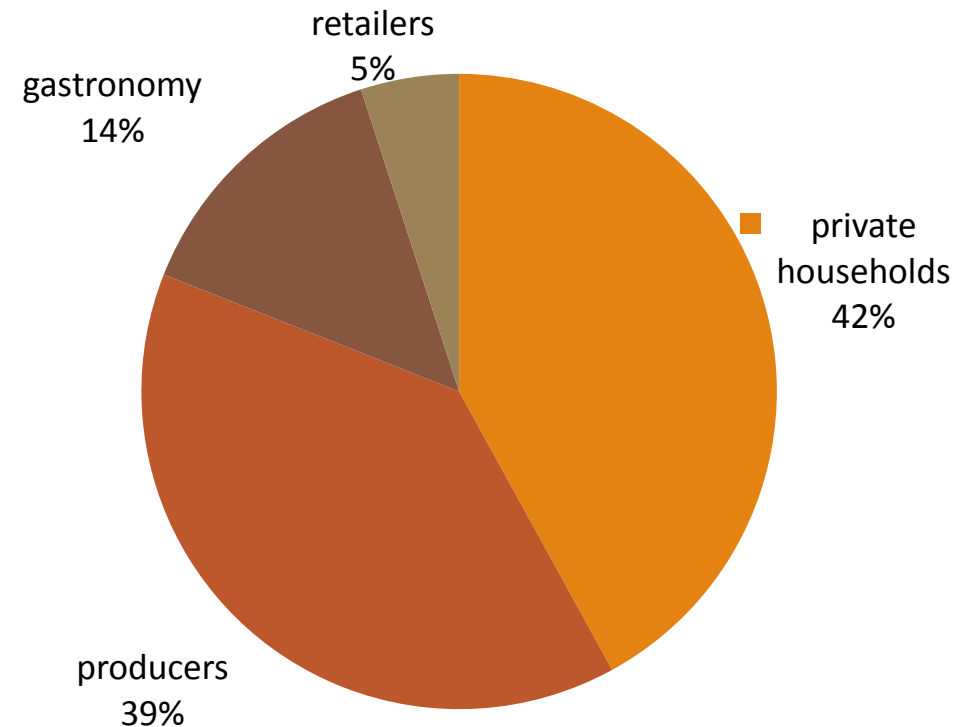
-> 185 kg/p.y on industry level

Source: Gustavsson et al.: Global food losses and waste, 2011

Trends Food Waste AT:

- in residual waste/households

- industrial/commercial waste





# Onions on the field...

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... after harvesting

Source: ABF-BOKU



# Bread from yesterday...



Source: ABF-BOKU

... to be used energetically

The amount of bread disposed of in the city of Vienna (1,7 mio people) could satisfy the demand of the city of Graz (270.000 inhabitants). Source: We feed the world

# Vegetable and fruits in...



... organic waste collection bin

Source: ABF-BOKU



tomatoes...



... not be used in pasta sauce

# Analysing waste from households...





# Dairy and meat products...



Source: ABF-BOKU

# Why do we produce food waste?

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## Some reasons at production & retail level

- due to quality standards, which reject food items not perfect in shape or appearance
- lack of coordination between different actors in the supply chain
- lower income countries:
  - financial, organizational, technical limitations in harvesting techniques,
  - storage and cooling facilities, infrastructure,
  - packaging and marketing systems.



# Why do we throw food away?

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## Some reasons at consumer level

- insufficient purchase planning and
- expiring best-before-dates/use-before
- lost confidence in our senses
- seasonal high amounts
- attitude/behaviour of consumers who can afford to waste food
  - of no use anymore
  - don't want to eat it
  - prefer different things



# Ecologic dimension

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Production of food is resource intensive:

- water consumption, arable land, resources e.g. fertilizer, packaging, energy intake: machinery, transport, storage
  - major impact e.g. areal erosion, over fertilization of water bodies, CH<sub>4</sub>-emissions
  - efforts without success if food is not eaten
- > global emissions of methane
- Organic material produces methane under pressure and exclusion of air
  - rarely captured and used, mostly uncaptured emissions into atmosphere

# Economic dimension

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resource input along the supply chain e.g.

€ Production:

- Raw materials, storage area, internal transports, working hours of people employed in production

€ Purchase of food in households

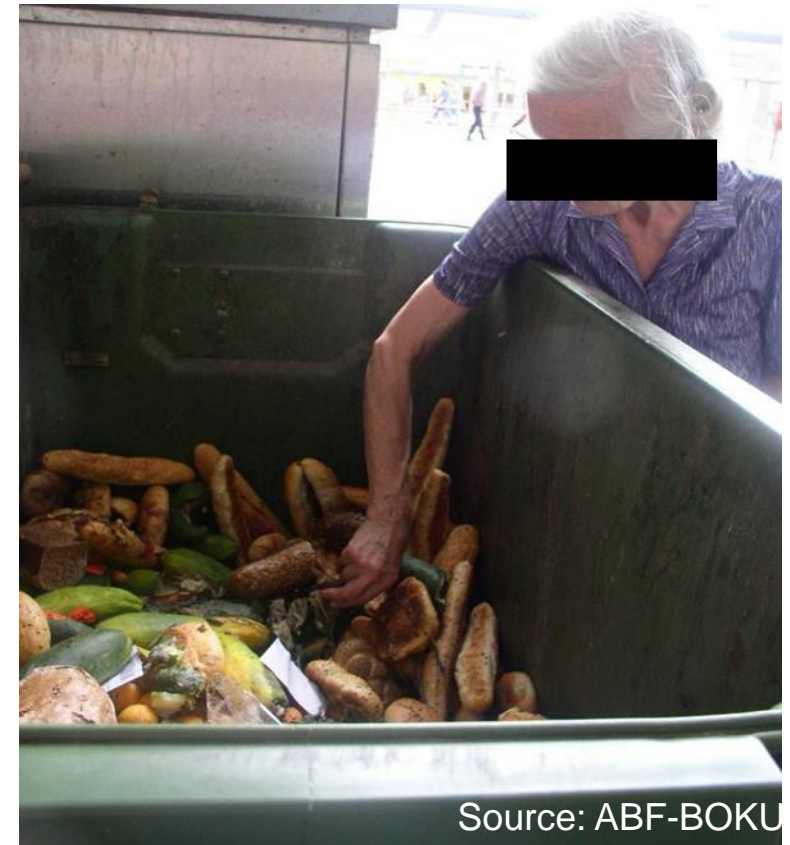
- 300-400 € per household in Austria/Vienna, 120 € per inhabitant

€ Disposal measures:

- use of machinery, transport, workforce, longtime aftercare on landfills

# Social dimension

- inequity – abundance of food vs. malnutrition at national and global level
- people who live under the subsistence level („live on the bread line“)
- e.g. in Austria 14 % of the inhabitants are at risk of poverty (1,2 million people, Source: Statistik Austria, 2012)
- e.g. in EU-27 16,4 %, (83 mio. people, Source: Eurostat, 6/2012)



Source: ABF-BOKU

# Initiatives against food waste in Austria

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- goal: 20 % reduction of food waste in residual waste until 2016
  - general reduction measures along the whole food chain
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- > cooperation with agriculture, retailers, consumers and caritative institutions – stakeholder dialogue since 2013, 4 focus areas
  - > new platform „Lebensmittel sind kostbar – Food is precious“ for networking and projects
  - > many individual projects on community level, public procurement, canteens & kitchens, private ones...
  - > city of Vienna: <https://www.wien.gv.at/umweltschutz/abfall/lebensmittel/stadt-wien.html>

# Awareness and information

- [http://www.bmlfuw.gv.at/lebensmittel/kostbare\\_lebensmittel](http://www.bmlfuw.gv.at/lebensmittel/kostbare_lebensmittel)

With practical tips for purchasing, storage, processing of food

- info folder
- teaching materials for 6-10 year old pupils
- creative leftover cooking: recipe contest, chefs as testimonials
- VIKTUALIA award for projects
- ...



# Fighting standards – „Wunderlinge“/oddtities

- project by rewe food retailing concern
- offer selected fruits & vegetables with defective appearances which have not been saled in the past
- reduced price and & quantity of 2 kg
- focus on taste rather than appearance





# Eat me! – Eat it, don't waste it

eat me! prepares vegetarian dishes from mostly organic vegetables that did not meet retail standards - due to aesthetics, not due to quality.

The dishes are served in re-usable jars in order to reduce packaging.

- delivered by bicycle for office lunch and offers catering services

<http://www.issmich.at>





# Alternative ways of cooking

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- Cookbooks e.g. „From peel to pit“
- Leftover cooking as socializing event amongst friends
- dumpstering as a political statement
- rediscover traditional ways of preparing wild herbs, vegetables & fruits:



# Transferring to caritative institutions

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- several caritative institutions serve clients with donated food, covers 55 % of their demand
- ECR Efficient Consumer Response issued a guideline for transferring of food
- Vienna: 2.252 Tons of eatable food donated by producers and retailers
  - > 94,4 % reaches the target group
- Project on national level: potentials & possibilities for Austrian wide transfer

# Private foodsharing – myfoodsharing.at



# conclusions

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- food is thrown away along the whole value chain
- all kinds of players can contribute to the prevention of food waste
- careful handling with food and groceries must be socially acceptable again
- rethinking of logistics, expectations, requirements and unconscious actions necessary
- ...

...It's all about values