


# Consumers and the Food Transition




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Gert Spaargaren  
Environmental Policy Group  
Wageningen University  
The Netherlands





# The role of consumers in food systems of the future

- Food and Sustainability: pressing concerns 
- The 'transition' of the food-system: what role for consumers?
- Direct and indirect environmental impact: on 'doing your bit' 
- Changing consumer behaviours: nudging and more 




# Food and sustainability

- >1920's/1960's: Organic Food system as Alternative System
  - Organic and Mainstream 'Opposing Paradigms'
  - Pesticide use and Fertilizers as most visible difference
- > 2000: Mainstream Food System 'engaging' with Sustainable Food
  - Sustainable /Smart/ Climate/Precision Agriculture
  - Food labelling and certification in globalizing food chains
- >2015 (Paris Agreement): Food System under Climate Pressure:
  - Climate Change brings the need for a 'Radical Transition'
  - Sustainability of Food decisive for future of the system

**Sustainability as multi-dimensional driver for change**





# Most pressing concerns for future Food Systems?



(pick the TWO DIMENSIONS that are the most important for you)

- 1) Safe food
- 2) Organic/ 'biological' food (no pesticides, no GMO)
- 3) Less food waste
- 4) Healthy food: (salt and sugar; obesity)
- 5) Fair-Trade food
- 6) Food and Ecosystem-sustainability (biodiversity/water)
- 7) Food and animal well being
- 8) Low Carbon Food (Climate Change)
- 9) Other, .....



# The 'transition' of the food systems: What role for consumers?

- Sustainability of food as main goal/direction
- Time horizon: 2020 – 2030 – 2050
- Social and Technical aspects involved (products and lifestyles)
- All actors of the Globalizing Food Chains involved
- What role for Citizen-Consumers? 

## Farm to Fork

FARMERS



PROCESSING  
INDUSTRIES



RETAIL



CONSUMERS

ROUTLEDGE STUDIES IN SUSTAINABILITY TRANSITIONS

## Food Practices in Transition

*Changing Food Consumption, Retail and  
Production in the Age of Reflexive Modernity*

Edited by  
Gert Spaargaren, Peter Oosterveer  
and Anne Loeber

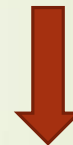


## Fork to Farm

CONSUMERS



RETAIL



PROCESSING  
INDUSTRIES



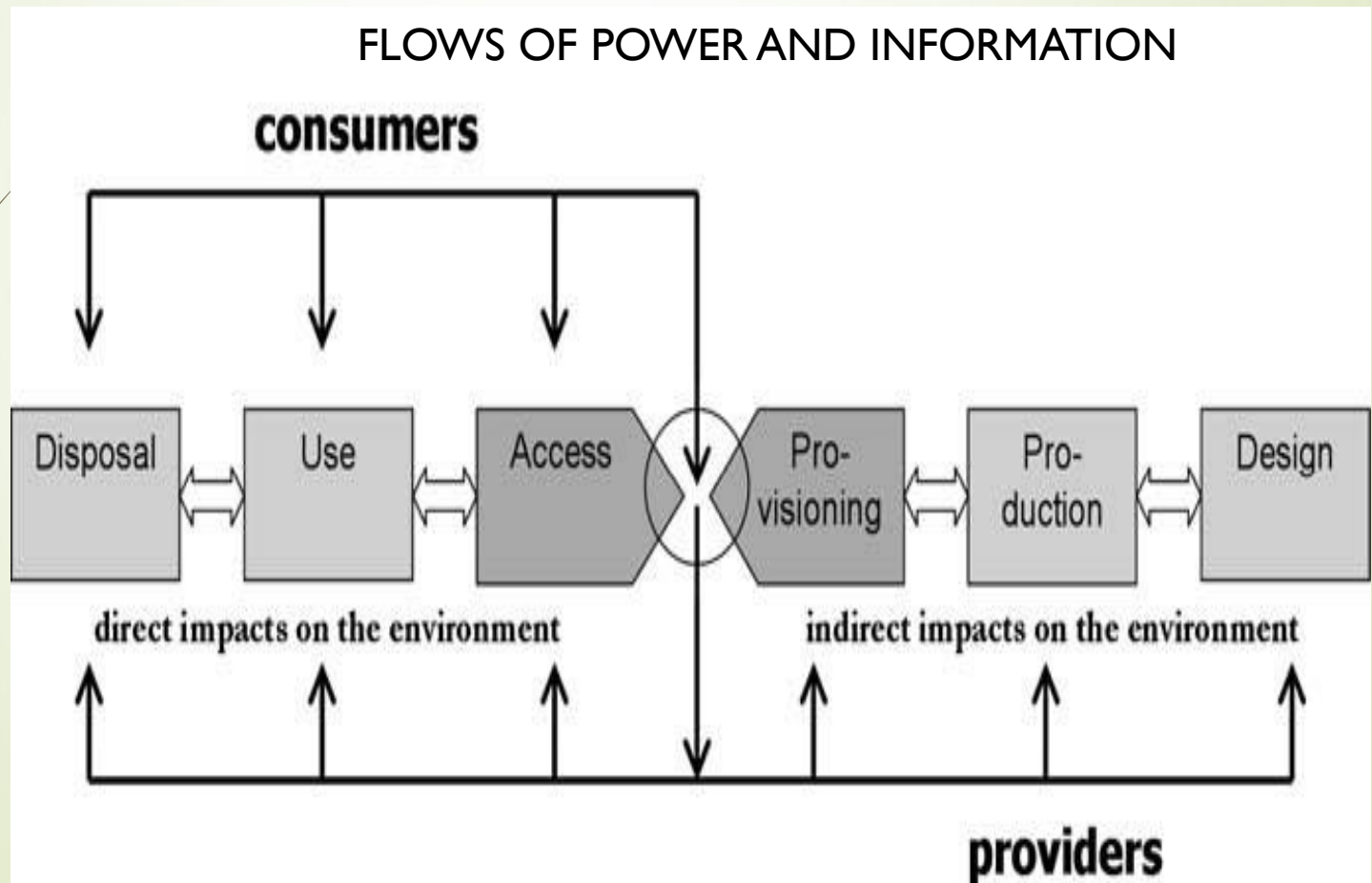
FARMERS



# Why do *consumption* practices matter?

- Since the 'Consumerist Turn', consumption (co) defines what happens with food systems overall
- Consumers are lead actors in food-matters that are under their own control (where to shop, what to buy, which restaurant to pick, what to eat, etc.)
- Consumers co-decide about matters that are decided upon higher-up in food chains (using the labels; boy- and boycotting products, etc.)

# Direct and Indirect Impact: on 'doing your bit'

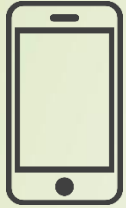




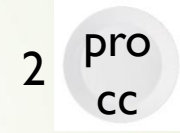
# Direct and Indirect Impact: on 'doing your bit' ...



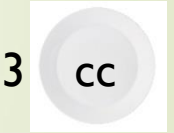
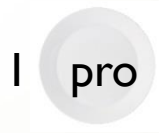
- 1: Pro=providers first
- 2: cc= citizen-consumers first;
- 3: procc=equally responsible



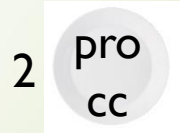
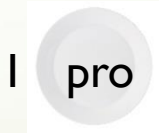
➤ Salt, Sugar, Fat



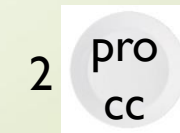
➤ Food-Wastes



➤ CO2-emission



➤ Animal Well-being



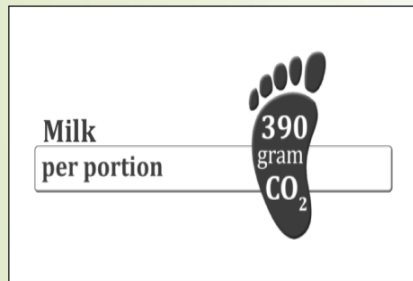
# Changing consumer behaviours: about 'nudging' and more



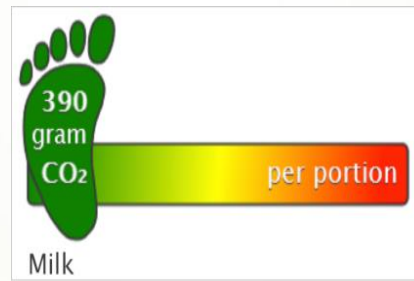
# Carbon Label in canteen of WUR

experiment: 3 periods of 6 weeks (2010 -2011)

Period I: no intervention



Period II: only black and white Carbon label



Period III: colored label 'plus'

### Menu suggestion

Every day we make lunch choices and our choices have an impact on the climate. Did you consider choosing climate friendly? Try to compose your lunch from green products!

Green menu:		Red menu:	
Product	CO <sub>2</sub>	Product	CO <sub>2</sub>
Vegetable soup	300	Goulash soup	900
Bread	NA	Bread	NA
Goat's cheese	200	Old Cheese	530
Pear	40	Kivi	100
Tap water	0.1	Mineral water	90
<b>Total</b>	<b>540.1</b>	<b>Total</b>	<b>1620</b>

### Contributions to CO<sub>2</sub> emissions of products

TRANSPORT	PRODUCT TYPE
Regional: Pear	Plant based: Vegetable soup
Long range: Kivi	Animal based: Goulash soup
PACKAGING	ENERGY
No packaging: Tap water	Low processing product: Fruit
Bottle: Mineral water	High processing product: Soup

Menu's



Pillar with scores

Beef is associated with higher CO<sub>2</sub> emissions than pork and poultry

grams CO<sub>2</sub> equivalents / 100 grams products

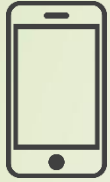
Beef	3000
Pork	930
Chicken	430

Source: Carlson-Kayama, A. and D. C. Alpendre (2009). Potential contributions of food consumption patterns to climate change.





How many consumers shifted towards a lower carbon lunch after the interventions?



Option I : 0 – 5 %

Option II : 5 – 25 %

Option III : 25 – 50 %

Option IV : > 50 %



# Why is it so difficult to change everyday behavioural routines?

Focus group with regular visitors afterwards **to find out why**

- Carbon Impact of (canteen)food underestimated
- Carbon label not noticed/used since carbon labels not (yet)widely available in canteens, supermarkets etc.
- Food-assortment of canteen not enough green/low carbon
- Interventions did not fit the present routine of having lunch: time is scarce; rushing to the check-out



# conclusions / discussion

Without some form of engagement of consumers, the transition towards more sustainable food-systems will be more difficult to achieve

The greening of consumption practices is the shared responsibility of consumers and providers

Behavioural routines are robust/ not easy to change