Sustainable food consumers and consumption

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CONTENT

1. Defining sustainability and sustainable food
2. Challenges and 3 examples of food companies’ strategies
3. The sustainable food consumer
4. Link between the issue ‘sustainability’ and ‘health’
5. The ‘future’ sustainable food and food consumer
DEFINING SUSTAINABILITY

“Sustainable development is development that meets the needs of the present without compromising the ability of future generations to meet their own needs.”

(‘Brundtlandt report’, 1987)
DEFINING SUSTAINABLE FOOD

“Sustainable FOOD is FOOD that meets the FOOD needs of the present without compromising the ability of future generations to meet their own FOOD needs.”
CHALLENGES

› The agricultural sector ...
› withdraws 70% of all freshwater
› main cause of water pollution (nitrate, phosphate, pesticides/fertilizer)
› causes ~ 18% of GHG emissions
› 75% of the world’s poor live in rural areas, and agriculture employs 40% of workers in developing countries


EXAMPLE BIODIVERSITY

- Retailer Coop in Switzerland, see http://www.coop.ch/
- Financially supports organic farming research, supports activities to preserve rare species
- Offers broad spectrum of food labels for different issues, does not sell wild endangered fish
- TV spot/song "C’est réel" in 2010 UN year of Biodiversity, 2011 chosen to be the most sustainable retailer by oekom research AG
EXAMPLE WATER POLLUTION & OVERUSE

- Nestlé has chosen to focus on water (besides nutrition and rural development) as part of their ‘creating shared value’
- Aim is to increase efficiency in factories and improve conservation outside factories
- Report reduced withdrawals 29%, discharge 45% (2002-12)
- Cooperation with e.g. water footprint network, etc.
- Oxfam ranked Nestlé as first of 10 multinationals in the ‘company scorecard’, with ‘fair’ performance in water
EXAMPLE – CLIMATE CHANGE

› Provamel, producer of organic soydrinks, chose to focus first and foremost on global warming (from 4 scarce resources)
› The product is organic (reducing pesticide use), plant-based and thus causes less CO2 emissions
› report to have a CO2-emission free production process (through increased efficiency and offsetting)
STRATEGIES

› Innovation
  › Efficiency in production (Nestlé, Provamel)

› Choice influencing
  › Biodiversity communication (Coop),
    CO2 label (Provamel)

› Choice editing
  › Not offering (Coop and endangered fish)

STRATEGIES

› Corporate social responsibility
› Eco-label / inform
› Responsible partner

› Nestlé creating shared value
› Provamel organic/CO2 label
› Coop’s engagement
STRATEGIES

› **Greening up:**
  Continuous improvement of all products

› **Greening out:**
  Innovating iconic green product

› Nestlé’s water efficiency gains

› Nestlé’s fair trade Kit Kat

### Types of individual ethical consumer activism:

<table>
<thead>
<tr>
<th>Buying</th>
<th>Positive buying</th>
<th>Supporting ‘good’ products and companies through consumption, e.g. FairTrade</th>
</tr>
</thead>
<tbody>
<tr>
<td>Relationship purchasing</td>
<td>”Educating” seller about ethical expectations, e.g. co-operatives</td>
<td></td>
</tr>
<tr>
<td>Buying something else</td>
<td>Fully screened</td>
<td>Choosing comparatively best according to ratings / guides, e.g. ethical investment</td>
</tr>
<tr>
<td>Not buying</td>
<td>Boycott</td>
<td>(Temporarily) not buying as a signal to the producer, e.g. Nestlé, Shell</td>
</tr>
<tr>
<td></td>
<td>Anti-consumption</td>
<td>Avoiding the use of certain products or do-it-yourself</td>
</tr>
</tbody>
</table>

Answers of the students in the Bachelor business administration education to the question:
Which kind of ‘sustainable behaviours’ could you test out doing?
SUSTAINABLE FOOD CONSUMERS

› 55% of EU citizens report that they know about the most significant impacts of the product that they buy on the environment

› Around 50% state that eco-labels play an important role in purchasing

› 30% believe reducing waste and recycling is the action with the best impact, 21% that it is buying eco-friendly, and 15% reducing travel

› 50% of EU citizens report to be willing to replace meat for vegetables out of environmental reasons

Eurobarometer studies on sustainable production and consumption and on the green market, from 2009, and 2012
SUSTAINABLE FOOD CONSUMERS

The ‘attitude-behaviour gap’

95% Would buy
75% Know a green product
63% Looking for green
47% Saw green
22% Bought green

Key leakage reason:
Unaware
Uneducated
Unavailable
Unmotivated

SUSTAINABLE FOOD CONSUMERS

LOHA – lifestyle of health and sustainability & Cultural creatives

› “Enjoyment and environmentally friendly lifestyle are not a contradiction”, “buy yourself a better world”

VS/DS - Voluntary simplifiers and downshifters

› “individuals who have freely chosen a frugal, anti-consumer lifestyle that features low resource use and environmental impact”

SUSTAINABLE FOOD CONSUMERS

LOHA – lifestyle of health and sustainability & Cultural creatives

VS/DS - Voluntary simplifiers and downshifters

Kategori | Score | Sort | Pris | Beskrivelse
--- | --- | --- | --- | ---
Middelhavsgetränk | 42 | √ | 24.95 | 100% økologiske ingredienser
RetEkolsisk | 42 | √ | 15.99 | 100% økologiske ingredienser
RetBæreneværd | 42 | √ | 29.99 | 100% økologiske ingredienser
XtraPerm | 42 | √ | 29.99 | 100% økologiske ingredienser
Dobbelletrap | 36 | √ | 24.99 | 100% økologiske ingredienser
FakeRet | 55 | √ | 24.99 | 100% økologiske ingredienser
FormRet | 55 | √ | 24.99 | 100% økologiske ingredienser
RetLukkens | 55 | √ | 24.99 | 100% økologiske ingredienser

Das offizielle Getränk einer besseren Welt.

Slow Food

100% økologiske ingredienser
What characterises ‘green consumers’?

› ‘altruistic’ / ‘biocentric’ values (Schwartz value scale, NEP paradigm)
› Environmental attitudes and concerns, health- and not price-orientation
› ‘young, female, well educated, liberal and wealthy’ partly substantiated
› perceived (moral) responsibility, effectiveness & self efficacy

Gilg, Andrew; Barr, Stewart; Ford, Nicholas (2005): Green consumption or sustainable lifestyles? Identifying the sustainable consumer.
Verain, Muriel C. D.; Bartels, Jos; Dagevos, Hans; Sijtsema, Siet J.; Onwezen, Marleen C.; Antonides, Gerrit (2012): Segments of sustainable food consumers:
Dagevos, Hans; Voordouw, Jantine (2013): Sustainability and meat consumption: Is reduction realistic?
SUSTAINABLE FOOD CONSUMERS

› (food-related) lifestyle?

› **Lifestyle** – “intervening system of cognitive structures that link situation-specific product perceptions to increasingly abstract cognitive categories and finally to personal values”

› In **food**: purchase motives, ways of shopping, quality aspects, cooking methods, and consumption situations

‘SUSTAINABILITY’ & ‘HEALTH’

› Both are long-term, higher order aims that might often get ‘pushed’ out of sight by short-term needs and wants (hunger, taste, convenience, …)

› Both are rather rational issues (as compared to hedonic, emotional)

› Both, as a product characteristic, require trust and belief as it cannot be seen or experienced (it is thus a ‘credence good’)

› However, health is a ‘selfish’, while ‘sustainability’ is an altruistic reason
SUSTAINABILITY & HEALTH

Are consumers buying organic – for health or for the environment?

› ‘Consumers buy organic food primarily due to its perceived health benefits. This is interesting, as there has been no evidence that organic food is actually healthier’

› ‘... even though households more often assign value to ... public good attributes, their actual propensity to purchase these goods is in fact strongly related to the extent to which they value private good attributes’

SUSTAINABILITY & HEALTH

> **Consumers**: Connected worldview of ‘sustainable food consumers’ => connection in the broader scope: ~”healthy planet, healthy people”

> **Producers**: IFOAM organic principles of health, ecology, fairness, care

> **Retailers**: ~‘container concept’*
of connected ethics of care and responsibility

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RESEARCH EXAMPLE: ORGANIC & FUNCTIONAL FOOD

Do occasional and/or intensive organic food consumers reject or prefer organic food with health claims over organic food without a health claim?

Aschemann-Witzel, Jessica; Maroscheck, Nicole; Hamm, Ulrich (2013). Are organic consumers preferring or avoiding foods with nutrition and health claims? Food Quality and preference, 30, 68-76.
RESEARCH EXAMPLE: ORGANIC & FUNCTIONAL FOOD

Choice for a product with a claim and significant difference to random choice (share of claim products in the set).

<table>
<thead>
<tr>
<th>Percentage products with claim chosen (No. of choices)</th>
<th>One-sample t-test (test value 0.40)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Whole organic buyers sample: 42.2% (630)</td>
<td>$t = (df = 629) 1.128, p = .260$</td>
</tr>
<tr>
<td>Occasional buyers: 45.60% (318)</td>
<td>$t = (df = 317) 2.001, p = .046$</td>
</tr>
<tr>
<td>Intensive buyers: 38.78% (312)</td>
<td>$t = (df = 311) -.441, p = .660$</td>
</tr>
<tr>
<td>Conventional outlet: 43.80% (363)</td>
<td>$t = (df = 362) 1.458, p = .146$</td>
</tr>
<tr>
<td>Alternative outlet: 40.15% (264)</td>
<td>$t = (df = 263) .050, p = .960$</td>
</tr>
<tr>
<td>Motive ‘self-centred’: 42.24% (483)</td>
<td>$t = (df = 482) .994, p = .321$</td>
</tr>
<tr>
<td>Motive ‘altruistic’: 42.18% (147)</td>
<td>$t = (df = 146) .533, p = .595$</td>
</tr>
</tbody>
</table>
THE ‘FUTURE’ SUSTAINABLE FOOD CONSUMER?

”... rather than helping society achieve needed change, this approach can create a **false sense of progress** that acts as a barrier to the more decisive action that is necessary to address the underlying drivers of humanity's unsustainable behaviours.”

THE ‘FUTURE’ SUSTAINABLE FOOD CONSUMER?

› **Sustainability “exceptors”:** Consumers with a very sustainable life-style, except for a certain area

› **Sustainability “cherry-pickers”:** Consumers applying sustainable behaviour/choice where it is low effort (‘low-hanging fruits’)

› **Rebound effect:** “changed behaviour that may offset part of the environmental gain” of e.g. resource efficiency

› **“Weak sustainability”**

THE ‘FUTURE’ SUSTAINABLE FOOD CONSUMER?

THE ‘FUTURE’ SUSTAINABLE FOOD CONSUMER?

› **Upscaling**: establishing innovations on a broader scale

› **Decoupling**: “decline in the ecological intensity per unit of economic output” or “decline in absolute terms” (~De-growth economy)

› **Leapfrogging**: ”Learn from the mistakes of the developed world and implement directly sustainable systems”

› **‘Strong sustainability’**

THE ‘FUTURE’ SUSTAINABLE FOOD CONSUMER?

Informing or nudging: Which way to a more effective environmental policy?. Ölander, F; Thøgersen, J.
THE ‘FUTURE’ SUSTAINABLE FOOD CONSUMER?

1. I manage my own self-esteem and health
2. I live within my financial limits.
3. The products I buy help local and international trade.
4. I only use clean and renewable energy.
5. I am active in a vibrant community.
6. I live in a high trust society in which I talk with, rather than at, people.
7. I have found the right balance between technology and simplicity.
8. My leaders (political and business) have courage.
9. I use much less stuff, but get the same level of service from the stuff I buy and use.
10. The true value of nature is protected by economics.

HEALTH & SUSTAINABILITY: HOW TO INCLUDE CONSUMER NEEDS AND TRENDS INTO THE PRODUCT DEVELOPMENT OF THE FUTURE?

› The product should provide a contribution to securing food sustainably, including answers to sustainable being vs. having (‘sufficiency’)
  and zero to positive impact

› The product & company should be consistent, and acknowledge connected issues and thinking
FOR MORE INFO

http://badm.au.dk/mapp/
CHALLENGES: NITROGENE AND PHOSPHERUS CYCLES

CHALLENGES: CLIMATE CHANGE

It is **very likely** that the Atlantic Meridional Overturning Circulation (AMOC) will **weaken over the 21st century**. Best estimates and ranges\(^1\) for the reduction are 11% (1 to 24%) in RCP2.6 and 34% (12 to 54%) in RCP8.5. It is **likely** that there will be some decline in the AMOC by about 2050, but there may be some decades when the AMOC increases due to large natural internal variability. \(\{11.3, 12.4\}\)

It is **very unlikely** that the AMOC will undergo an **abrupt transition or collapse** in the 21st century for the scenarios considered. There is **low confidence** in assessing the evolution of the AMOC beyond the 21st century because of the limited number of analyses and equivocal results. However, a collapse beyond the 21st century for large sustained warming cannot be excluded. \(\{12.5\}\)

“...northern and northwestern parts of Europe are likely to gain most from short-term climate change, although they also are likely to be negatively affected by climate change over the longer term”

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### CHALLENGES: BIODIVERSITY LOSS

(Search Species, Conservation Status, Locations, Habitats or Threats

<table>
<thead>
<tr>
<th>SPECIES</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Norway Lemming</td>
<td><em>Lemmus lemmus</em></td>
</tr>
<tr>
<td>Norway Lobster</td>
<td><em>Nephrops norvegicus</em></td>
</tr>
<tr>
<td>Norway Spruce</td>
<td><em>Picea abies</em></td>
</tr>
</tbody>
</table>

Norway

MULTI-NATIONAL EVERYDAY LIFE SEGMENTS IN WESTERN EUROPE: POSITIONING ACCORDING TO SOCIAL STATUS AND BASIC VALUES

<table>
<thead>
<tr>
<th>Social Status</th>
<th>Basic Values</th>
<th>Establisheds</th>
<th>Intellectuals</th>
<th>Adaptive Achievers</th>
<th>Experimentalists</th>
</tr>
</thead>
<tbody>
<tr>
<td>Higher</td>
<td>(Upper Conservative)</td>
<td>(Modern Mainstream)</td>
<td>(Modern Lower Class)</td>
<td>(Fun &amp; Action Oriented)</td>
<td>(Consumer-Materialistic)</td>
</tr>
<tr>
<td>Middle</td>
<td>(Traditional Working Class)</td>
<td>(Modern Lower Class)</td>
<td>(Modern Lower Class)</td>
<td>(Fun &amp; Action Oriented)</td>
<td>(Consumer-Materialistic)</td>
</tr>
<tr>
<td>Lower</td>
<td>(Archaic-Rural)</td>
<td>(Modern Lower Class)</td>
<td>(Modern Lower Class)</td>
<td>(Fun &amp; Action Oriented)</td>
<td>(Consumer-Materialistic)</td>
</tr>
</tbody>
</table>

LOHAs:
› Altruism
› Self-actualisation
› Authenticity
› Quality of life
› Health
› Sustainability
› Connected world
› Pluralistic
› Experience
› ...

http://en.wikipedia.org/wiki/The_Cultural_Creatives
THE ‘FUTURE’ SUSTAINABLE FOOD CONSUMER?

“... vi skal ikke skamme os over, at vi sætter et såkaldt økologisk fodaftryk. ... 

Det skal bare være et positivt aftryk.”

=> non-toxic, joint materials, up-cycling

Michael Braungart on C2C concept, interview i Information, 31.1.2013