

Smart Consumer Awareness

Sustainable food consumption through sustainability information

Informational Governance



WAGENINGEN UR
For quality of life



In this project consumers receive information about the environmental impacts of their food through modern media.

Background

Food production can have negative environmental impacts that are not known to consumers. In the project Smart Consumer Awareness groups of consumers receive information about the environmental impacts of their food through modern media. It is expected that this stimulates them to buy more sustainable products, thereby reducing the negative impact of food production and processing on the environment.

Key mechanism of informational governance

Informational governance arrangements are developed to transfer sustainability information to consumers with the aim of influencing consumers' food purchasing behavior. The key successfactor for such arrangements is low transaction costs for consumers in incorporating sustainability information into their decision making processes.

Approach

We conducted experiments with consumers who are confronted with various 'informational governance arrangements' to investigate the effectiveness of such arrangements. The initial experiments were carried out in the 'virtual supermarket'.



The virtual supermarket: a three dimensional virtual environment in which consumers can navigate and shop for products.

Highlights project

- Focusing on consumers' food purchasing decisions
- Characterizing key mechanism of informational governance
- Conducting experiments with different informational arrangements
- Identifying determinants of effective informational governance arrangements

The virtual supermarket

The virtual supermarket, developed by Wageningen UR and GreenDino, is a three-dimensional virtual environment used as a research tool for consumer behavior. Three large plasma screens offer a realistic and immersive environment in which consumers can navigate and shop for products, while their behavior is recorded. The setup of the supermarket as well as the products can be manipulated by the researcher. The tool has been used to study food pricing and labeling strategies.

Conceptual framework

In 2013 the scientific paper on the conceptual framework of informational governance for sustainable consumption has been finalized and submitted to a peer-reviewed journal. We concluded that the disclosure of information about externalities to consumers can be a powerful instrument in the transition to more sustainable food production chain, provided the information is presented to consumers in the appropriate way.

Key dimensions of informational governance

Besides content of the information, display, channel and framing are considered key dimensions of informational governance arrangements for sustainable consumption. Using the conceptual framework we examined a number of existing informational governance arrangements for sustainability and suggest how key information attributes may influence the effectiveness of such arrangements in steering consumer choices.



Fruits and vegetables in the virtual supermarkets for the experiment.



Front-of-pack labels used for products in the virtual supermarket.

First experiment

Based on the theoretical framework described in the paper the first choice experiment has been carried out using the virtual supermarket. The experiment took place in a local supermarket (Spar in Noordwest, Wageningen).

In the experiment consumers were asked to purchase fruits and vegetables in the virtual supermarket. Three 'treatments' were made to provide consumers with information on the environmental impacts of the food products:

- Via front-of-pack labels showing categories of environmental impact (e.g., A, B, C, D)
- Via front-of-pack labels showing quantitative information of environmental impact (e.g., points)
- Via an APP (Groente- en fruitkalender) showing categories of environmental impact and additional information

Consumer purchases were recorded and analyzed together with information on consumer characteristics and preferences collected through additional questionnaire data. This setup allows us to investigate which of the arrangements was more effective in steering consumer behavior and why.

Follow-up experiments

In 2014 and 2015 follow-up experiments will be carried out based on the results of the above experiment. For instance, experiments in which we provide quantitative sustainability information to consumers through 'true pricing', or a monetized estimate of the environmental impact of products. Ideally these experiments would be carried out in a physical supermarket.

Contact

LEI Wageningen UR
P.O. Box 35
6700 AA Wageningen
www.wageningenUR.nl

Lan Ge
T +31 (0)317 48 45 43
E lan.ge@wur.nl

Eva van den Broek
T +31 (0)70 335 82 29
E e.vandenbroek@wur.nl

Coen van Wagenberg
T +31 (0)317 48 45 58
E coen.vanwagenberg@wur.nl

