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The CORPUS Research Agenda for Sustainable Food Consumption in Europe

CORPUS – Enhancing the Connectivity between Research and Policy-making in Sustainable Consumption

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1 Introduction

Recent events around the globe - such as the Dioxin crisis in Germany and the occurrence of radioactive food in Japan due to the Fukushima nuclear disaster – have put more attention and pressure onto food systems. Therefore, it appears necessary to engage even more in strengthening and furthering our research in sustainable food consumption. With this in mind, the project CORPUS developed a new research agenda, representing the joint efforts of researchers and policy-makers who participated in CORPUS.

Starting in January 2010, the project “*CORPUS: Enhancing the Connectivity between Research and Policy-making in Sustainable Consumption*”, funded by the European Commission within FP7, has been working on and testing novel ways of knowledge brokerage between researchers and policy-makers, in three domains of **sustainable consumption** (food, mobility, housing), in order to enhance evidence-based policy-making and to develop a policy-led research approach.

On sustainable food consumption, the project consortium has recently organised three workshops, each with an audience of 50-60 experts from all over Europe, where current trends, policy instruments and possible future scenarios were comprehensively discussed and developed. With a total number of about 150 workshop participants and more than 450 registered users of the project’s web-platform (<http://www.scp-knowledge.eu>), the CORPUS project has already established a broad community.

Extensive work and joint efforts have undergone the formulation of this Research Agenda (RA). Consortium partners, registered users, workshop participants, interviewed researchers and policy-makers have all cooperated in shaping a joint research agenda on Sustainable Food Consumption. Effectively, more than 100 people all over Europe have been actively engaged in the development of the Research Agenda, combining different professional and disciplinary backgrounds. As a result, this Research Agenda represents a joint effort in setting priorities and uncovering challenges in Sustainable Food Consumption.

The main objective of the research agenda is to strategically and comprehensively set the stage of research in sustainable food consumption for the coming years, with the goal of advancing towards more sustainable consumption. Both the scope of the research agenda and of the CORPUS project are within the domain of sustainable food consumption. Although many topics from the production side have been covered, the scope of the research agenda remains on consumption. Even though many issues regarding food consumption are defined by local and global causes as well as by local and global effects, the present research agenda considers EU-27 and Europe in general as its own geographical scope.

The research agenda delineates four main ‘thematic’ strands that define the major areas where sustainable food consumption research should converge: Sustainable Food Supply Chains, Sustainable Diets, Drivers of Food Consumption, Policy Issues and Knowledge Brokerage.

2 Objectives and scope of the research agenda on sustainable food consumption

2.1 Strategic objectives of the research agenda

While there is no broadly accepted definition to date, several attempts to clarify and sharpen the concept of sustainable food consumption have been made. Depending on the thematic focus – environment and climate, public health and life expectancy, malnutrition and critical access to food – definitions differ¹. As a result, current strategies focus on single issues independently (e.g. childhood obesity) – but there is a need for an over-arching policy review which tackles the full range of drivers of unsustainable food production and consumption. Developing such integrative strategies and identifying the most sustainable way to ensure the nutrition of the world's current and future populations, however, requires further research².

The research agenda aims to develop and suggest a path of present and future research needs in order to help achieve sustainable food consumption in Europe. Our objective is therefore to show the most pressing and urgent issues in the sustainable food consumption domain, and to draw the attention of EU-based research for supporting, consequently, evidence-based policy-making.

The scope of the research agenda regards the domain of sustainable food consumption. The CORPUS project is on sustainable food consumption, and although many topics from the production side have been covered, the focus of the research agenda remains on consumption. The geographical scope of our effort is Europe and, more precisely, EU27 and beyond.

2.2 Process and development of the Joint research agenda

The research agenda has been developed during the course of the first year of the project CORPUS, which is working in the Food, Mobility and Housing domains with the objective of enhancing the connectivity between research and policy-making in sustainable consumption. It has been of primary interest of the project to progress towards the outcome of presenting this document as a shared effort, together with the participants of the CORPUS workshops and the CORPUS web-platform's users.

Effectively, more than 100 people all over Europe have been actively engaged in the development of the Research Agenda, combining different perspectives, approaches and instruments. Therefore, in order to achieve the completion of this joint research agenda, a series of steps have been followed during this experience. At first, a sequence of interviews has been undertaken with researchers from all over Europe that work in the sustainable food consumption do-

¹ Reisch, L.A. 2010. A Definition of "Sustainable Food Consumption". Knowledge Unit CORPUS project. http://www.scp-knowledge.eu/sites/default/files/knowledge/attachments/KU_Definition_Sustainable_Food.pdf

² Reisch, L.A., G. Scholl and U. Eberle. 2010. CORPUS Discussion Paper 1 on Sustainable Food Consumption CORPUS project. http://www.scp-knowledge.eu/sites/default/files/Food_Discussion_Paper_1.pdf

main. This step has allowed us to collect urgent issues that have received special attention when considering the sustainability of food consumption. Although many issues deeply relate to the production side and often have a global dimension, we have tried to focus on the viewpoint of food consumption with local, regional and European boundaries.

During the second stage of the process, which took place in one of the CORPUS workshops, we prepared a group exercise that put together policy-makers and researchers from different EU member states and from different backgrounds, though all related to sustainable food consumption. Thanks to this effort, we again collected a large number of issues and research questions relating to SFC. All of these inputs were rationalized and then organized into four thematic areas that best suited the knowledge needs that were communicated to us both by researchers and policy-makers. Therefore, this draft document was submitted to the comments of the CORPUS web-platform users.

After the users' comments, another draft research agenda was produced and new insights were collected within the last interaction exercise of CORPUS' food series. Furthermore, policy-makers and researchers had the chance of adopting, commenting, rephrasing and adding to this research agenda.

After a second round of remarks from web-platform users, the joint research agenda has been finalized in this document as it is shown in the following section 2.

3 Themes of research in sustainable food consumption

Four areas of research have been identified to define the major fields where sustainable food consumption research should converge in order to meet the major challenges of SFC.

1. Sustainable food supply chains;
2. Sustainable diets;
3. Drivers of food consumption;
4. Policy Issues & knowledge brokerage.

Each of these themes has received special attention and extensive reflections during the different rounds that constituted our work. For each of these themes a number of 'hot topics' have been identified for research. Therefore, a deeper level has been defined, where 'knowledge needs' have been selected as major and urgent issues for future research in the coming years

3.1


SUSTAINABLE FOOD SUPPLY CHAINS

HOT TOPICS	KNOWLEDGE NEEDS
Local food and sustainability	<ul style="list-style-type: none"> ✓ Social and economic benefits of local food initiatives to the local economy ✓ The environmental impacts of local food in a life-cycle perspective: trade-offs and synergies ✓ The potential of local food initiatives in ensuring food security and influencing consumer attitudes toward sustainable food ✓ Comparative analysis of conventional agricultural systems at European/Global level and best practices ✓ The importance of cultural and identity aspects in setting up local and national food initiatives ✓ Convergences and divergences between 'Local Food Systems' and 'Geographical Indications' ✓ Spill-over effects of Local Food Systems (e.g. Urban gardening,) ✓ Ways to develop the local economy on the basis of ecosystem services ✓ Collection of definitions on national, regional, local food
Transparency of the food supply chain	<ul style="list-style-type: none"> ✓ Integrated food sustainability label: is it possible and what are the limitations? ✓ Different tools in use to provide information about the environmental impact of food consumption, and their effectiveness in promoting healthy, sustainable behaviours ✓ Development of methods and tools for sharing information about the environmental impacts of food throughout the supply chain ✓ The environmental and social impacts of food imports into the EU ✓ How to overcome fear of transparency of the supply chain
Food waste	<ul style="list-style-type: none"> ✓ Mental, structural, age-related and cultural reasons for food waste ✓ Innovative technology to support development of novel, healthy sustainable foods and processes, including quality of raw materials ✓ Quantities and types of food waste generated at all stages of the life-cycle ✓ The potential of food waste prevention in terms of avoided pollution, use of natural resources and avoided costs ✓ Evaluation of initiatives on food waste prevention (e.g. awareness campaigns) ✓ Innovative technologies and innovative social organisations to reduce waste and increase recycling ✓ Food waste vs. Health and Safety regulations ✓ Using Ethology for preventing food waste ✓ Food waste and by-products as raw material for other manufacturing chains or as high value molecules ✓ Identification of successful practical measures that people from EU have undertaken and reasons for changing behaviours

Retailers and sustainable food

- ✓ The environmental and social consequences of the spatial location of large retail stores
- ✓ Effects of organisation of the food supply chain on its environmental impacts – a comparison between member states
- ✓ Supply chain synergies and overall coordination issues
- ✓ Transition processes: development of niches
- ✓ Retail concentration and its influence on food consumption patterns across the EU
- ✓ The power of retailers to influence the environmental qualities of production and related success stories

Holistic approach to the food chain

- ✓ Research on cooperation in the supply chain to improve sustainability: (i) good examples; (ii) preconditions; (iii) ways of improvement
- ✓ Encompassing reflection of the supply chain (e.g. including transport, packaging, manufacturing, waste management,)
- ✓ Food System Governance (social networks, role of civil society actors, bottom-up approaches, relationships between actors along the chain,)
- ✓ Analysis of the impact of EU multinational food companies in the South (e.g. imports, decentralisation of production)
- ✓ Analysis of the configuration of actors and power in the food chain (e.g. concentration of companies, uptake of emerging models by major players, role of contestation and protest by civil society organisations,)
- ✓ Resilience of the food chain

3.2


SUSTAINABLE DIETS

HOT TOPICS	KNOWLEDGE NEEDS
Reduction of animal-based products consumption	<ul style="list-style-type: none"> ✓ Role and potential of vegetarian and vegan diets to reduce environmental, health and social problems ✓ Impacts of meat consumption on climate, land-use, biodiversity, water usage, world-wide hunger ✓ Ways to shift the incentives/subsidies from meat/animal based products to vegetarian/plant based products ✓ Investigation of drivers of animal-based product consumption (both in developed and developing countries) ✓ Ways to promote less animal-based products focused diets ✓ Research into sustainable fish production (farm and wild fish) and instruments to support sustainable fish
Sustainable and healthy diets	<ul style="list-style-type: none"> ✓ Key components of environmentally responsible, climate friendly, socially fair and healthy diets in different national/geographical locations (and global) across Europe and for different age groups ✓ Linkages between nutrition science and sustainability ✓ Mechanisms and incentives for adopting new behaviours towards a more plant-based diet ✓ Provision of comprehensive and useful information on sustainable and healthy diets ✓ Attitudes of different consumer segments concerning diet change ✓ Understanding the trade-offs and synergies between all sustainability attributes ✓ Needs of different consumer groups (age, social status,) ✓ Alternative diets: (i) use of existing nutritional data for knowledge brokerage; (ii) ways to embed them in society (e.g. canteens, restaurants, schools,) ✓ Organic food
Tackling obesity and overweight	<ul style="list-style-type: none"> ✓ Drivers of obesity and overweight and related national differences across the EU ✓ The economic, health, social and environmental costs of obesity ✓ Best practices/programs to tackle obesity, overweight and malnutrition in EU member states ✓ Identification of the individual costs of obesity (e.g. medical, psychological,)

Food inequality

- ✓ Effects of increasing food prices on most vulnerable social groups at risk of food poverty
- ✓ Role of education: in particular food storage, preparation skills and understanding of healthy diets by different socio-economic groups
- ✓ Access to and affordability of sustainable food for different socio-economic groups
- ✓ The role of social innovation (e.g. 'grow your own' and 'community garden' initiatives) in tackling food poverty and reconnecting people with food and where it comes from
- ✓ Identification of successful policy instruments and potential of their transferability
- ✓ Ways to enable businesses to supply food for sustainable diets
- ✓ Influence of (EU) politics and multinational firms on world hunger

3.3


DRIVERS OF FOOD CONSUMPTION

HOT TOPICS	KNOWLEDGE NEEDS
<p>Consumer Behaviour</p>	<ul style="list-style-type: none"> ✓ The environmental, economic and social impacts of different lifestyles and food consumption patterns ✓ Main factors influencing the food choice of different socio-economic groups ✓ The role of education in shaping consumer behaviour ✓ Role of the media ✓ Drivers and barriers to the uptake of pro-environmental behaviour ✓ Establish frameworks/tools for changing social norms and supporting bottom-up change ✓ Basket research: different patterns of socio-economic groups, needed shifts and how a sustainable basket looks under budget restraints ✓ The influence of food cultures on sustainable food consumption ✓ Research on media coverage of sustainable food ✓ Description of sustainable food with best practices examples
<p>Availability and affordability of sustainable food</p>	<ul style="list-style-type: none"> ✓ Affordability of sustainable food for different socio-economic groups ✓ The role of business in “making sustainable food the easy choice” and related success stories ✓ Availability of sustainable food and related information to consumers in different consumption situations ✓ Information to define what sustainable food looks like ✓ New business models and alternative food networks ✓ Labelling research
<p>Sustainable Public Procurement (SPP) of food</p>	<ul style="list-style-type: none"> ✓ Scope for increasing the effectiveness of SPP to reduce negative impacts of the food chain ✓ Different incentive schemes in use across the EU to encourage SPP of food and their effectiveness ✓ The potential of SPP of food to meet greenhouse gases reduction targets in the EU ✓ The effects of SPP of food on the availability and affordability of sustainable food for private consumers ✓ Impact of EU procurement law on SPP

**Contextual
mega-trends**

- ✓ Impacts of new food technologies, process and product innovation on food consumption
- ✓ Price volatility: future governance, response of governments and EU
- ✓ Nutrition transition and related health problems (e.g. obesity, malnutrition)
- ✓ The role of an aging population in changing food consumption patterns, food systems and global food trends
- ✓ The challenges of urbanisation and ethnic mixes to food consumption patterns
- ✓ Use of information technology to increase transparency and availability of information and for personal choice

3.4

POLICY ISSUES AND KNOWLEDGE BROKERAGE

HOT TOPICS	KNOWLEDGE NEEDS
<p>Policy coordination and governance</p>	<ul style="list-style-type: none"> ✓ Effective models and mechanisms for the engagement of the business sector and civil society in the governance of sustainable food policies ✓ Policy coherence in the topic of sustainable food at the EU, national and regional level (relationships and conflicts between different policy sectors/line ministries) ✓ Stakeholder management (practices, routines): what are success factors, challenges and how to include contextual/framework conditions ✓ Effective <i>mechanisms</i> and institutional <i>models</i> (e.g. examples, good practices and inspiring examples) of horizontal and vertical policy integration in the topic of sustainable food: what kind of models are used, particularly taking into account reliability issues and the cooperation with stakeholders ✓ Re-evaluation of currently applied systems and policies: success factors, best practices, learning in the policy cycle
<p>Methods of policy research</p>	<ul style="list-style-type: none"> ✓ Implementation of methods for policy impact assessment and policy effectiveness studies in the topic of sustainable food and how to make them attractive for policy-makers ✓ Success factors of interdisciplinary research towards sustainable food policies, incl. practices and experiences with actual cooperation between disciplines ✓ Standardised methods for the comparative analysis of national sustainable food policies within the EU ✓ Coordination of research programmes to maximise impact
<p>Knowledge brokerage</p>	<ul style="list-style-type: none"> ✓ Information transition management of available scientific knowledge for policy-makers ✓ Differences of rationalities, needs and objectives between research and policy-making and how to deal with them; how best to translate research results for policy-makers' needs, e.g. information management inside the public administration ✓ Best ways to communicate research results about conflicts and trade-offs between the environmental, social and economic aspects of sustainable food consumption ✓ Differences in cultural and organisational factors in policy-research interactions and how to overcome them ✓ Evaluation of the reliability of scientific knowledge (in the exchange between policy-makers and researchers): meta-analysis of scientific findings in the form of a systematic overview ✓ The role and influence of intermediary institutions (e.g. think tanks, consultants) in the policy-making process, particularly on the EU level ✓ Knowledge management of policy-makers: finding and applying the "right knowledge"; definition of quality criteria for knowledge brokerage ✓ Innovative ways of how to link research to policy-making and related success factors ✓ Easy accessibility and usability of database(s) of research findings for policy-makers ✓ Knowledge management about future developments – using scenarios and visioning processes