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Food system approach

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FOODforce position paper ***'Food System Approach'***

Objective

This position paper intends to give clear and tangible suggestions, based on hands-on experience of FOODforce members, to EC policy officers (DG Research, DG Agri, DG Growth, DG Sante, DG Connect, DG Environment) for designing programmes in the framework of Horizon Europe, in all inter-connected aspects of research, innovation, business creation, rural development and a sustainable Agri-Food system, and as such contributing to the FOOD2030 strategy.

Summary

FOODforce has identified and synthesised three "Lines Of Action" and two overarching suggestions for Horizon Europe Project design, to turn the complexity of today's unsustainable food system into a healthy, circular and resource efficient future food system.

In summary, we suggest:

1. Set-up Multi-Actor Discussion Groups connecting all types of actors covering the whole food system for the duration of Horizon Europe
2. Develop a tool box of methods which encourage individuals to easily make their daily decisions towards more sustainable and healthier diets
3. Cluster larger and smaller projects, at regional, national and European levels, within defined innovation fields, with flexible numbers of different kinds of partners
4. Joint call development across concerned DGs, involving concerned actors, evaluated by experts trained in the systems approach. Alignment among funding schemes: if you manage one you can manage all.
5. Valorisation Funnel: set up new comprehensive Horizon Europe instrument after project execution; install Transfer Brokers using prepared links to other existing SME funding schemes

And in conjunction, faster and clearer regulatory processes are needed for a faster and stronger uptake of new knowledge and technologies.





Lines Of Action to move to a Food System Approach

» 1. Multi-actor approach: how to make it real, effective and cross-sectorial

The different links in the chains (farmers, producers, processors, retail and consumers) rarely work together. Instead, many projects focus on only 1 or 2 links of the value net.

- There will not be real impact without more involvement of the retail sector, the main interactor with final consumption. Retailers already have large databases on behaviour of their consumers and may contribute to influence consumer habits. New Big Data Analysis and Social Sciences (consumer behaviour) are key instruments to help retailers to analyse relevant information from their customers, e.g., food waste, healthy/unhealthy/ sustainable food choices.
- There is a need to change the mind set of researchers and in particular project coordinators: To listen well to all actors and be open-minded for new ways of working, new knowledge and expertise. We need to link different disciplines with a cross-faculty approach at university / research institute level including social sciences, bringing together worlds with different cultures, attitudes and drivers, sectors and opportunities.
- We need new incentives for researchers (e.g. for multidisciplinary publications, patents, spin-offs, participation in Public Private Partnerships (PPP)).
- Many consumers believe information and recommendations from influencers / opinion makers, even when there is no scientific evidence for their statements. Therefore these "influencers" are also part of the Food System approach.
- Communication with consumers/citizens about food and nutrition must be based on real and relevant (evidence-based) information, from a very early stage (primary school): "start with the citizens of tomorrow", e.g. by using different channels like the promotion of good food and health habits for children using board games, apps/websites for young(er) consumers.

THEREFORE WE SUGGEST ...

Multi-actor Discussion Groups connecting all type of actors covering the whole food system.

Role and outcome: 1: Discuss and analyse critical points in the food system, at regional, national and European levels, contributing to a better 'Food System Awareness'. 2: Provide a map of relevant potential multi-actors, to make it easier for actors and project coordinators to join. 3: Improve quality of input + output from all sides. 4: Foster better long-term interaction between scientists and civil society, on the basis of mutual trust and respect. 5: The actors will be e.g. farmers, food producers, market actors (retailers), consumer organisations, food providers (cooking experts, restaurants, cooking schools, school/retirement homes, hospital catering services, school canteen leaders), regulatory bodies, policy makers, as well as all types of relevant industry (new smart-agri-systems technologies), animal and human health providers and academia (all disciplines).





» 2. How to involve behavioural consumer science to achieve real impact towards sustainable nutrition

Current existing dietary guidelines and generic public health messages are of limited value in achieving significant improvements to diet, health and sustainable food choices.

The real challenge is: how to change our habits as consumers?

- This will include **laboratory and field experiments as well as longitudinal studies**, e.g. interventions, in order to understand actual behaviour in close-to-realistic settings. The multitude of factors impacting decision-making of individuals must be replicated in research in order to obtain both reliable and valid results: attitudes and beliefs, preferences, habits and choice behaviour should be mapped in the settings in which they take place including situational factors, social (peer group) influence, individual characteristics and cultural differences.
- Need for **intervention studies** that allow close monitoring of the effect of treatments and stimuli such as personalised nutrition and dietary advice, personalised (fortified) products and treatment.
- **Field studies** to replicate realistic lab settings which account for the reality of drivers, influential factors and situational settings that impact choice behaviour, e.g. in-store studies, canteen/cafeteria experiments and restaurant studies.

THEREFORE, WE SUGGEST TO:

Based on laboratory and field experiments, longitudinal, intervention and field studies we need to develop a **tool box of methods which encourage individuals to easily make the decision towards more sustainable and healthier diets**. This toolbox should be developed by a multi-interdisciplinary and multi-actor approach and should be accessible to all actors including industry and retail.

» 3. Faster and stronger uptake of knowledge into the food sector

EU projects commonly stop after 3 – 5 years, and practical implementation of their results is still limited. Horizon Europe projects with innovation potential should have the opportunity to pass their results through a review process for better implementation and valorisation.

THEREFORE, WE SUGGEST TO:

1. Set up a **new comprehensive Horizon Europe instrument ('Valorisation Funnel')** with additional calls and funding for the most promising project results to go to market, e.g. by joining forces with similar projects, involving new partners for valorisation, and with budget for professional consulting for business development. The existing tools (e.g. SME instruments) are not felt to be sufficient here.
2. Install **Transfer Brokers** for better transfer of project results towards new business models and developing of business plans; using **prepared links to other existing SME funding schemes** (regional / national).
3. Suggested structure:
 - *Phase 1 – 3-5 years project execution (as now)*
 - *best results from Phase 1 projects are reviewed for Phase 2 (Valorisation Funnel)*
 - *Phase 2 – Next Implementation (1-2 years, new partners, Transfer Brokers, additional funding)*





Overarching suggestions for Horizon Europe Project design: Cluster/Matrix/Modular System of related projects

- A **mix of large projects and more dedicated smaller projects**. Cluster of related projects (Example: current cluster on microbiome) to ensure effective connection, communication and synergy among projects.
- **Cluster** approach at regional, national and European levels on a mid- to long-term perspective consistently bringing together the main actors of a subsystem; e.g. SMEs, research institutions, local government, regulatory, and civil society actors. This would create more outputs, enhancing interactions, innovation and establishing new or smarter value-chains.
- Allow **flexible numbers** of different kinds of **partners during the course of a mid/long term project**. Example: high input of many partners at design and start of project, but possibility to change/add partners easily (SMEs, partners from civil society) towards the end of a project for communication/dissemination/exploitation when outcomes are more practically interesting.

How could the EC support a FOOD systems approach?

- Overcome thinking in and acting as silos: Ideally, this would be approached by joint call specification across for example DG-Research, DG-Agri, DG-Grow, DG-Sante.
- More alignment among regional, national and European funding schemes in terms of topics and **administrative processes** ('if you manage one you can manage all').
- Call text is very important; it should be developed together with relevant actors to enforce an interdisciplinary systems approach.
- Right questions are key: projects should allow development of the right questions (together with civil society and industry) before working on the solutions.
- Evaluation panels should be skilled and guided in system thinking.

FOODforce <https://www.foodforcenetwork.eu/> is a network of more than 20 leading European universities and research provider organisations covering all of Europe and active in the areas of food production and processing linked to nutrition and health. FOODforce members are connected with their local stakeholders, ranging from primary producers, manufacturing industry, packaging, ICT industry, food processing industry up to local processors and retailers (mainly SMEs, but also big companies), and can secure a demand-driven interactive approach in education, knowledge transfer and innovation to these local markets. FOODforce members have broad remits but share a common interest in multidisciplinary food science and innovation. We provide a proactive forum for discussions on delivery of best practice and societal impact and facilitate international aspects of knowledge exchange and innovation, both within and outside the EU. FOODforce supports research and innovation by tackling several Societal Challenges: '*Food Security, sustainable agriculture, marine and the bioeconomy*', '*Health, demographic change and well-being*' and '*Supply of raw materials, resource efficiency and climate*'. As a voice of European universities and research institutes in food, nutrition and health, FOODforce wants to share opinions with the EC in order to help and advice both ambitions and implementation of policies.



FOODFORCE MEMBER ORGANISATIONS

Belgium	- Ghent University – “Centre of Expertise Food2Know”. - University of Leuven
Denmark	- University of Copenhagen
France	- INRA, Centre de Recherches de Toulouse - INRA, Centre de Paris Food-Consumer
Germany	- University of Hohenheim - German Institute of Food Technologies (DIL)
Iceland	- Mafís ohf. / Icelandic Food and Biotech R&D
Ireland	- Teagasc Food Research Centre, Ashtown
Italy	- University of Bologna – Alma Mater Studiorum
The Netherlands	- Wageningen University and Research - Maastricht University / Maastricht University Centre
Norway	- Nofima Food Research Institute
Poland	- Institute of Animal Reproduction & Food Research of Polish Academy of Sciences – Division of Food
Portugal	- Escola Superior de Biotecnologia, Universidade Católica Portuguesa (CBQF)
Romania	- National Institute of Research and development for Food Bioresources IBA Bucharest
Serbia	- Institute of Food Technology in Novi Sad (FINS)
Slovak Republic	- Slovak University of Agriculture in Nitra
Spain	- Polytechnical University of Valencia (UPV) - AZTI Tecnalia - IRTA Research and Technology Food & Agriculture - AINIA, technology centre
United Kingdom	- Quadram Institute Bioscience - Leeds University

FOODFORCE ASSOCIATED ORGANISATIONS & NETWORKS

- ✓ European Commission – Directorate General Joint Research Centre:
 - Institute for Health & Consumer Protection, Ispra, Italy
- ✓ The European Association for Food Safety, SAFE consortium
- ✓ ETP Food for Life
- ✓ JPI FACCE
- ✓ JPI HDHL
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