Grand challenge 2: Food security, sustainable agriculture and forestry, marine and maritime and water research, and the bio economy

4. Sustainable food

Good quality food for all

GRAND CHALLENGES :

- C1. Health, demographic change and wellbeing
- C2. Food security, sustainable agriculture and forestry, marine and maritime and inland water research, and the Bioeconomy
- C5. Climate action, environment, resource efficiency and raw materials



CHALLENGE

Accessibility to good and healthy food is not equally available to all. Socio-economic factors, pricing, education, culture, location are critical factors that may limit access to healthy quality food and related dietary habits. Unequal access to food has a strong local and global impact in both urban and rural areas. This is expected to become even worse in a changing climate. This inequality is challenging public health as well as social and economic cohesion. Food poverty and food wastage are also pressing challenges in the EU. Consumers are, at times, receiving conflicting and contradictory information about healthy diets and nutritional

value and this causes confusion.

SCOPE

Both basic and applied research should be developed with an interdisciplinary approach to understand and assess the processes generating food inequalities and examine how this affects social and economic cohesion locally and globally.

Research should focus on the following aspects:

- Map the food access in rural and urban areas
- Calculate and assess food poverty in the EU
- Look at supply regulation and issues connected to distribution and prices (transnational level)
- Investigate the socio-economic inequalities existing inside a country with regard to food and nutrition (national level)
- Analyse all questions surrounding sustainable nutrition: quality, health (use of pesticides), access to healthy food (local level)

In addition, concrete approaches to addressing the issues could be explored such as:

- Design and assess educational programmes to encourage healthy sustainable food habits in particular in primary education
- The universal basic income as a way to provide equal access to quality food

Transnational, national and local level

EXPECTED IMPACT



- Reduced inequalities of access to sustainable healthy food
- Reduced food poverty in the EU
- More sustainable urban and rural food systems
- Effective strategies to neutralize actors /institutions contributing to food injustice/ inequalities and food waste around the world
- Effective strategies to fix the flaws/instances of injustice of the transnational food commerce
- Fostering better quality nutrition to prevent long-term health problems, diseases and infections, food disorders (obesity and malnutrition) and antibiotic resistance

7 Good quality food for all

Research topic: Good quality food for all

#5b.

Grand Challenges :

1: Health, demographic change and wellbeing

2: Food security, sustainable agriculture and forestry, marine and maritime and inland water research, and the Bio economy

5: Climate action, environment, resource efficiency and raw materials

CHALLENGE

Accessibility to good and healthy food is not equally available to all. Socio-economic factors, pricing, education, culture, location are critical factors that may limit access to healthy quality food and related dietary habits. Unequal access to food has a strong local and global impact in both urban and rural areas. This is expected to become even worse in a changing climate. This inequality is challenging public health as well as social and economic cohesion. Food poverty and food wastage are also pressing challenges in the EU. Consumers are, at times, receiving conflicting and contradictory information about healthy diets and nutritional value and this causes confusion.

SCOPE

Both basic and applied research should be developed with an interdisciplinary approach to understand and assess the processes generating food inequalities and examine how this affects social and economic cohesion locally and globally.

Research should focus on the following aspects:

- Map the food access in rural and urban areas,

- Calculate and assess food poverty in the EU,

- look at supply regulation and issues connected to distribution and prices (transnational level),

- investigate the socio-economic inequalities existing inside a country with regard to food and nutrition (national level),

- analyse all questions surrounding sustainable nutrition: quality, health (use of pesticides), access to healthy food (local level).

In addition, concrete approaches to addressing the issues could be explored such as: - Design and assess educational programmes to encourage healthy sustainable food habits in particular in primary education,

- The universal basic income as a way to provide equal access to quality food.

Transnational, national and local level

EXPECTED IMPACT

Reduced inequalities of access to sustainable healthy food Reduced food poverty in the EU More sustainable urban and rural food systems

Effective strategies to neutralize actors /institutions contributing to food injustice inequalities and food waste around the world.

Effective strategies to fix the flaws/instances of injustice of the transnational foo commerce.

Fostering better quality nutrition to prevent long-term health problems, diseases infections, food disorders (obesity and malnutrition) and antibiotic resistance

Online consultation rating: average importance: 4,03/5

Nations prioritizing this research area: Cyprus, France, Greece

CITIZENS' VISIONS

[CHE] Vision 4. Less is more.

"Less food will be produced and it will be handled more responsibly.

There will be a decision-making system permitting to extract or use natural resources in a sustainable and economical manner and, at the same time, give a bigger share to the global south."

[EST] Vision 6: Life in your age

"healthy fast food and different snacks are easy to find and consume"

[IRE] Vision 3: Relationships with one another and the environment "Food production done ethically. Work with nature."

[HRV] Vision 3: The preservation of human health and nature for the generation XYZ "People will grow healthy food for themselves, with minimal or no ecological footprint."

[ITA] Vision 4: A school beyond times - a new education model "Nutrition is governed by laws that make it organic, sustainable and accessible to all."

[PL] Vision 1: Healthy Family, Healthy Society (Flower of Life) "We all eat healthy because we have easy access to organic food produced locally"



Evolving food culture in growing cities

GRAND CHALLENGES :

- C2. Food security, sustainable agriculture and forestry, marine and maritime and inland water research, and the Bioeconomy
- C5. Climate action, environment, resource efficiency and raw materials



CHALLENGE

Many people in cities come from diverse cultures. For a long time, people who migrated were expected to adapt to the local food culture. Things have changed and today migrants feel the need to maintain their traditional culture and gastronomy. In ever growing cities, this raises challenges in terms of sustainability due to the need of providing a huge diversity of food cultures, in terms of social-economics impact and in terms of social inclusion and cohesion. Challenges may arise e.g. when a city hosts Mediterranean, African or Asian food cultures which rely on food products which require to be imported from distant regions. Specific challenges include issues related to personalized food diets, food provision, social cohesion, diversity in communities, and impact on environment.

SCOPE

Research should investigate the following aspects:

- Comparative study of food supply chains and their social, ecological and economic impact
- Studies on the role of food as an enabler for social inclusion and cohesion in cities
- Sociological and behavioural research on food practices and habits taking into consideration aspects related to flavour, taste and emotions
- Historical research of nutrition flows during periods of migration
- All stakeholders (including the actors of the food service economy, food providers in cities, producers, importers, etc.) and in particular citizens, should be included in the research on more sustainable food production, consumption and delivery

Research should help developing and demonstrating practical solutions such as:

- Policy tools for management of mixed food cultures in cities
- Sustainable non-indigenous local growing techniques
- Intervention options into diverse and multicultural food consumption practices
- Non-prescriptive tools to define the footprint (co2, water, land use) of food
- Scenarios and strategies for integrated local food production for different cities with different climates (dynamic modelling)
- Urban planning, architecture and design should shape cities in order for them to facilitate and increase community collaboration and social cohesion via a more sustainable food production and consumption

EXPECTED IMPACT



- More sustainable cultural mix
- Improved social inclusion and cohesion through food diversity in cities
- Personalized sustainable and healthy food diets taking into consideration the food culture mix and diversity
- More integration of citizens in the food system research, innovation and development
- Efficient food value supply chains tailored for culturally diverse sustainable and resilient food systems
- Functioning interventions for the implementation of change and the promotion of new and sustainable ways to consume food
- A sound, well communicated knowledge basis for consumers' food decisions

8 Evolving food culture in growing cities

Research topic:

Evolving food culture in growing cities

5d

Grand Challenges :

2: Food security, sustainable agriculture and forestry, marine and maritime and inland water research, and the bio economy

5: Climate action, environment, resource efficiency and raw materials

CHALLENGE

Many people in cities come from diverse cultures. For a long time, people who migrated were expected to adapt to the local food culture. Things have changed and today migrants feel the need to maintain their traditional culture and gastronomy. In ever growing cities, this raises challenges in terms of sustainability due to the need of providing a huge diversity of food cultures, in terms of social-economics impact and in terms of social inclusion and cohesion. Challenges may arise e.g. when a city hosts Mediterranean, African or Asian food cultures which rely on food products which require to be imported from distant regions.

Specific challenges include issues related to personalized food diets, food provision, social cohesion, diversity in communities, and impact on environment.

SCOPE

Research should investigate the following aspects:

-Comparative study of food supply chains and their social, ecological and economic impact

-Studies on the role of food as an enabler for social inclusion and cohesion in cities -Sociological and behavioural research on food practices and habits taking int

consideration aspects related to flavour, taste and emotions.

-Historical research of nutrition flows during periods of migration

-All stakeholders (including the actors of the food service economy, food providers in cities, producers, importers, etc.) and in particular citizens, should be included in the research on more sustainable food production, consumption and delivery

Research should help developing and demonstrating practical solutions such as:

-Policy tools for management of mixed food cultures in cities,

-Sustainable non-indigenous local growing techniques,

-Intervention options into diverse and multicultural food consumption practices,

-Non-prescriptive tools to define the footprint (co2, water, land use) of food,

-Scenarios and strategies for integrated local food production for different cities with different climates (dynamic modelling).

-Urban planning, architecture and design should shape cities in order for them to facilitate and increase community collaboration and social cohesion via a more sustainable food production and consumption.

EXPECTED IMPACT

-More sustainable cultural mix,

-Improved social inclusion and cohesion through food diversity in cities

-Personalized sustainable and healthy food diets taking into consideration the food culture mix and diversity,

-More integration of citizens in the food system research, innovation and development -Efficient food value supply chains tailored for culturally diverse sustainable and resilient food systems

-Functioning interventions for the implementation of change and the promotion of new and sustainable ways to consume food,

-A sound, well communicated knowledge basis for consumers' food decisions. -Online consultation rating: average importance: 3,76/5

Countries prioritizing this Research Area: Switzerland, Belgium, the Netherlands

CITIZENS' VISIONS

[LUX] Vision 1. On the way to a participatory community.

"Children are raised and integrated into the community and nobody is excluded from society. The biological garden would be an integrated part of that co-living and represents the food base for all of us."

Policy recommendations for sustainable food

1. To facilitate public private partnerships (quadruple helix approach) to develop business models that tackle and improve access to food, based on the "quadruple helix approach" (citizens, governments, education, industry).

This integrated approach is innovative. Although sectorial evidence exists, it is necessary to create linkages, which address the topic in a more holistic manner. This calls for consensus building and shared interests between parties that do not necessarily collaborate and might have divergent agendas.

2. Legal framework to limit food loss

Some members states (at national level) have created legal environment and generated good practices that could be adopted through policies (hard or soft law) on a Pan-European level to systematize the prevention of food loss

The benchmarking and research would lead to a **European legislative environment (legal framework) to support/encourage the redistribution/donation of food** (unsold food, excess agricultural produce, excess food, food waste from agro-industrial processes etc.) to prevent food loss, avoid waste and provide more access to food for the less privileged. This legal framework should be co-created with the help of directly affected stakeholders (including citizens).

3. User-friendly quality food labelling

User-friendly (creative and colourful) quality food (sustainable and nutritious) labelling with clear symbols in an understandable way for the citizens should be available throughout Europe. This could include nutritional value, sustainability and provenance. One basis would be the already existing cases (for example, UK with chocolate or European Organic label).

4. Increased visibility for healthy & sustainable food at points of sale

A policy recommendation based on existing national regulation would give healthy and sustainable food products have increased visibility at points of sale (including supermarkets) and less visibility is dedicated to unhealthy food (for example Netherlands with only healthy snacks at check-out counters in supermarkets Improved marketing for sustainable and healthy food products. A policy would be useless if the food items displayed were not sold).

5. Design of urban spaces for increased social cohesion and sharing of food cultures

Through urban policies, new city designs and buildings tend to incorporate more spaces (roofs, balconies, yards, cellars, etc.) for aspects related to food, including communal cooking and eating spaces, urban farming, vertical farming, neighbourhood aquaponics systems for community empowerment. This shall enable food culture diversity to become more sustainable and to reinforce social inclusion and cohesion.

This is still a weak signal all over Europe both in small and large cities. These should be scaled up and multiplied and approached in a more integrated and systemic manner at city level. The result is expected to increase the understanding and sharing of diverse food cultures in growing cities. Study cases should be carefully analysed and evaluated. EU Programmes like URBACT (Networks of cities) could act as catalysts and case studies. Some EU programme could finance such initiatives.

6. Join Forces for a common food agenda

For research and innovation, enable pool of funders interested in bringing forward a common agenda for food and nutrition security.

7. Canteens should provide more multi-cultural and diverse food.