

LERU Note  
June 2013

**Essential SSH Research for the Societal Challenge**  
*Food security, sustainable agriculture and forestry*

With this Note LERU wants to advise the European Commission to include essential Social Sciences and Humanities (SSH) research in the programme addressing the challenge 'Food security, sustainable agriculture and forestry, marine and maritime and inland water research and the bio-economy' in Horizon 2020. The seven Notes complement a 2012 LERU Advice Paper on the role of SSH in Horizon 2020<sup>1</sup>.

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**Introduction: a historical perspective**

1. One accepted definition of the term "food security" states that every household should have access to adequate amounts of healthy, nutritious food in a form that also respects the family's dietary preferences. This implies an analysis of health and hygiene conditions, typologies of farming, food production industry characteristics, commercial chain structures, food distribution and many other elements. A key element in this approach, however, is linked to the traditions and cultures of specific regions and social groups, which do not necessarily correspond to national boundaries, including traditional practices, religious beliefs, socio-cultural differences, stratification by gender and age group, local gastronomic culture, aesthetics and taste, geographical influences and government strategies. All historical studies related to food have shown that it is necessary to take into account all the cultural and socio-economic variables that define the distinctive nature of one particular area. Food can be seen as an identity marker, as suggested by many anthropological studies. Food, food items and foodways can be symbols of local cultures seemingly or apparently resisting the onslaught of foreign food and food styles, but they can also be carriers of globalisation actively transmitting culinary patterns from elsewhere, in addition to which there are also many forms of hybridisation. Cafes, restaurants, supermarkets and food shops can be seen as a microcosm of relatively clearly delineated cultural or socio-economic entities or even arenas where the local and the global may meet, mix, reinforce or even clash with each other. They can thus be used as a lens to investigate wider processes connected to globalisation and their impact on global cities, and notably on the production, consumption and wasting of food in urban environments.

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<sup>1</sup> League of European Research Universities. *Social sciences and humanities: essential fields for European research and in Horizon 2020*. Advice paper n.11, June 2012.

2. The practical consequence of this premise is that a food security policy that sends generic messages and is equal for everyone may, in fact, not be understood or even be rejected by its intended beneficiaries. One example of this involves the influence of religious and cultural beliefs concerning what can be accepted as food. There are, for instance, many well-known strictures against eating some food items - despite their high nutritional value - like all meat or meat from specific animals, the consumption of fermented drinks, and limits on the quality and quantity of food at certain times of year. Food that is readily accessible because it is locally produced or imported may remain uneaten for cultural reasons.
3. Not only does usage vary greatly according to conditions whose origins are deeply rooted in time, but food availability and access are also greatly influenced by history and culture. Availability of food has always been extremely variable, depending on socio-economic conditions or job type, especially in the absence of remedial strategies. Rigid hierarchies still dictate food allocation within the family or social groups according to gender and age. Technology, which could often widen availability and access, can also be an obstacle. Technology is not a "black box" whose operation is a mystery - it is an instrument to be interpreted and used according to acquired cultural codes. In Europe many of the problems surrounding access to food were resolved during the nineteenth century. However, the recent crisis has seen the appearance of new forms of poverty - not all linked to recent immigration - that place these problems in a contemporary context and demand targeted policies. As a result the following three issues are particularly relevant:

#### Cultural food practices and taboos

4. In-depth research into the customs and limitations surrounding specific types of food or their combinations stemming from traditional practices and religious prohibitions is needed. The ideal would be to complete a comprehensive mapping of these usages, which exist in all European countries, also reflecting the numbers of different ethnic groups that retain - partially, at least - the food customs of their origins as a link with their land of origin. Only in this way can food security policies effectively target consumers, avoiding waste of resources and energy. They should also lead to a wider interpretation of the concept of food security, forcing us to adopt a more realistic approach. In particular we recommend a careful analysis of alimentary taboos. This means more than just religious prohibitions - take, for example, the growing popularity of vegetarianism or the fall-out from situations such as those created by recent food industry scandals regarding the presence of horsemeat in processed products. In this last case the levels of outrage differed across Europe. There was no real anger in areas where eating horsemeat is a normal part of traditional practices, but there was an intense reaction in countries where horses are not regarded as working animals, but are seen as pets on the level of dogs and cats. The result of this attitude is the development of a taboo against killing and eating animals with a sentimental appeal.

#### Gender role

5. We recommend an in-depth study on the primary importance of women in food security, analysing their manifold role in food production, preparing meals, consumption and educating children about their food culture (especially looking at the historical evolution of this issue). Food messages and policies must be specifically directed towards

the section of the population that is directly responsible for the majority of activities linked to food. That is why it is important to understand women's needs, their cultural position, local traditions, educational level, how meals are prepared at home and the way in which information is communicated. Only a more forceful message that targets women more effectively will prepare the way for the implementation of useful policies in the medium and long term.

#### Ethics

6. The quality of food is important for public health outcomes, thus overlapping with crucial health policies and the agenda of the health sector: dietary lifestyles matter both to individuals and to society, opening the space for interventions on individual choices motivated by public needs that are ethically questionable. Valuable local identities and cultural peculiarities might be threatened by technical solutions for improving agricultural yields throughout the food system, with different stakes pointing toward different solutions. Concerns for environmental sustainability and food security must also be addressed at the same time, thus opening up the possibility of tensions between these key developmental goals. The cosmopolitan nature of food production and distribution systems give rise to debates pertaining global justice and the duties and rights of people belonging to different nation states and supranational institutions. In the public perception, there are furthermore fundamental moral disagreements about the use of genetically modified organisms and the management of animals. Ethics can be valuable in highlighting specific places of ethical disagreement in the design and implementation of food policy. If moral theorists can employ results in the field of medical humanities to address the controversial issues arising from food policy for health, it is clear that the moral questions regarding who should act- and on the bases of which duties- will be crucial in the implementation of just solutions for the food challenges.

#### *A sociological perspective*

7. As the sources and quality of food are increasingly invisible to consumers in modern globalising industrial food systems, a discourse on food quality is becoming paramount, and many consumers appear to deploy increasingly politicised frames to consider their access to quality food. On their part, the social sciences have long shown that food, food choices and food practices are political: food unites - meals bring people together in social collectivities - and divides - food may express cultural conflicts and meals can also be quite alienating events. Thus, if food and food habits have been only implicitly addressed in classical sociological literature, the field of food studies is now quite established. For rural sociologists, food has been central in studies of agricultural and technological change for some decades now. For medical sociologists, food and nutrition are increasingly recognised as an important factor in the study of health and wellness. Cultural and economic sociologists have stressed the symbolic role of everyday practices and the way in which food systems, trust in food and food communication are intertwined with different social and economic arrangements. More recently political sociologists and political scientists have stressed how food practices of an alternative kind and food movements contribute to new forms of sub-politics parallel or alternative to more traditional means of democratic participation.

#### Media communication

8. Indeed, food has increasingly become a debated area at social and political level in contemporary societies. In the 1990s, European societies witnessed a number of so-called food scandals or at least debates in the media about various issues related to food, such as BSE, salmonella, pesticide residues, obesity, animal welfare, GMO and functional foods, which highlighted the issue of food safety. All in all, food issues in contemporary society are relevant for a number of different social actors, from farmers to food industry producers, from retailers to scientific

experts, from cultural intermediaries to individual consumers. With the intensification of media debates about both food safety and food security, and with the increased presence of discourse surrounding the quality of food and nutrition (in terms of safety, a refinement of taste, a rising of consciousness for ethical themes and an health agenda) the distribution of responsibility among social actors for handling and solving food problems is contested and food becomes more clearly a political issue. The politics of food clearly deals with food consumption as well as what comes before and after it, what makes it possible and what are its consequences beyond its immediate meanings and rewards. It thus stretches to the entire commodity circuit, including consumption, production, distribution, regulation and representation. Indeed, a number of discourses and practices which address the politics of food today are predicated on the attempt to make the commodity circuit more transparent, shorter and fairer. The diffusion of low-cost standardised fast-food as well as food scares associated with heavily industrialised farming have often catalysed public attention towards products which are “natural”, “local”, “traditional”, as well as sourced from “sustainable” agricultural practices and produced through “fair” labour relations. As a result, the issues of food quality and social inequalities are particularly relevant, as described below.

#### Food quality

9. Data coming from the Eurobarometer 2012<sup>2</sup> illustrates that more than 96% of EU citizens find quality an important factor when buying food (even before price, which is cited by 91%), while around 60% considers food security a relevant matter in Europe and tended instead to express concern (75%) at the challenge of feeding the world's population. Still, while access to adequate nutrition may appear less urgent in Europe to European consumers, many of the themes

which are now collected under the label of food quality indeed express the particularly European vision on food security, considered as access to adequate (culturally and socially nourishing) food. There is thus the space to bring back to issues of food security what goes under the label of a ‘turn to quality’ in the study of food dynamics. A large amount of research described a range of novel practices in the production, distribution, retailing and consumption of food products. Highlighting concerns such as re-localisation and embeddedness, this research has suggested that a new moral economy alongside the world of corporate food has developed. Thus we have seen a growth in the number of small specialty food producers and retailers, the re-invention of farmers’ markets and street markets, a new interest by middle-class consumers in finding green, organic, traditional, local foods. Media interest fuelled by cookery and tourist programmes has contributed to the generation of a certain amount of cultural effervescence around small food producers or even alternative food practices, especially of a distinctive kind. This has gone hand in hand with a remarkable interest in food scares, which have been increasingly of global or at least transnational nature, generating spirals of cultural panic and making evident the central role of risk communication in contemporary societies, but also contributing to consumers’ increased interest in alternative and local food as a defensive and yet innovative strategy of risk-coping. The rise of the Slow Food movement - from Italy and increasingly internationally - testifies to the cultural power that new food movements can indeed marshal. The increasingly relevance of alternative food networks has been fuelled by the political investment of consumers and their attention to local issues/foods/territories and to small-scale economic circuits.

#### Social inequalities

10. Access to alternative food networks is often considered a major route to high quality food in EU countries, yet such access is highly

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<sup>2</sup> [http://ec.europa.eu/public\\_opinion/index\\_en.htm](http://ec.europa.eu/public_opinion/index_en.htm)

differentiated across social classes, urban and rural consumers, and consumers of different ethnic origins. More broadly, a number of studies of EU consumers and food practices show that access to culturally and socially adequate food is mediated by cultural and economic capital, with a remarkably differentiated social map in terms of both actual choices and the structuration of long-term dispositions to choice (i.e. tastes). The perception of food quality also varies greatly across social classes and ethnic groupings and the current context of global migrations and economic crisis tends to put such differences under stress, especially as shrinking economic resources are being differently managed by different households to cope with food needs in the context of other relevant expenses. There is thus the need to consider how food choices and food tastes are managed in the context of household choices as related to the capacity to reflect the household social standing, and what this may entail in terms of a shifting map of the social differentiation of access to adequate food.

### *An economic perspective*

11. Cultural aspects play an important role in shaping dietary patterns and habits, but also social norms and ethical principles that drive food choices. Cultural differences in diets and values across the EU Member States should be addressed, as well as the changes in food preferences and dietary habits driven by globalisation and newly emerging localisation trends. Therefore, in the coming years, it will be crucial to study how information and communication policies impact the knowledge of people and their culture, so that food consumption choices and behaviours may be affected. Indeed, a change in consumer behaviour with regard to health and environmental sustainability may constitute a strong demand pull in driving changes in food supply chains, and an opportunity to change business models and business choices.

On the other hand, the strong upward trend and increased volatility in global food prices make food and nutrition security a key priority of the EU policy agenda. In addition to the traditional issues related to food security at the global level, such as population growth, income distribution and resource constraints, the newly recognised challenges in the form of climate change, speculation and bio-energy demand for non-food uses of agricultural commodities have put further pressure on the existing EU agri-food system. Moreover, the EU food system is faced with a progressive slowdown of yield crop and productivity growth. The societal challenge related to food is a multidimensional issue. From an economic point of view we can distinguish between three main different dimensions: economics, environment, health and nutrition.

*The economic dimension*

12. This dimension points to the economic vulnerability of food systems, focusing especially on the current and future competitiveness of the EU's agri-food sector. In a context of increasing uncertainty and pressures coming from the international market, there is a need for a renewed interest in the role of R&D and innovation to contrast the productivity slow down of the last decades and the challenges coming from sustainability concerns. In this respect, a key role in pushing firms towards innovation is played by their exposure to international market. Indeed, despite the negative perceptions of the European public opinion towards globalisation, there is consolidated evidence that more market competition increases R&D investments and productivity growth. Thus, a better comprehension of these interrelationships represent a promising area for future research.
13. Despite the need of the public, politicians and scientists for agri-food data, despite knowledge, information, and dissemination management, no comprehensive database and platform are thus far available at the European level. The data is rather scattered in different contexts and locations

(databases) and hardly interlinked. The appropriate tool to provide this interlinked platform could be a Geographic Information System (GIS)-based Collaborative Research and Dissemination interactive web-based platform (CRDE). This platform serves to monitor, visualize, evaluate and analyse the multilayer agri-food related data, as well as to enable communication between scientific disciplines and dissemination of findings to a broader public and the policy level. Data can include spatial information, climate-ecological features and effects, production and consumption pattern, and other data such as health, education and nutrition related information, which can be retrieved in a gender-disaggregated way. This GIS and database module can be used to evaluate and monitor the multiple interrelationships and correlations between features (e.g. gender-disaggregated nutritional status), and spatial differences and temporal progress.

*The environmental dimension*

14. In order to reach a sustainable agri-food system which is a complex multi-functional eco-system producing different kinds of goods (not only food but also industrial, environmental, energy and cultural goods and services), changes of consumption patterns will be needed as technological solutions (alone) are not sufficient to tackle current global environmental challenges. Given the potential environmental impacts of food production and distribution, the analysis of consumer food choices becomes particularly important. Indeed, food consumption induces considerable negative externalities on society by, for example, contributing to 20-30% of the global warming potential in Europe. It is crucial to study policies aimed at promoting environmentally friendly food choices and capable of accounting for (and interacting with) society's values, consumers' bounded rationalities and the constraints related to modern lifestyles. Therefore, it will be important to analyse consumer preferences, behaviours and attitudes towards environmental sustainable food choices. Current environmental problems call for new

paradigms of production, distribution and consumption, globally and locally. In this direction, in a context of increasing urbanisation, development paths towards smart cities - with proactive and empowered 'smart' citizens - should be devised. Current work on the study of consumer preferences and attitudes with regard to sustainability of food products and processes is not sufficiently deep and extensive as it has mainly focused on specific topics that involve particular segments of consumers and contexts. The topic of environmental sustainability in the agri-food system needs to be approached from a broader perspective that may include all consumers. Methodological work is also needed to develop tools to evaluate the sustainability of processes, products and innovations that are easily applicable and understandable by non-experts.

*The health dimension*

15. In recent years a rapid change in food consumption and lifestyles has occurred, resulting from the industrialisation, urbanisation, economic development, and globalisation of markets, that have effectively contributed to change food habits. Indeed, the globalisation in the food sector has led to important changes in food consumption patterns in the EU countries, shifting from traditional diets based on local foods to more diversified and multi-ethnic consumptions. This has led to an improvement of diets in some countries due to the diffusion of healthier food habits. On the other hand, for those countries in which the Mediterranean diet is widespread these changes have negatively modified the nutritional status. At the same time, a significant increase in diet-related diseases has been observed, which severely affects consumer health status and wellbeing. In this context, one of the challenges for the promotion of public health is to comprehend if there exists any link between the growth of these diseases and the changes in life styles and food patterns.

### **Conclusion**

16. LERU supports the inclusion of the societal challenge “Food security, sustainable agriculture and forestry, marine and maritime and inland water research and the bio-economy” in Horizon 2020 and recommends that SSH research lines are built into its work programmes from the beginning. SSH researchers should be actively involved in the research agenda setting of the energy challenge, taking part in the whole process, from problem formulation to implementation and evaluation.

17. LERU suggests the following SSH-related research pillars on this societal challenge in Horizon 2020:

#### **Pillar 1: Historical and cultural context of foodways**

This pillar should research the following topics with an interdisciplinary and comprehensive approach: the cultural and historical creation of specific foodways, the formation of cultural food practices and taboos, the gender role (with specific attention to women), and questions related to ethics.

#### **Pillar 2: Sociological context of food in modern societies**

18. This pillar should examine the crucial role of media communication in contemporary societies, questions related to food quality (re-localisation, consumers’ anxieties, etc.), and social inequalities in food distribution.

#### **Pillar 3: Economy and Environment**

19. This pillar should be devoted to the understanding of the economic dimension (EU’s agri-food sector, globalisation), the environmental dimension and the challenge of sustainability, and the consequences on consumer health.