

# Towards a global research program on food systems

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**Food Systems Workshop, Marble Hall, University of Copenhagen, Faculty of Science,  
Frederiksberg Campus, Copenhagen, October 25<sup>th</sup> 2014.**

## **Summary report**

### **(A) Background.**

Future Earth is interested to establish a research area on food systems. This one day workshop, hosted by the CCAFS Coordinating Unit at the University of Copenhagen in collaboration with Future Earth, was intended to contribute to that aim. Two objectives were agreed for the meeting, namely (i) *to identify some of the major research themes that are currently under-researched* and (ii) *to explore modalities for achieving greater synergy amongst current global research programmes on Food Systems*. The facilitated workshop was attended by 44 invited participants who represented a wide range of research disciplines, institutions, nationalities and geographic spread and was structured around plenary presentations and working group discussion and feedback.

### **(B) Objective 1: Five possible research opportunities for Future Earth**

Participants were asked before the workshop to propose topics for a future research agenda, topics that they regarded as being poorly covered at the moment. We deliberately stayed away from topics that were well-covered by current programs (e.g. productivity research as conducted by the CGIAR). Topics were identified and these were collated and sent to participants for comment. The following five under-researched areas were then discussed at the workshop.

#### ***(1) Co-production of universally-applicable food systems framework(s) for use by a global alliance of multiple stakeholders***

Problem statement: *Research to improve balanced food security, environment and business outcomes is hindered by not having common food systems concepts and frameworks since most research endeavours in the food 'space' are not well couched within the bigger food system concept.*

The following 3 steps were identified for follow-up action:-

- a) Collate directory of approaches to food system conceptualisation.
- b) All stakeholders (including researchers) review approaches in the context of (i) their original purpose and (ii) potential of integrating elements to derive frameworks suitable to a Future Earth food systems programme.
- c) Identify new modelling frameworks which compare approaches based on (i) whole system modelling with (ii) interfacing sub-system models.

#### ***(2) The demand side of food systems and behavioural change***

Problem statement: *Food consumption patterns have a big impact within and beyond the food systems and we still do not fully understand the dynamics, drivers and values, and how to foster changes in the system.*

Examples of the research questions identified include:

- a) Understanding regime shift: urbanization, the changing role of supermarkets *etc*
- b) What is likely to happen in future food systems and do we understand the dynamics of how change can be bought about?
- c) How do we consider the cultural context of the diverse food systems on a global basis?

#### ***(3) Food losses and waste.***

Problem statement: *How to minimize food loses and waste in order to achieve global food security?*

Examples of the research questions identified include:

- a) What is the meaning of ‘waste’ in different cultures and settings and can we agree on a common definition of ‘waste’ across the globe?
- b) Is there enough precise data on the volume of food waste?
- c) How does policy, especially on food regulation, generate food waste and /or discourage food waste?
- d) Should the margin of responsibility be more on the demand side or supply side?

#### ***(4) Urban and peri-urban agriculture***

Problem Statement: *How can cities develop targeted urban food system policy principles?*

Examples of the research questions identified include:

- a) What are the food consumption patterns in cities and what are their reactions to policy instruments?
- b) How much can urban agriculture contribute to food system resilience (supply chain and price volatility?)
- c) Would using urban agriculture’s role as a teaching tool enhance the ‘policy visibility’ of urban food systems?
- d) How can we facilitate city planners to address the institutional bias against urban agriculture?

#### ***(5) Different food system requirements under various socio-ecological contexts***

Problem statement: *Participants felt that very little of substance was known on this topic and couched the problem statement in the context of 12 key areas where more information was required.*

Examples of the research questions identified include:

- a) What are the relative impacts of globalization and local cultural values on food systems and system resilience?
- b) How do food system characteristics interact with human health (e.g. obesity .v. malnutrition)?
- c) What are the effects of local and international markets on food systems?
- d) What is the process of transition of food systems as developing countries begin to prosper?

### **(C) Objective 2: Modalities for achieving greater synergy amongst current global research programmes on food systems**

Working groups were asked to address two questions:

Question 1: *Where are global food systems going and what are the key challenges for the next 5 years?*

Three key points emerged from participants’ feedback:

- i. **Food systems research is a new food security paradigm.** Historically, food systems were regarded more as a development issue rather than a research theme. However, that has changed and it is now recognised that key drivers of change such as population and wealth growth, climate change and globalization require that food security research must embrace a food systems perspective.
- ii. **Food systems research: the challenge of complexity.** As with any emerging and complex area of research, there will be challenges that will have to be addressed such as integrating the perceptions of a broad spectrum of stakeholders, the ability of research institutions, especially in the developing world, to find the skills, time and funds to undertake such additional work and the fact that many research institutions are entrenched in the ‘traditional’ productionist paradigm
- iii. **Food Systems research: the challenge of engaging partners.** Participants stressed that it was imperative to engage with the private sector, but that this sector is generally only interested in basic and applied research as relates to their business model, and with the main motive relating to profitability and risk. They have also tended to have a short-term horizon, especially if shareholder owned, but many big companies now have long-term sustainability central in their business model. A framework needs to be found which allows them to become more effective partners in more broad-based, big-picture and long-term research.

Question 2: *How can we create synergies amongst global food systems research players so that we achieve our objectives and stay aware of progress and activities as a community and also ensure our targets are met?*

The overriding message was the need to build a platform through which a global alliance of food systems researchers could interact with other stakeholders through a range of mechanisms. Possible mechanisms, potentially facilitated by a Future Earth food system program, could be:

- i. Initiate a mapping exercise which captures all global, regional and national institutions that are working on food systems, and this exercise should span the activities of the full spectrum of potential stakeholders.
- ii. Undertake a descriptive review of the current range of food systems conceptual frameworks, but may need to accept that there might not be a single appropriate unifying food systems framework and that the envisaged global alliance may need to work with a 'landscape of frameworks'.
- iii. Build on existing global alliances on overarching research issues as well as existing international agricultural networks even if the latter currently do not have a specific focus on food systems *per se*,
- iv. Within such global alliances and research networks, it will be essential to identify committed individuals who will act, and continue to act, as *Champions* and *Visionaries* for this initiative. Such people should be drawn from the full spectrum of stakeholders. Without such committed people the continuity of a global alliance on food systems may become compromised.
- v. Commit to bringing such champions and visionaries together for an intensive and dedicated workshop to chart the way forward in more detail. In doing so, there is need to consider the potential benefits of structuring the global alliance on a regional basis.
- vi. Prepare a high profile review paper which describes the food systems concept and suggests priority research goals and research questions that need to be addressed in order to create a nexus around which food systems researchers from the diverse stakeholder groups and regions could begin to interact.