

**The Uppsala opinion paper on the role of the university research
community in improving global food security, safety and quality**
May 2013

Scientists from 13 universities from six continents gathered at the Swedish University of Agricultural Sciences in a workshop arranged by the Global Challenges University Alliance on *the Future of Food* on May 22-24, 2013 to discuss the role of university research on global food security, safety and quality. We, the undersigned scientists of this opinion paper, made the following six main conclusions:

1. The unique position of academia

The food chain, which represents food that is produced, sold and eaten, has potentially profound consequences for public health and economic development and welfare. Thus, there are strong commercial, political and ethical interests related to food security, safety and quality. Academia has, through its mandate to generate non-biased knowledge and to be transparent, a responsibility and the unique position to provide independent, publicly available and qualified analyses of issues related to a sustainable production of enough food that is safe and also provides acceptable sensory, nutritional and functional qualities. The training of students to become next-generation leaders and agents for change as well as the cooperation between colleagues from different geographic, economic and cultural settings, add value to the unique position of academia.

2. A multidimensional and global issue

Almost the same numbers of persons that are under-nourished are obese in the world today. This illustrates the complexity of the global future of food production and consumption, and highlights the need for integrating safety and quality in discussions on food security related to private sector and institutional frameworks. The weight of these different dimensions, which vary among societies in terms of economic strengths, policies, beliefs, ethics, traditions and ecologies, must be recognized when making analyses and suggesting actions for improved global as well as local food security, safety and quality. This demands an integrated approach where researchers from different disciplines and geographical background work together.

3. Understanding the food system framework

The trade and distribution of food are global and all societies face a future challenge in the increasing demand for safe and high quality food, paralleled by increased scarcity of natural resources and an increased concern about the environmental and climate impact of agriculture, as well as by socio-demographic developments. In addition, by transporting food, resources such as water and elements are dislocated. Taken together, this calls for insights regarding system boundaries from the household to the global level. This requires input from several scientific disciplines when executing research on economically, socially and environmentally sustainable food systems that are relevant at national, regional or global levels.

4. Improved methods and analytic approaches

The food system from production to consumption is a multifaceted phenomenon that is investigated with a range of scientific methods and analytic approaches. Ideally, research-methods should be developed that translate different outcomes into a common “currency” that will better harmonize monitoring and surveillance tools globally. There is also a need for developing analytical approaches that are so broad and simple that they can be applied to multiple situations; while at the same time have the capacity to handle the complexity of food security, safety and quality. These novel methods and analytical approaches should also be applicable to emerging food-related issues, such as the costs of wasted food, risk assessments and ultimately, for disasters.

5. Getting the message through

The science-based knowledge generated about food systems does not always reach the players and relevant stakeholders along the food chain. Informed customers, retailers, transporters, producers, authorities and policymakers, as well as an open interchange of ideas are vital drivers for achieving the common goals of food security, safety and quality. Thus, there is a need to investigate how to refine the communication of science-based knowledge to different stakeholders in a diverse global village.

6. When there is knowledge, why is it not translated into action?

Numerous factors that include uncertainty, competing claims, poor governance, lack of individual economic or other forms of incentives, cultural constraints or preferences can contribute to a reduced effectiveness in translating new knowledge into action for the benefit of enhanced food security, or improved food safety and quality. An ambitious but important need for global research is to identify best practices and tailor culturally functional approaches.

These six aspects of university research will make a significant contribution to improved global food security, safety and quality.

Signed

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