EUROLAB Special Briefing

Delivering on EU Food Safety and Nutrition 2050 - Future challenges and policy preparedness

The European Commission aims to ensure a high level of food safety and animal and plant health within the EU. Access to safe and nutritious food is a key element of health and well-being for the more than 500 million European citizens. Thus, the implementation of coherent farm-to-table measures and adequate monitoring, while ensuring an effective internal market is a key priority for the European Commission.

Food needs to be nutritious, fresh and above all safe. Consumers are becoming more attentive at their diets and more aware of the possible dangers of unsafe food. Recent "food crises" such as dioxins in food and feed, mad cow disease, melamine in milk products, plasticisers in sprot drinks and the contamination with enterohemorrhagic E. coli EHEC have emphasised the importance of safety in the food chain.

In order to determine the current issues related to food safety while looking at the future challenges and policy preparedness, the Directorate General Joint Research Centre (JRC) and the Directorate General for Health and Food Safety (DG SANTE) have carried out a study between January 2014 and December 2015. The foresight study "Delivering on EU food safety and nutrition in 2050 - future challenges and policy preparedness" aims to aid policy makers in their assessment of the resilience of the current food policy and regulatory framework with a time horizon to 2050, contributing to ensuring that EU citizens continue to enjoy high standards of safe, nutritious and affordable food.

The methodology used in this study is scenario development. The scenarios were constructed based on different developments of specific drivers that can significantly impact and bring change to the food system; these are global trade, EU economic growth, agro-food chain structure, technology uptake, social cohesion, food values, climate change, depletion of natural resources and world population growth. For each scenario a number of challenges were identified and policy options were developed as well as suggestions to policy-makers on how to address these challenges.

The following scenarios were analysed:

1. **'Global Food' Scenario:** is in some way a projection to 2050 of the situation in which the EU finds itself in 2015; an even more interconnected global food chain with increased global trade and a more concentrated food industry. As the challenges faced in "Global Food" are in essence an amplification of issues already encountered today, many of the policy options do not introduce new measures, but rather aim to improve existing policies and provisions and enhance their implementation. Harmonisation of food safety standards at the global level, improved risk assessment based on global cooperation, vulnerability analysis, enhanced implementation, inspection and controls along the entire food chain (both intra-EU and internationally) would allow a smoother functioning of the global food market.

2. **'Regional Food' Scenario:** in "Regional Food", the 2050 EU food chain looks quite different from the current one. Climate change and depletion of natural resources, coupled with an increasingly aware and concerned population, result in significant EU policy changes towards self-sufficiency, a circular economy model and the abandoning of major international trade agreements. Challenges may require: expanding the scope of the General Food Law, hygiene regulations and related controls to include individuals engaging in food production; monitoring, enforcement and traceability systems would need to be re-organised and enhanced at Member State level, improve food safety education & promote the use of social networks and ICTs by individuals engaging in food production; introduction of production quotas and stock maintenance might need to be established in the EU.

3. **'Partnership Food' Scenario.** "Partnership Food" is characterised by an economically weak EU with close trade and food policy ties with a strong global player (for this scenario the US and Canada were used assuming that the existing

ties would facilitate such a move) and little trade with the rest of the world. In this scenario the stagnation of the European economy contributed to the EU losing importance in geopolitics and trade, especially in agriculture and food. In "Partnership Food", the loss of scientific and technological expertise in the EU can have serious repercussions for the food system. The suggested policy options discuss, among others, how to lift barriers to innovation, increase co-operation between authorities and food business operators, further improving consumer perception of new technologies, implement continuous education via life-long learning ICT-based programs.

4. **'Pharma Food' Scenario.** "Pharma Food" describes a world with globalised trade and a strong EU economy, and a population that strives for a healthy lifestyle. The challenges in "Pharma Food" mainly arise from the global liberalised trade system and the predominance of personalised nutrition and "phoods" in EU diets. Also, regulatory authorities will face difficulties to keep up with the fast-paced development of such new products and technologies. Policy options that may address these include, respectively, expanding third-country point of origin controls, introducing a certification scheme for home "phood" manufacture

Within the boundaries of this study, the EU legislative framework governing food safety appears to be robust and appropriate. However, certain elements would need to be strengthened to better prepare for future challenges: harmonisation and streamlining of risk assessment approaches and inclusion of risk-benefit assessment, need for a benchmarking system to monitor the performance of the EU's regulatory system related to food safety and nutrition, an effective early warning system for emerging hazards, adaptation of official controls and inspections to future needs, provision of clear food information to the public and investment in food and nutrition education.

An analysis of the individual scenarios, challenges and related responses described in this study identified a number of issues that were pertinent in multiple scenarios.

Key insights:
- The legislative framework governing food safety in the EU is robust and appropriate;
- Action needed for improving the effectiveness of EU nutrition policies;
- Harmonisation of risk assessment approaches and inclusion of other legitimate factors such as health benefits and socio-economic consequences;
- A suitable and harmonised metric for benchmarking and monitoring food safety performance in the EU needs to be established;
- An effective early warning system for emerging hazards at EU level is missing;
- Adaptation of official control and inspection services to future needs;
- Investment in providing food safety and nutrition education to the public.

Food and nutrition education has been identified as a cornerstone of any society that aspires to have a healthy population, along with crucial backing by governance that – together with policy-makers, industry and the society – maintains nutrition and health high on the agenda. These key insights could form the starting point for adapting the current food safety and nutrition policy framework.

Sources:

- JRC Science for Policy Report 2016, Delivering on EU Food Safety and Nutrition in 2050 - Future challenges and policy preparedness: https://ec.europa.eu/jrc
- Food and feed safety, The European Commission's science and knowledge service https://ec.europa.eu/jrc/en/research-topic/food-and-feed-safety
- EFSA, Nutrition News http://www.efsa.europa.eu/en/news?term=61996
- News ELC (Federation of European Specialty Food Ingredients Industries), 11/2016, http://www.elc-eu.org/news/

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