Workshop: Modernising and simplifying the CAP – food related issues
31 May 2017

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

Ladislav Miko
Deputy Director General for Food Safety
DG SANTE, European Commission
Delivering on EU Food Safety and Nutrition in 2050 - Future challenges and policy preparedness

Kalliopi Mylona, Petros Maragkoudakis, Anne-Kathrin Block, Jan Wolfschl, Sandra Caldeira, Franz Uiberth

2016
FOOD SAFETY AND NUTRITION

OBJECTIVE OF EU POLICY AND LEGISLATIVE FRAMEWORK:

„Provision of safe, nutritious, high quality and affordable food“

- High variety of foods available in EU
- Food was never so safe as today
- Single market, harmonised approach, shared legislative framework
- Trends: more information, lower limits, stronger control, more technology ....
The food chain system overview

1. Primary production
   - agricultural and horticultural crops
   - seeds, fruit trees
   - livestock
   - aquatic products

2. Harvesting / Slaughtering / Fishing
   - cutting, milling, brewing
   - blending, smoking, preservation

3. Processing / Manufacturing
   - 1st stage: cutting, milling, brewing
   - 2nd stage: blending, smoking, preservation

4. Packaging / Labelling
   - Canning
   - Modified atmosphere
   - Labelling (B2B / retail)

5. Storage
   - Storage length
   - Storage conditions (temperature, atmosphere, humidity)

6. Placing on the market / Distribution
   - Retail
   - Wholesale
   - Direct sale of small amounts of products
   - Internet sale

7. Consumption / Consumer handling
   - Household
   - Catering / Restaurants
   - Home storage

8. Transportation

Inputs:
- plant reproductive material
- plant protection products
- veterinary medicinal products
- water
- soil, fertilisers, manure

Modified from: Commission SWD (2013) 516 final 'A fitness check of the food chain: State of play and next steps'
FOOD SAFETY IN FUTURE – IS IT FOR GRANTED?

FOOD SECURITY (VOLUME)

FOOD SAFETY & QUALITY

CLIMATE CHANGE

RESOURCES - WATER

RESOURCES - SOIL

RESOURCES - FERTILISER

RESOURCES - ENERGY

INTENSIFICATION: TECHNOLOGY, CHEMICALS, BREEDING...

HEALTH (NUTRITION, OBESITY, ...)

PREFERENCES (MEAT, “BIO”, NEW TECH)

ECONOMY – PRICE-NEW TECH

DEMOGRAPHICS
Drivers used for scenario building

- Social cohesion
- EU economic growth
- Technology uptake
- Global trade
- Food values
- Agro-food industry structure
- Natural resource depletion
- Climate change
- Global population growth
SCENARIOS

Local Food

Global Food

Pharma Food

2016

2050 ? --

Health and Food Safety
Global Food

- Liberalised trade and global food chain
- EU one of many players
- Raw materials sourced globally—long complex food chains
  - Broad technology acceptance
  - Concentration of agro-food industry; mass production of processed, affordable foods
- Diets driven by price, taste, convenience
- Health and Social Inequalities
- Natural resources depletion, global population growth
Local Food

- Localisation/regionalisation/homesteading
- Technology for sustainable use of resources
- Mix of large entities and localised food production
- High social value of food; diets low in animal protein
- Strong sense of communal values and community responsibility
- Natural resources depletion global population growth
Pharma Food

- High-tech world – maximise HLY, CC adaptation, diversity
- "Phood": Pharma & food sectors converge + ICT; concentration
- EU is a strong player worldwide
- Global trade and global food chains
- Health is the main driver for food choices, personalised nutrition
- Social well-being?
- Natural resources depletion, global population growth
## Driver characteristics per scenario

<table>
<thead>
<tr>
<th>Driver</th>
<th>&quot;Global Food&quot;</th>
<th>&quot;Local Food&quot;</th>
<th>&quot;Pharma Food&quot;</th>
</tr>
</thead>
<tbody>
<tr>
<td>Global trade</td>
<td>Full liberalisation</td>
<td>Disrupted and fragmented</td>
<td>Full liberalisation</td>
</tr>
<tr>
<td>EU economic growth</td>
<td>Medium</td>
<td>Decoupled, GDP no longer used as indicator</td>
<td>High</td>
</tr>
<tr>
<td>Agro-food chain structure</td>
<td>Concentration</td>
<td>Diversification, alternative food chains</td>
<td>Concentration</td>
</tr>
<tr>
<td>Technology uptake</td>
<td>High</td>
<td>High with focus on environmental sustainability</td>
<td>High with focus on nutrition &amp; health</td>
</tr>
<tr>
<td>Social cohesion</td>
<td>Low</td>
<td>High</td>
<td>High</td>
</tr>
<tr>
<td>Food values</td>
<td>Low</td>
<td>High with focus on local production &amp; quality</td>
<td>High with focus on nutrition &amp; health</td>
</tr>
<tr>
<td>Climate change</td>
<td>2°C threshold of temperature increase to be reached by 2050</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Depletion of natural resources</td>
<td>Progressive natural resource depletion towards 2050</td>
<td></td>
<td></td>
</tr>
<tr>
<td>World population growth</td>
<td>World population will increase to about 9 billion by 2050</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
# Global Food: Policy options

<table>
<thead>
<tr>
<th>Main Prioritised Challenges</th>
<th>Potential policy options</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Differences in the handling of food in third countries due to diverging food safety standards</strong></td>
<td>Build efficient food safety standards with implementation details</td>
</tr>
<tr>
<td></td>
<td>Co-regulation or enforced self-regulation by food business operators</td>
</tr>
<tr>
<td><strong>Suitability of the current EU risk assessment procedures for new food ingredients, food products and food-related technologies (including suitability of exposure data and current maximum residue levels)</strong></td>
<td>Enhance collaboration between risk assessment bodies</td>
</tr>
<tr>
<td></td>
<td>Horizon scanning to identify vulnerabilities in the supply chain</td>
</tr>
<tr>
<td><strong>Ability to perform official food-related controls</strong></td>
<td>Long-term funding mechanisms</td>
</tr>
<tr>
<td></td>
<td>Expand third country controls</td>
</tr>
<tr>
<td></td>
<td>Enhancing surveillance to ensure food safety during transportation</td>
</tr>
<tr>
<td></td>
<td>Improving traceability using related technologies</td>
</tr>
<tr>
<td><strong>Increased sedentary behaviour and snacking due to changed lifestyles</strong> &amp; <strong>Diets based predominantly on highly processed foods and decreased availability of fresh produce</strong></td>
<td>Fiscal measures</td>
</tr>
<tr>
<td></td>
<td>Food reformulation and other incentives</td>
</tr>
<tr>
<td></td>
<td>Zoning and other limitations</td>
</tr>
<tr>
<td></td>
<td>Standards and guidelines for public procurement</td>
</tr>
<tr>
<td><strong>Provision of complex quality labelling information to the consumer and opportunity for fraud</strong></td>
<td>Funding of national and European food and diet related actions</td>
</tr>
<tr>
<td></td>
<td>Improve nutrition education</td>
</tr>
<tr>
<td></td>
<td>Improve the provision of nutrition information</td>
</tr>
<tr>
<td></td>
<td>Harmonisation at international level</td>
</tr>
</tbody>
</table>
# Local Food: policy options

<table>
<thead>
<tr>
<th>Main Prioritised Challenges</th>
<th>Potential policy option</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Food safety responsibility in the hands of individual producers</strong></td>
<td>Expansion of the scope of the General Food Law and hygiene regulations to individual food producers</td>
</tr>
<tr>
<td></td>
<td>Establishment of a list of &quot;risk&quot; products</td>
</tr>
<tr>
<td></td>
<td>Food safety education</td>
</tr>
<tr>
<td><strong>Failure to provide appropriate food safety information to the consumer</strong></td>
<td>Social networks and ICTs</td>
</tr>
<tr>
<td><strong>Re-introduction of food waste and organic side-stream products in the food chain</strong></td>
<td>Expansion of the scope of General Food Law and feed hygiene regulations to individual producers</td>
</tr>
<tr>
<td></td>
<td>Communal food waste handling or recycling centres</td>
</tr>
<tr>
<td></td>
<td>Proactive education initiatives</td>
</tr>
<tr>
<td><strong>Temporary shortages of fresh produce and food poverty in a self-sufficient food system</strong></td>
<td>Emergency mechanisms for food re-distribution</td>
</tr>
</tbody>
</table>
# Pharma Food: policy options

<table>
<thead>
<tr>
<th>Main Prioritised Challenges</th>
<th>Potential policy option</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Potential drawbacks of personalised nutrition and &quot;phoods&quot;</strong></td>
<td>Adapting or creating an effective regulatory framework</td>
</tr>
<tr>
<td></td>
<td>Redefining health and nutrition claims</td>
</tr>
<tr>
<td><strong>Ability to perform official food-related controls</strong></td>
<td>Regulating &quot;phood&quot; manufacture: &quot;Phood licence&quot;</td>
</tr>
<tr>
<td></td>
<td>Post-market monitoring and “nutrivigilance&quot; controls</td>
</tr>
<tr>
<td></td>
<td>Expand third country controls</td>
</tr>
<tr>
<td><strong>Suitability of the current EU risk assessment procedures for new food ingredients, food products and food-related technologies (incl. suitability of exposure data and maximum residue levels)</strong></td>
<td>Dealing with cumulative effects and long term exposure</td>
</tr>
</tbody>
</table>
Conclusions

• The legislative framework governing food safety in the EU is robust, effective and efficient

• Action needed for improving the effectiveness of EU nutrition policies

• Harmonisation of risk assessment approaches to allow for the 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
Thank you for your attention!