

SCAR FOOD SYSTEMS Strategic Working Group,

**Qualitative mapping of Food and Nutrition Security relevant policies in EU
Member States and Associated Countries**

Dear Members,

The main rationale for the SCAR FOOD SYSTEMS Strategic Working Group – (SCAR FOOD SYSTEMS SWG) is that the SCAR member states provide strategic advice and support to the EU Research & Innovation (R&I) policy framework FOOD 2030¹ as well as to the review of the Bioeconomy Strategy in which food plays a central role given the 'food comes first' principle.

The Terms of Reference (ToR) for this SWG, was endorsed at the SCAR Plenary of 6 December 2016. The ToR mentions that the main task in 2017 is to "provide strategic intelligence (EU 28) including the mapping of R&I funding done at National and regional level related to Food Systems and provide insight into the type of existing policies and strategies that are linked to Food and Nutrition security and the priorities of FOOD 2030".

The expected delivery date for qualitative mapping is end April 2017.

This task is further complemented by a quantitative mapping of R&I public funding at EU Member State and Associated Country level (expected delivery June 2017). This task has started with four pilot countries.

Thank you very much for your involvement.

With my best regards,

¹
http://ec.europa.eu/research/conferences/2016/food2030/pdf/food2030_conference_background.pdf#view=fit&pagemode=none

Monique Axelos ,

Chair of the SCAR Food Systems SWG

SCAR FOOD SYSTEMS SWG

Qualitative mapping questionnaire

Participating country in SCAR FOOD SYSTEMS SWG's:	HUNGARY
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Please submit the questionnaire below to the chair of the SCAR FOOD SYSTEMS SWG:

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PART 1 – FNS related policy:

- List the relevant national/regional policies or strategies that are relevant to ensuring food and nutrition security (e.g.: agriculture, health, food safety, climate, fisheries, etc).**

- Weblink to the policies/strategies:**

- **National Development 2030 – National Development and Regional Development Concept:** http://www.terport.hu/webfm_send/4204
- **National Rural Strategy 2012-2020:** <http://videkstrategia.kormany.hu/>
- **Hungary's Medium- and Long-term Development Strategy for Food Industry (2014-2020):** <http://www.kormany.hu/download/f/82/60000/%C3%89FS.pdf>
- **Food Chain Safety Strategy 2013-2022:** <http://elbs.hu/>
- **"FOOD FOR LIFE" Consensus Innovation Strategic Plan of the Hungarian Food Industry (2014 - 2029):** http://www.techplatform.hu/letoltes/mnetp_egyeztetett_innov_strat_vegso_valtozat_ff.pdf
- **National Smart Specialization Strategy (S3):** <http://nkfih.gov.hu/szakpolitika-strategia/intelligens-szamosodasi-strategia-s3>
- **National Environmental Technology Innovation Strategy 2011-2020:** <http://kornyezettechnologia.kormany.hu/download/c/66/40000/NKIS.pdf>
- **Digital Agricultural Strategy:** <http://ivsz.hu/wp-content/uploads/2016/06/ivsz-digitalis-agrar-strategia-2016.pdf>
- **Seed Sector Strategy:** <http://www.vsz.hu/hu/agazati-strategia/vetomag-agazati-strategia.html>
- **Hungarian Fruit and Vegetable Sector Strategy:** The strategy has been completed but has not been accepted. It is waiting for leadership approval.
- **Multiannual National Strategy Plan on Aquaculture of Hungary (draft):** http://halaszat.kormany.hu/download/d/f5/f0000/2015_03_30_NAS_4%201_program%25C3%25ADr%25C3%25B3i%20verzi%25C3%25B3_v%25C3%25A9lem%25C3%25A9nyez%25C3%25A9sre.pdf
- **Professional Strategy for Preservation of Plant Genetic Resources for Food Purposes (2013-2020):** http://www.biodiv.hu/hazai-genmegorzes/hazai-strategia-genetikai-eroforrasok-megorzese/elelmnovgenforras-strategia_2013-2020_final.pdf

B. What issues do each of them cover?

- **National Development 2030 – National Development and Regional Development Concept:** Hungary's overall long term development plan. It contains sector development chapters. There are separate agricultural and R&I subchapters. The topic "food" is scarce; however, viable country, healthy food production and food supply appears among the specific objectives.
- **National Rural Strategy 2012-2020:** It aims at the renewal of the Hungarian rural areas. It covers most of the agricultural topics, inter alia food safety and food security.
- **Hungary's Medium- and Long-term Development Strategy for Food Industry (2014-2020):** 1) stable funding, balanced management 2) innovative and efficient enterprises 3) labour with advanced knowledge 4) an equal position in the food chain 5) sought-after Hungarian food, strong market position.

- **Food Chain Safety Strategy 2013-2022:** I. Food chain safety knowledge management (Establishing and operating the knowledge centre: Global information management, Introducing transparent risk analysis, Reorganization of the laboratory network; Developing a knowledge network and innovation: Building the basis of the knowledge network, Modern education and training, Partnerships in research and innovation, Active public relations); II. Control of food chain risks (Control of known hazards: Extensive risk reduction, Strong and credible authority; Control of unknown hazards and unacceptable risks: Successful fight against abuse, Protection of critical infrastructures)
- **"FOOD FOR LIFE" Consensus Innovation Strategic Plan of the Hungarian Food Industry (2014 - 2029):** increasing the competitiveness of Hungarian food industry along consensus innovation research strategy (topics: food quality and food processing, sustainable food production, food and consumer, food safety, nutrition and health, food chain management)
- **National Smart Specialization Strategy (S3):** Situation analysis, Governance structure, Vision and objectives, Priorities, Policy instruments, Evaluation and monitoring system
- **National Environmental Technology Innovation Strategy 2011-2020:** environmental technology solutions to support sustainable production and business models
- **Digital Agricultural Strategy:** the 5 fields of agricultural informatics (production, plant, product line, systems, public administration)
- **Seed Sector Strategy:** The increased (and increasing) Central and Eastern European seed needs, further development of breeding centers, seed knowledge center, cooperation with other professional organizations, black trade, image of seed sector,
- **Multiannual National Strategy Plan on Aquaculture of Hungary:** decreasing the administrative burden, access to waters and area, environmental, economic and social sustainability, research programs and scientific cooperation, promoting good-quality, sustainable food, supporting aquaculture-related research
- **Professional Strategy for Preservation of Plant Genetic Resources for Food Purposes (2013-2020):** agrobiodiversity, ex situ/ in situ/ on farm preservation of genetic resources, research, education, social awareness, international cooperation

C. Which institutional actors are responsible for each policy/strategy?

- **National Development 2030 – National Development and Regional Development Concept:** Government of Hungary
- **National Rural Strategy 2012-2020:** Minister of the Prime Ministry
- **Hungary's Medium- and Long-term Development Strategy for Food Industry (2014-2020):** Minister of Agriculture
- **Food Chain Safety Strategy 2013-2022:** Minister of Agriculture

- **"FOOD FOR LIFE" Consensus Innovation Strategic Plan of the Hungarian Food Industry (2014 - 2029):** N/A
- **National Smart Specialization Strategy (S3):** National Office for Research, Development and Innovation (function: Professional supervision and governance); All ministries and chapters concerned (Prime Ministry, Ministry of National Economy, Ministry of Human Resources, Ministry of Agriculture, Ministry of Foreign Affairs and Foreign Economic Relations, Hungarian Academy of Sciences), including the delegates of the managing authorities concerned in the 2014-2020 programming period (function: government level); County Government Office (function: local/territorial coordination)
- **National Environmental Technology Innovation Strategy 2011-2020:** ministries and local governments
- **Digital Agricultural Strategy:** N/A
- **Seed Sector Strategy:** N/A
- **Multiannual National Strategy Plan on Aquaculture of Hungary:** N/A
- **Professional Strategy for Preservation of Plant Genetic Resources for Food Purposes (2013-2020):** Minister of the Prime Ministry

D. Are these policies/strategies focussed on your country only, on Europe or do they target International cooperation and development?

- **National Development 2030 – National Development and Regional Development Concept:** national focus
- **National Rural Strategy 2012-2020:** national focus
- **Hungary's Medium- and Long-term Development Strategy for Food Industry (2014-2020):** national focus
- **Food Chain Safety Strategy 2013-2022:** national focus
- **"FOOD FOR LIFE" Consensus Innovation Strategic Plan of the Hungarian Food Industry (2014 - 2029):** national focus
- **National Smart Specialization Strategy (S3):** national focus
- **National Environmental Technology Innovation Strategy 2011-2020:** national focus
- **Digital Agricultural Strategy:** national focus
- **Seed Sector Strategy:** national focus
- **Multiannual National Strategy Plan on Aquaculture of Hungary:** national focus with international threads
- **Professional Strategy for Preservation of Plant Genetic Resources for Food Purposes (2013-2020):** national focus with international threads

E. Do any of these policies/strategies contain an R&I focus? If yes, describe.

- **National Development 2030 – National Development and Regional Development Concept:**
 - R&I is among the specific objectives to be enforced in the policies
 - The development of Hungarian brands (e.g. food industry) must be supported by dynamic, creative industry
 - Innovation and the development of food industry can be a breakout point for Hungary in the long term
 - The development of the agricultural and food economy is priority
 - To improve the agriculture-food biotech cluster's international competitiveness is among the main objectives
- **National Rural Strategy 2012-2020:**
 - One of the strategic directions and tasks: the creation of new agricultural and environmental science sector R&D&I strategy in line with the unified and comprehensive Research & Development & Innovation Strategy, identification of new trends, determination and enforcement of priorities in allocation of domestic and international calls for grant applications, the priorities of domestic and international competition systems
- **Hungary's Medium- and Long-term Development Strategy for Food Industry (2014-2020):**
 - Encouraging R&I, supporting technology and knowledge transfer
 - As for meat processing: innovation (product development, packaging)
 - Identifying barriers to innovation by SMEs
 - Innovation based of cooperation of various specializations
 - Technology innovation lags behind product innovation
 - Supporting innovation in SMEs
 - Supporting innovation networks and interprofessional cooperation
 - Supporting basic and applied research beneficial to the sector
 - Establishment of think tanks (universities, companies, governments, non-governmental organizations)
 - Development of knowledge and technology transfer network
- **Food Chain Safety Strategy 2013-2022:**
 - Economic development and innovation are essential tools for improving food chain safety
 - Developing partnership among stakeholders are essential for R&D&I
 - Applied research should be stimulated (e.g. in the field of customer preferences, development of products and technology, sustainability, food chain safety)
- **"FOOD FOR LIFE" Consensus Innovation Strategic Plan of the Hungarian Food Industry (2014 - 2029):**

- Rate of innovation, R&I investment, knowledge and technology needs improvement
- R&I efforts and resources should be focused on distinct areas
- Actions improving R&I efficiency and practical applications, strengthening innovation
- Training of manpower tailored to the needs of industry
- Improving multilateral communication (industry – research - society)
- Changing of the attitude of stakeholders (especially that of industry and research)
- Organization and disclosure of industry R&I information
- Building a national knowledge transfer network and establishing a food industry knowledge centrum
- Innovation-friendly environment is needed (government and industry efforts are expected): enhanced infrastructure, tax breaks, scholarships, exchange of experts and researchers, transparent calls for grant proposals (coupled with appropriate evaluation system), reducing administrative burdens
- **National Smart Specialization Strategy (S3):**
 - Food sector priorities cover R&I concerning the entire food chain
 - Intervention matrix that contains agricultural R&I
 - (plant and animal) variety breeding
 - water management, irrigation technology, soil improvement
 - horticultural technologies
 - environment-friendly plant production and crop protection technologies
 - animal production and veterinary medicine technologies
 - viticulture and wine growing
 - aquaculture
 - forestry, wildlife management
 - processing of pharmaceutical crops
 - agricultural biotechnology
 - Production and sale, not only on the local market, of local foods of high added value produced by using innovative agricultural and food technologies (e.g. Hungarian specialities)
 - Increasing the R&D activity and adaptation, and the innovation capacity of the agricultural enterprises
 - Improving the efficiency of energy use of agricultural production
 - Keeping the rural population in place by strengthening the agricultural supplementary activities
 - Targeted support of young farmers to promote a generational change of farmers
 - Expansion and appreciation of forest usufructuary rights; the strengthening of the role of forestry in the bio-economy
 - Strengthening of the public welfare and tourism potential of forests

- Strengthening of cooperation between the stakeholders in agribusiness and certain stakeholders in research and innovation, and the food chain
 - Provision of development aimed at the competitiveness of food processing SMEs (product mix of higher added value)
 - Supporting new participation in Union and national quality systems and voluntary agricultural product verification systems
 - Development of short supply chains
 - Enhancing the use of environment-friendly technologies, the development of environmentally conscious farming
 - Maintenance and development of organic farming
- Agricultural innovation
 - Improving the professional preparedness of the production and service sides; the renewal of the professional system of further training
 - Developing water management based on water retention, adapted to climate change
 - Preserving soil fertility, preventing and mitigating degradation processes and promoting soil-friendly farming
 - Promoting the sound use of pesticides and nutrients
 - Developing environment-friendly technologies, promoting eco-innovation
 - Increasing the number of starting rural businesses, improving the efficiency and promoting the sustainable operation of the already running businesses
 - Promoting special economic activities based on internal resources in regions with a shortage of human resources and undertakings
 - Strengthening the cooperation between the stakeholders in the rural economy
 - Managing the problems specific to regions characterised by small villages and farm settlements
 - Realising the operation of demand-based consultancy system, concentrating on sectoral target groups - availability of local planning, developing and activation capacities
 - Promotion of the funding of small agricultural and food processing undertakings which are squeezed out of bank financing
 - Increasing the level of the vertical and horizontal cooperation in the agriculture, and development of product line systems
 - Increasing consumer awareness and environmental awareness
 - Increasing the competitiveness of the horticultural and animal production sectors
 - Mitigating the adverse effects of climate change by using complex water management interventions

- Increasing the level of the vertical and horizontal cooperation in the agriculture, and development of product line systems
 - Facilitating the innovative, competitive and knowledge-based fishing and aquaculture, including also the related processing
 - Development and market introduction of new or significantly improved products, new aquaculture species with good market prospects, as well as new or improved processes or control and management systems
 - Assessing the technical and economic feasibility of innovation, products and processes
- **National Environmental Technology Innovation Strategy 2011-2020:** it points out the sectorial R&I purposes and untapped potentials; program design should be tailored to suit the goals expounded in the strategy
- **Digital Agricultural Strategy:** N/A
- **Seed Sector Strategy:** knowledge transfer between research institutes and the seed sector needs improvement
- **Multiannual National Strategy Plan on Aquaculture of Hungary:** harmonization of national research programs, cooperation of the sector and the relevant scientific community (common R&I projects), promoting technology and knowledge transfer, enhancing research in the field of aquaculture (focus: responsible utilization and protection of water resources), exchange of experience and knowledge, promoting the international dimension of technology transfer
- **Professional Strategy for Preservation of Plant Genetic Resources for Food Purposes (2013-2020):** searching, collecting and documentation of national genetic resources; encouraging and supporting agricultural research; breeding programs and research on national breeds, national landbreeds, local and traditional breeds; strengthening and widening international collaboration in the field of plant genetic conservation

F. Are there any new relevant national/regional policies or strategies being currently developed that are relevant to ensuring food and nutrition security? If yes, describe.

There are not any new relevant national/regional policies or strategies being currently developed that are relevant to ensuring food and nutrition security.

PART 2 – Bioeconomy Strategy

2. Does your country have a national Bioeconomy Strategy?

Hungary does not have a national Bioeconomy Strategy.

A. If yes, what does it cover?

N/A

B. Does it have a food related pillar? If yes, describe.

N/A

C. Weblink to the Bioeconomy strategy:

N/A

D. If there is no Bioeconomy Strategy yet, is there one being developed at the moment?

Yes, there is a national Bioeconomy Strategy being developed at the moment.

PART 3 – Research and Innovation Policy and Programming

3. List specific national/regional R&I policies/strategies/funding programmes relevant to food and nutrition security (e.g.: agriculture, health, food safety; climate, fisheries, etc).

A. Weblink to the R&I policies/strategies/funding programmes:

- **National Research and Development and Innovation Strategy (2013-2020):**
<http://nkfih.gov.hu/szakpolitika-strategia/nemzeti-kfi-strategia/befektetes-iovobe-kfi>

B. What FNS relevant issues do each of them cover?

- **National Research and Development and Innovation Strategy (2013-2020):** food industry belongs to the key innovation sectors in Hungary, agricultural R&I is a featured program

C. Which institutional actors are responsible for each R&I policy/strategy/funding programmes?

- **National Research and Development and Innovation Strategy (2013-2020):** Ministry of National Economy

D. Who does what and how do these actors cooperate?

- **National Research and Development and Innovation Strategy (2013-2020):** governmental R&I strategic management (Ministry of National Economy); coordination of innovation processes in the public sector (N/A); Legislation, monitoring and rationalization of legislation (N/A); Providing centralized and decentralized innovation management services, management of the

service system (N/A); Renewal, monitoring and evaluation of R&I tax incentives (N/A), enhancing the creation of a start-up ecosystem (N/A); Program management and monitoring (N/A); Management of R&I-focused public procurement (N/A); Management of featured programs and sectors (N/A); special funding system (funding that can be awarded based on individual government decision) to attract R&I intensive foreign direct investment (N/A); intellectual property protection (Hungarian Intellectual Property Office); Controlling and monitoring of the strengthening of knowledge bases (ministry responsible for science policy); Public education that develops innovation and creativity, talent management, social awareness (N/A)

E. Are these R&I policies/strategies focussed on your country only, on Europe or do they also target RI & for international cooperation and development?

- **National Research and Development and Innovation Strategy (2013-2020)**: national and international focus

F. Are there any new specific national/regional R&I policies/strategies/funding programmes being currently developed that are relevant to ensuring food and nutrition security? If yes, describe.

- **Action plan for the future of agricultural research**: The action plan has been completed but has not been accepted. It is waiting for leadership approval.