

Mapping of Hungarian RDI financing done for SCAR Food Systems SWG

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Background

- SCAR Food Systems SWG
- Scope: map MS agricultural research funding mechanisms
 - Co-financed and EU-funded will be mapped by COM
- Aim: mapping for the next planning period – to have more calls on the areas not covered
- Input to Food 2030
- Qualitative (what is in the strategies) and quantitative mapping (projects funded)
- Done in first semester of 2017 by pilot countries: HU, FI, BE

QUALITATIVE MAPPING

QUALITATIVE mapping

- Q1: List the relevant national/regional policies or strategies that are relevant to ensuring food and nutrition security:
- A1: 12 policies/strategies
 - National Development 2030 – National Development and Regional Development Concept
 - National Rural Strategy 2012-2020
 - Hungary's Medium- and Long-term Development Strategy for Food Industry (2014-2020)
 - Food Chain Safety Strategy 2013-2022
 - "FOOD FOR LIFE" Consensus Innovation Strategic Plan of the Hungarian Food Industry (2014 - 2029)
 - National Smart Specialization Strategy (S3)
 - National Environmental Technology Innovation Strategy 2011-2020
 - Digital Agricultural Strategy
 - Seed Sector Strategy
 - (Hungarian Fruit and Vegetable Sector Strategy)
 - Multiannual National Strategy Plan on Aquaculture of Hungary (draft)
 - Professional Strategy for Preservation of Plant Genetic Resources for Food Purposes (2013-2020)

QUALITATIVE mapping

- Q2: What issues do each of them cover?



QUALITATIVE mapping

- Q3: Which institutional actors are responsible for each policy/strategy?
- A3: several different responsible state bodies
 - Government of Hungary
 - Minister of the Prime Ministry
 - Minister of Agriculture
 - 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)
 - ministries and local governments
 - N/A (no responsibility defined in a strategy)

QUALITATIVE mapping

- Q4: Do these policies/strategies focus on your country only, on Europe or do they target International cooperation and development?
- A4: National focus or national focus with international threads

QUALITATIVE mapping

- Q6: List specific national/regional R&I policies/strategies/funding programmes relevant to food and nutrition security
- A6: 1+(1)
 - 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
 - Ministry of National Economy
 - 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)
 - National and international focus
 - (Action plan for the future of agricultural research – draft)

QUANTITATIVE MAPPING

QUANTITATIVE mapping

	A	B	C	D	E	F
	PROJECT ID NUMBER (A Unique Identifier for the project. If there is none give the project a number)	COUNTRY THAT FUNDS THE PROJECT (BE,F,I,FR,HU)	ACRONYM OR SHORT NAME OF THE PROJECT	TITLE OF THE PROJECT (in English)	PROJECT KEYWORDS (in English)	CATEGORIZE THE PROJECT IN ONE OF THE MAIN FOOD SYSTEMS CATEGORIES
1						
2						
3						
4						
5						
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7						
8						
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10						
11						
12						
13						
14						
15						
16						
17						
18						
19						
20						
21						

QUANTITATIVE mapping

Raw data - obligatory

- Project ID No
- Country that funds the project
- Title of the project
- Keywords
- Categorization
- Main food systems
- Food systems subcategories
- FOOD2030 priorities
- Total cost of the project (EUR) (only public part)
- Start year of the project
- Name of funding organization/institution
- Public funding national/regional
- Who receives public funding (public/private/PP)
- What is funded (R/I/R&I)

Raw data – optional

- Acronym/short name of the project
- Title of the call
- Start date of the project
- Duration of the project
- Name of the funding programme
- Abstract
- If PPP: total costs
- Comments

Data analysis

QUANTITATIVE mapping: challenges

- How to get raw data?
- Information sources:
 - Research Institute of Agricultural Economics
 - Ministry for Agriculture
 - Hungarian Chamber of Agriculture
- All roads lead to a single institution (since 2015):
 - National Research, Development and Innovation Office

QUANTITATIVE mapping

The screenshot displays the NKFİ-EPR (National Research Development Office - Electronic Grant Management System) website. The main content area shows search results for the keyword 'food-safety'. The search results table is as follows:

azonosító	Vezető kutató	megjelenítés
64310	Bíró Borbála	MTA Talajta
112730	Forgách Petra Éva	Szent István

Additional information on the page includes:

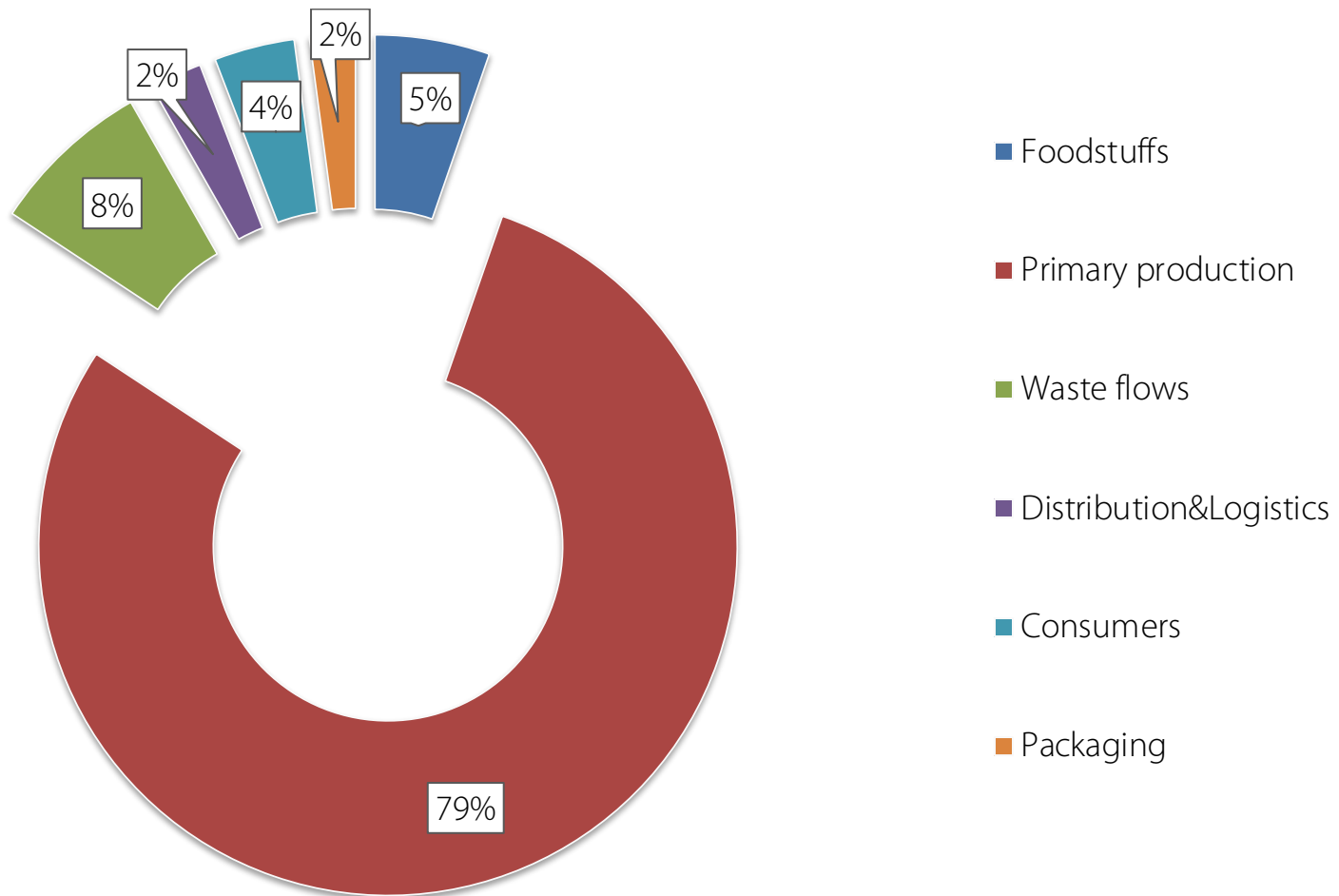
- Összes projektek száma: 7202
- Search filters: kulcsszavak (food-safety), találatok egy oldalán (10), csak címben keressem.
- Navigation menu: Kezdőlap, Projektek, Publikációk, Ortelius, Súlyó.
- Footer: MAGYARORSZÁG KORMÁNYA, BEFEKTETÉS A JÖVŐBE, and various utility icons.

QUANTITATIVE mapping

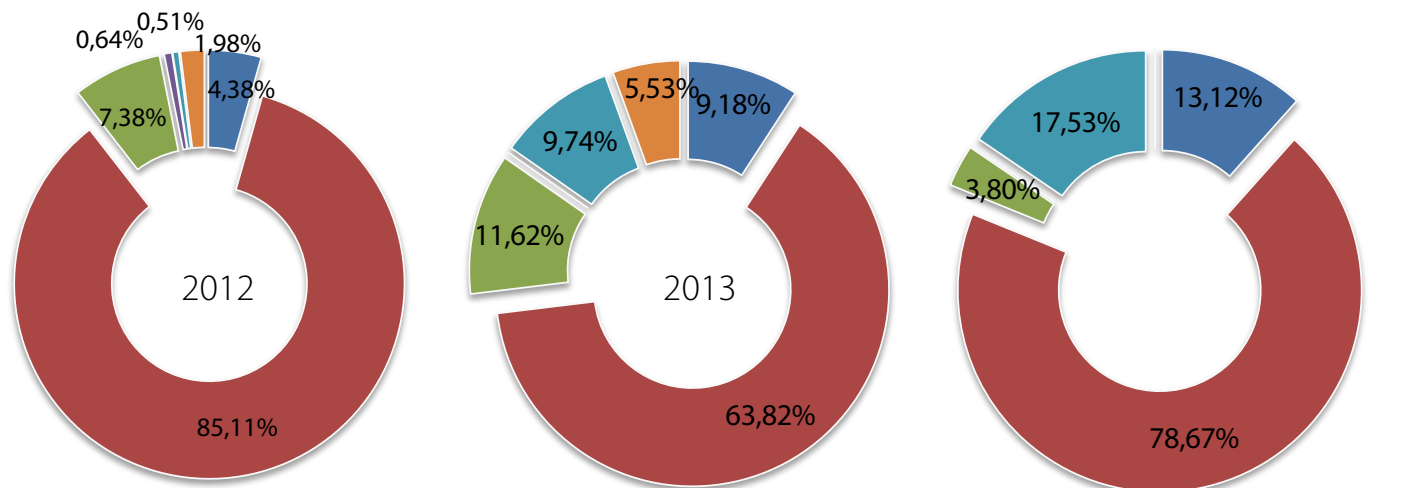
	A	B	C	D	E	F	G	H	I	K	L	M	N	O
	PROJECT ID NUMBER (A Unique Identifier for the project. If there is none)	COUNTRY THAT FUNDS THE PROJECT (BE,FI,FR,HU)	ACRONYM OR SHORT NAME OF THE PROJECT	TITLE OF THE PROJECT (in English)	PROJECT KEYWORDS (in English)	CATEGORIZE THE PROJECT INTO ONE OF THE MAIN FOOD SYSTEMS CATEGORIES	CATEGORIZE THE PROJECT INTO ONE OF THE FOOD SYSTEMS SUB-CATEGORY	CATEGORIZE THE PROJECT INTO ONE OF THE FOUR FOOD 2030 PRIORITIES	TOTAL COST OF THE PROJECT IN EURO - ONLY PUBLIC MONEY express as €(1.000.000,00)	TITLE OF THE CALL	YEAR OF THE CALL (choose one of these years 2012, 2013, 2014, 2015 or 2016)	START YEAR OF THE PROJECT (choose one of these years 2012, 2013, 2014, 2015 or 2016)	START DATE OF PROJECT (DD/MM/YYYY)	DU
1	TÉT_16-1-2016-0107	HU		Development and implementation of innovative technologies for eliminating organic pollutants	organic pollutant, eliminate, technology	FOOD SAFETY	PRODUCTION	CLIMATE smart and environmentally sustainable food systems	5 571,79	Kétoldalú tudományos és technológiai (TÉT) együttműködés támogatása a magyar-francia relációban (TÉT_16_FR)	2016			
2	TÉT_16-1-2016-0116	HU		Comparing and combining Direct Computer Sketching		PRODUCTION	INPUTS	CLIMATE smart and environmentally sustainable food systems	6 477,69	Kétoldalú tudományos és technológiai (TÉT) együttműködés	2016			
3	TÉT_16-1-2016-0131	HU		Investigation of host-pathogenic interactions in Esca's disease causing early capitalization of grapes: the correlation between the production of the virulence factor of pathogenic strains and the severity of the symptoms occurring in the field conditions		PRODUCTION	CROPS	CIRCULARITY and resource efficiency of food systems	6 110,79	Kétoldalú tudományos és technológiai (TÉT) együttműködés támogatása a magyar-francia relációban (TÉT_16_FR)	2016			

RESULTS & EVALUATION

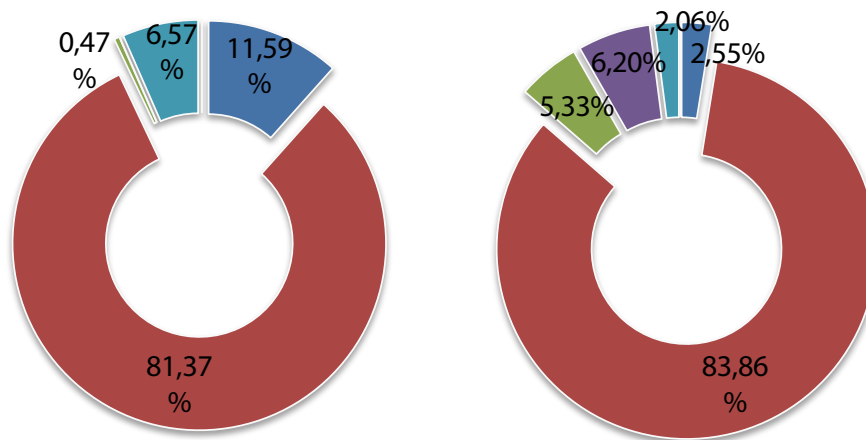
Total funding for sectors of the food system 2012-2016



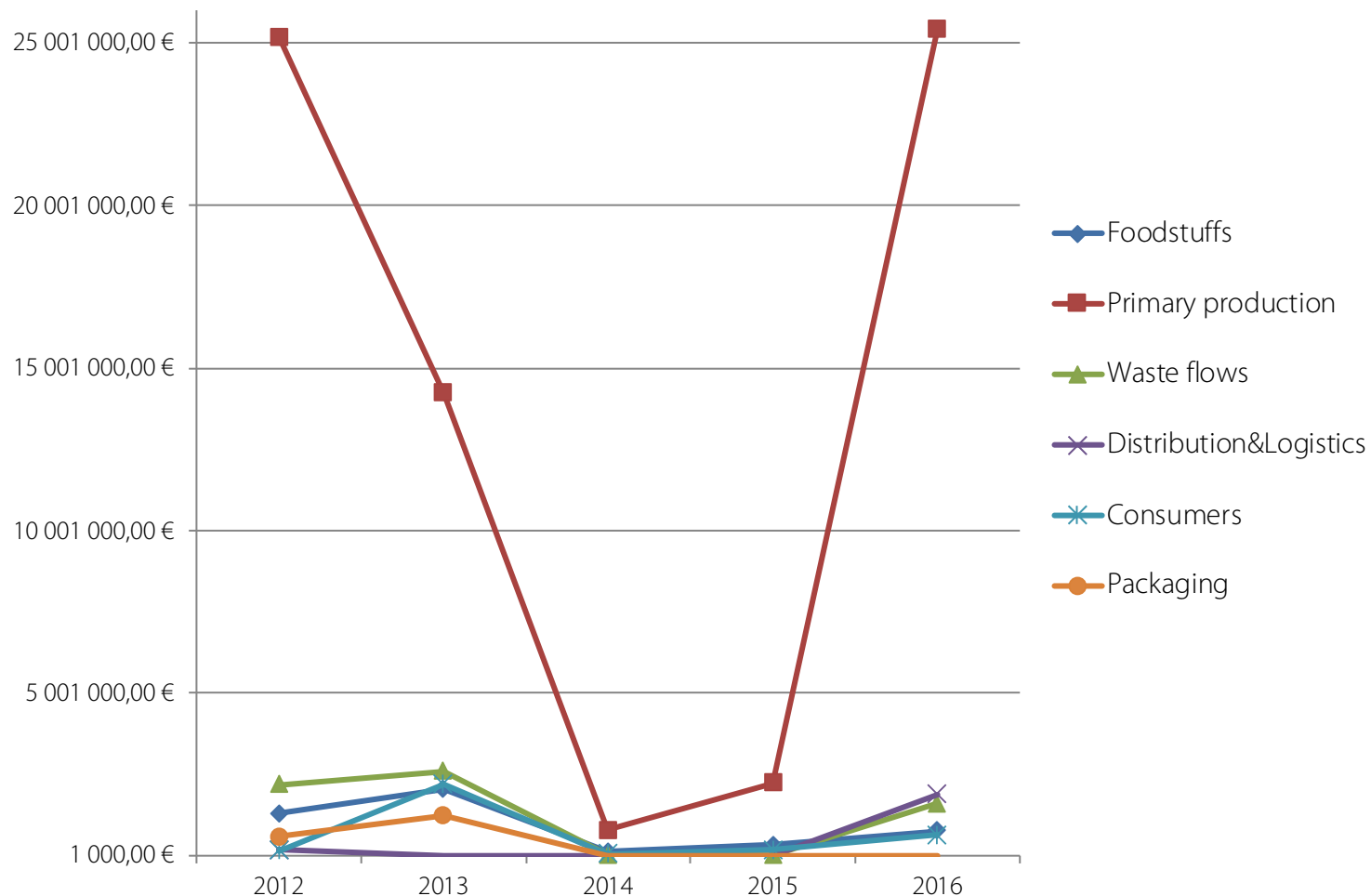
Shares of the funding for the sectors of the food system (%) per year



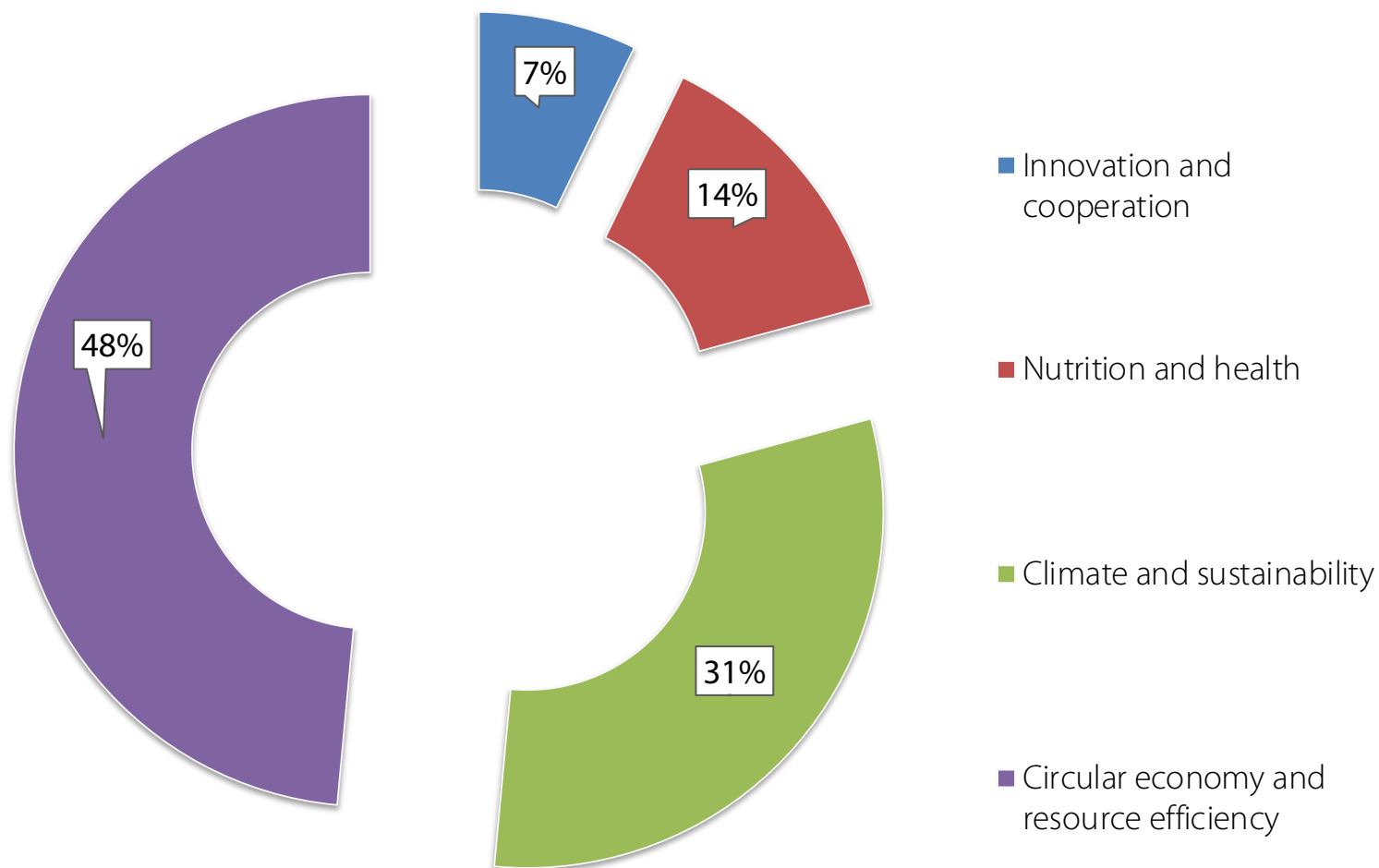
■ Foodstuffs ■ Primary production ■ Waste flows ■ Distribution & Logistics ■ Consumer ■ Packaging



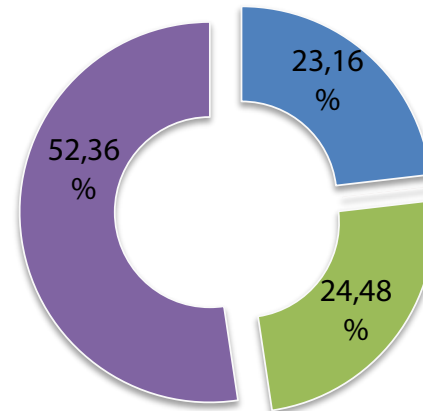
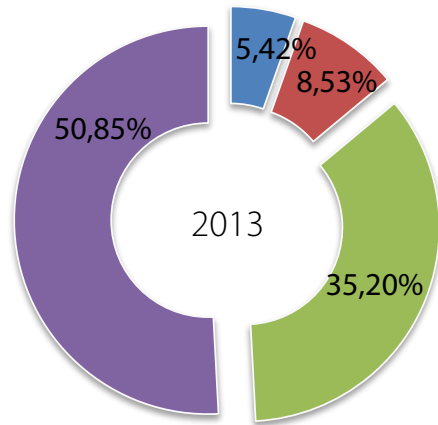
Funding for sectors of the food system in 2012–2016



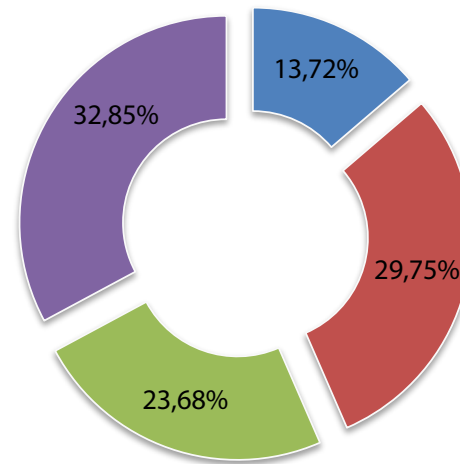
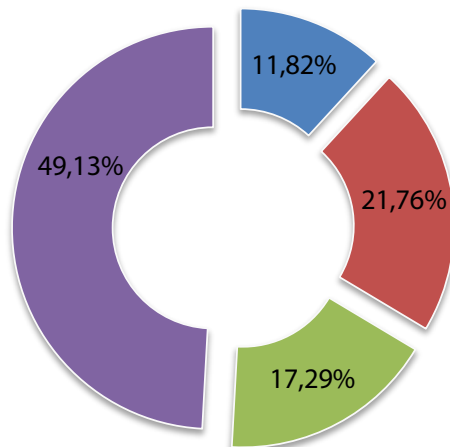
Funding for research areas 2012-2016 according to Food 2030 categories



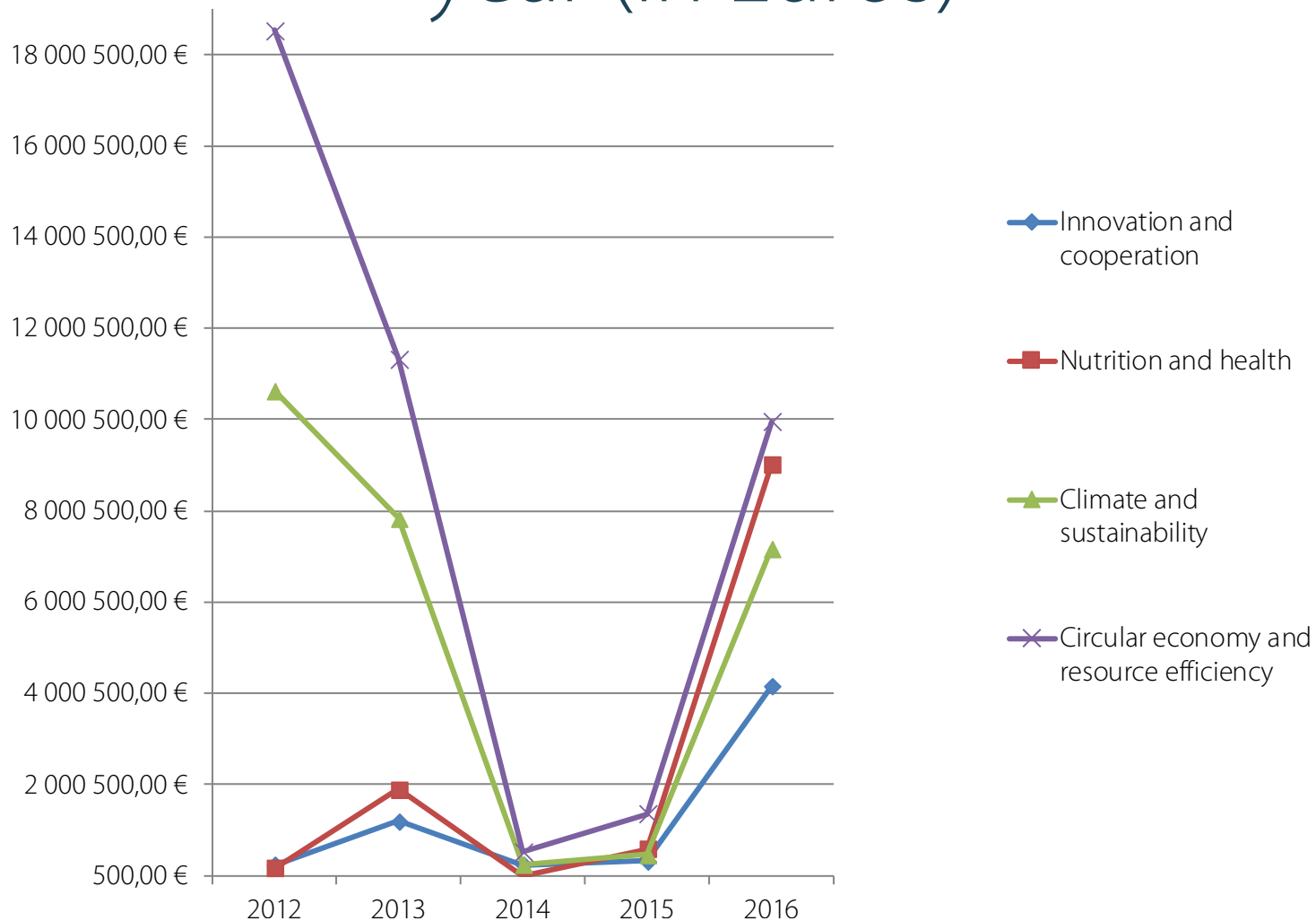
Funding for the fields of research of the funding per year (%)



■ Innovation and cooperation ■ Nutrition and health ■ Climate and sustainability ■ Circular economy and resource efficiency

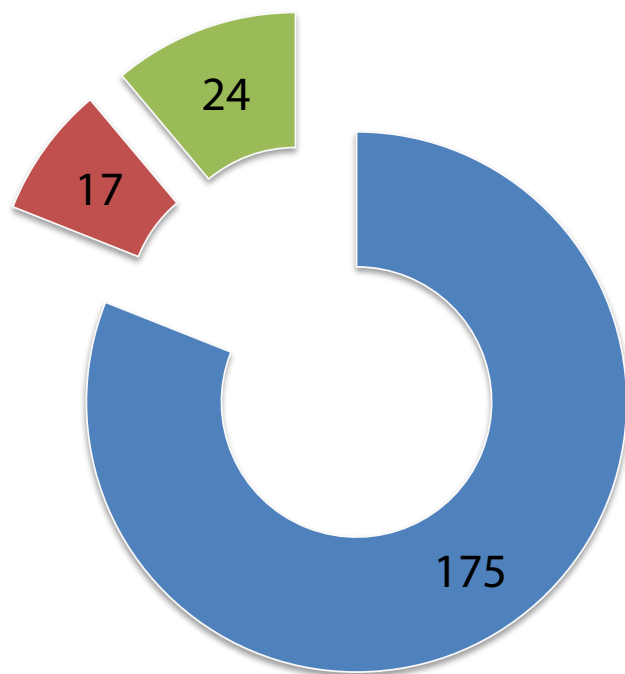


Funding for the research areas per year (in Euros)

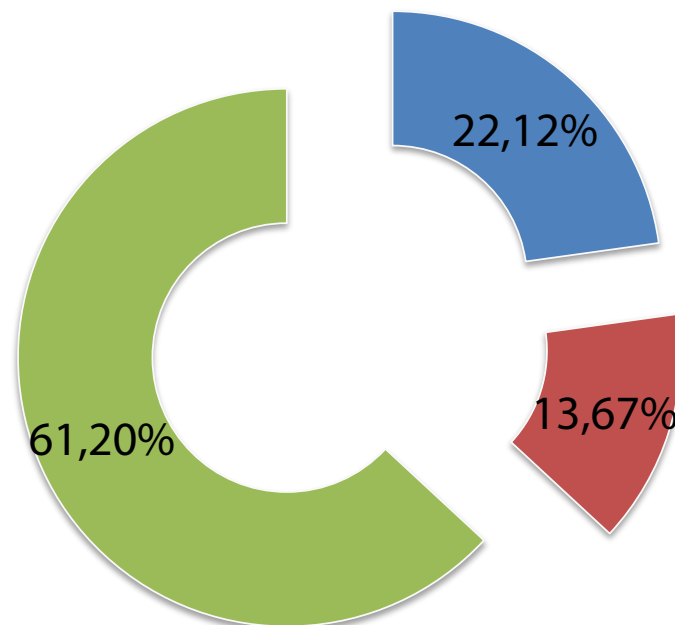


Who received the funding in 2012-2016?

Number of the projects

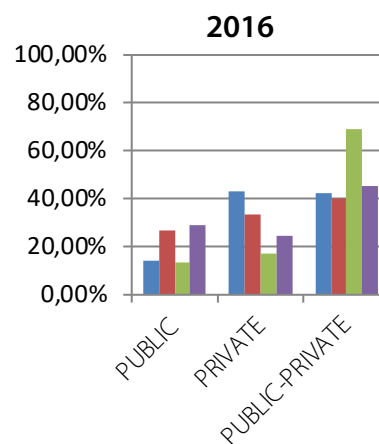
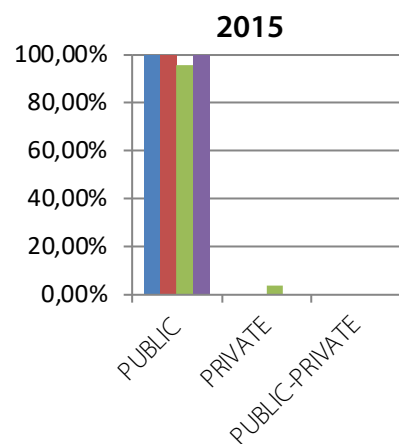
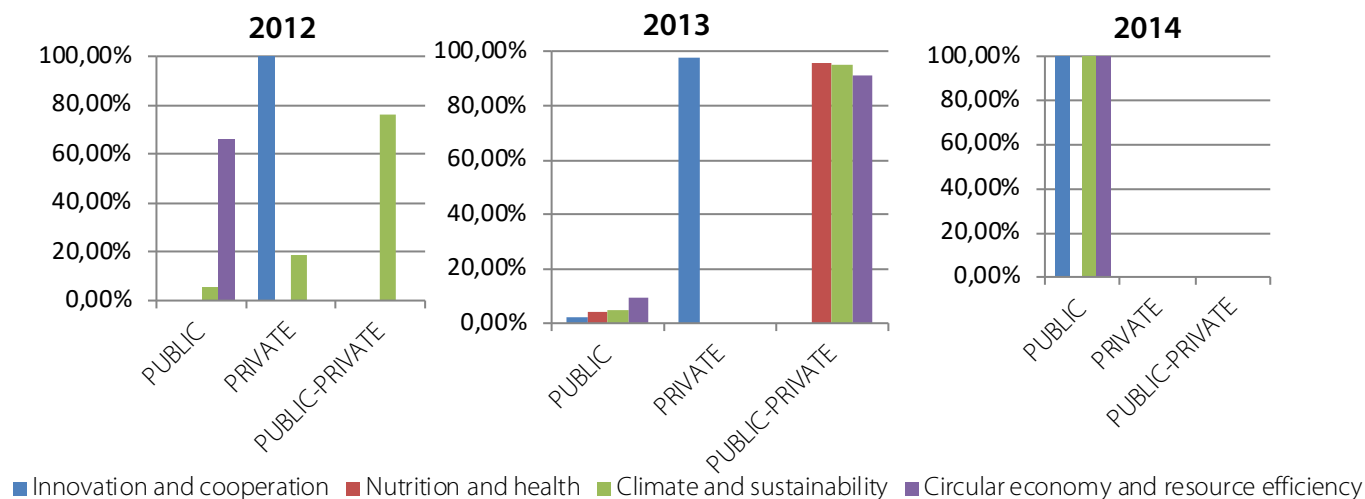


Amount of the funding (%)

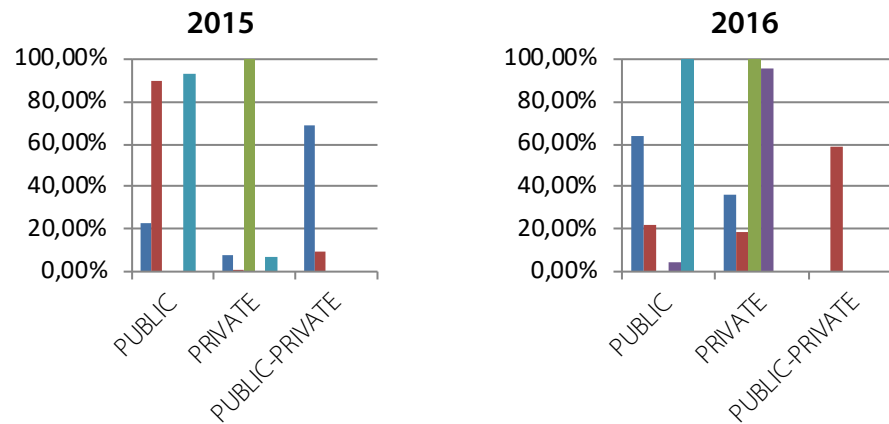
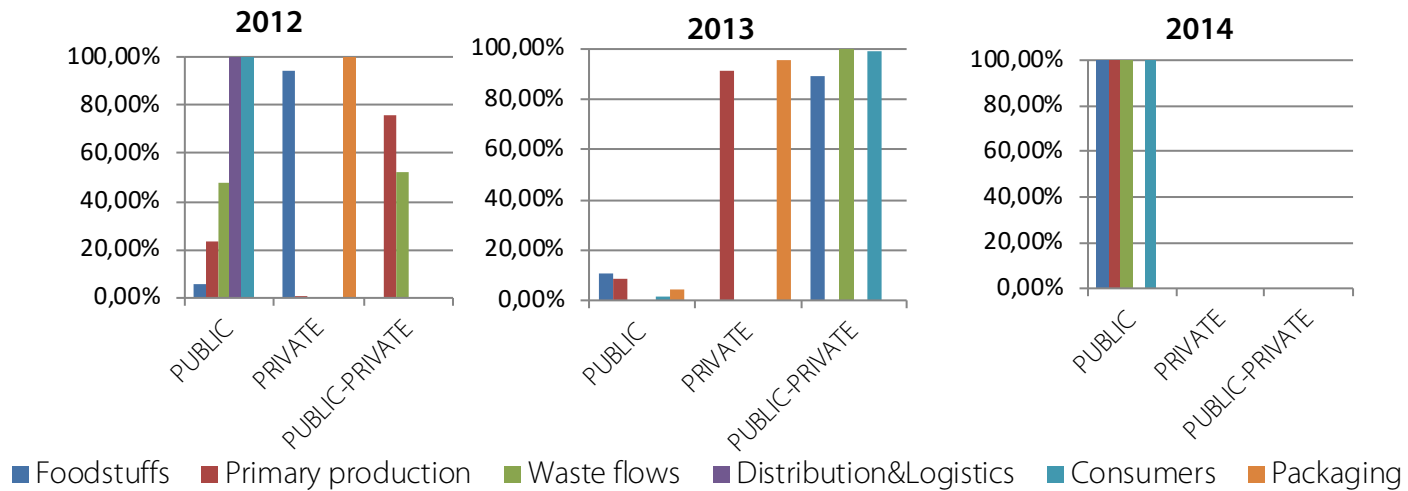


■ PUBLIC ■ PRIVATE ■ PUBLIC-PRIVATE

How they share the funding in research areas per year?



How they share the funding in each food system categories per year?



CONCLUSIONS

Conclusions: Ranking

- Top funding: Production – Crops (climatic adaptation)
- Rank 2: Production – Inputs
- Medium emphasis:
 - Food safety
 - Production, Processing
 - Consumption (mycotoxins)
- Scarce:
 - Distribution
 - Processing (mostly ingredients, lack of development of technology and packaging)
 - Consumption
 - Food waste

Conclusions

- Beneficiaries (last 5 years): public sector (universities, research institutes) – basic research/applied research (?)
- Beneficiaries (2014): only public sector (new Planning Period: 2014-20)
- Funding/project: more balanced between public and private sector, PPP
- Research dominates over innovation (in numbers; but amount of funding is more balanced)

QUANTITATIVE mapping: Hurdles

- Personal professional network
 - Differences between countries
- Data source (no electronic database, Ctrl-C+Ctrl-V)
- Programming periods (2007-13, 2014-20)
- Lists of projects vs. Search based on the beneficiaries
- No uniform data sheets, depending on calls
- Categorization (subjective, lack of common categorization)
- Language (HUN)
- Currency (HUF)
- Data visualization
- Human resource (3-6 PM)

QUANTITATIVE mapping – Future possibilities and advantages

- Cooperation with Research Institute of Agricultural Economics
- Publication (EU level common paper will be published)
- National Research, Development and Innovation Office
 - Renewal of the RDI Strategy
- Networking (EFSA Advisory Forum, Codex Alimentarius, expert networks,)

THANK YOU FOR YOUR ATTENTION!

<https://scar-europe.org>

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