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European Commission

HORIZON 2020

Insights into Research and Innovation in Food Safety



Final Event Montpellier, France, 30 June 2016

HORIZON 2020

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Quick: Basis about Horizon 2020



Three Pillars

1. Excellent science

2. Industrial leadership

3. Societal challenges

7 Societal Challenges

1. Health, demographic change and wellbeing

2. Food security, sustainable agriculture and forestry, marine and maritime and inland water research and the bioeconomy

3. Secure, clean and efficient energy

4. Smart, green and integrated transport

5. Climate action, resource efficiency and raw materials

6. Inclusive, innovative and reflective societies

7. Secure societies



The 2016-2017 Work Programme: solutions to Societal Challenge 2?



Four Calls in Societal Challenge 2

Sustainable food security

Blue Growth

Rural Renaissance

Bio-based innovation for sustainable goods and services



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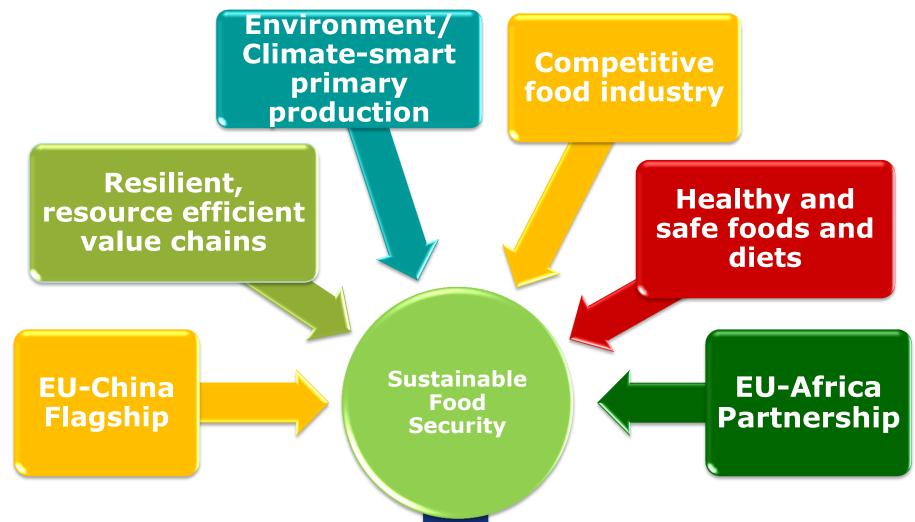


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Sustainable Food Security: 6 areas





SC2 and Food Safety in 2016

- Support for International Research on animal health (CSA^a)
- Understanding host-pathogen-environment interactions (livestock) (RIA^b)
- The impact of consumer practices in food safety: risks and mitigation strategies (R/A)
- Increase overall transparency of processed agri-food products (RIA)
- Reinforcing international cooperation on sustainable aquaculture production with countries from South-East Asia (CSA)
- **Societal Challenge 1: The European Human Biomonitoring Initiative (**CO-FUND EJPC**)**



SFS-12-2016: Support for international research on animal health

- This global initiative will consolidate and deepen international research cooperation in the area of animal health, in particular infectious animal diseases, including zoonoses and parasites, and related issues such as anti-microbial resistance.
- Achieve overall STAR-IDAZ goals.



STAR-IDAZ International Research Consortium on Animal Health

Further details: https://ec.europa.eu/programmes/horizon2020/en/news/internation al-partners-launch-new-international-research-consortium-worktogether-animal-health



SC2 and Food Safety in 2017*

- **Research and approaches for emerging diseases in plants and terrestrial livestock (***RIA***)**
- Validation of diagnostic tools for animal and plant health (IA^a)
- **Co-fund on "One Health" (zoonoses emerging threats) (**CO-FUND EJP**)**
- Sweeteners and sweetness enhancers (RIA)
- Alternative production systems to address anti-microbial drug usage, animal welfare and the impact on health (RIA)
- Innovative sustainable solutions for improving the safety and dietary properties of seafood (IA)
- How to tackle the childhood obesity epidemic? (RIA)

SFS-46-2017: Alternative production systems to address anti-microbial drug usage, animal welfare and the impact on health*

Some highlights:

- Efforts to maximise production and ensure product safety often involve overuse of anti-microbial drugs in farm animals.
- Address immunity and health, biosecurity measures and residue detection. Develop possible means, including tools, methods and schemes, by which more welfare-friendly production systems can help improve health and reduce the use of veterinary drugs.

Research and Innovation Action (RIA), 5 Mio EURO EU-China Flagship

*Check 2017 update, to be published in the coming weeks! HORIZON 2020



SFS-36-2017: Co-fund on "One Health" (zoonoses – emerging threats)*

Some highlights:

- Coherence in research is needed to better understand processes triggering and propagating zoonoses, their routing in the animal-human-environment triangle and their impact on public health.
- Create a European joint programme to deal with zoonoses with an emphasis on zoonotic food-borne microbial infection and intoxication, including natural toxins and the risks associated with domesticated and wild animal reservoirs and their exposure routes towards human infection. It includes antimicrobial resistance.

Cofund (European Joint Programme), 35 Mio EURO

*Check 2017 update, to be published in the coming weeks! HORIZON 2020





EU-Africa in Horizon 2016-2017

Support to the implementation of the EU-Africa Partnership on food and nutrition security and sustainable agriculture

- SFS-41-2016: EU-Africa Research and Innovation partnership on food and nutrition security and sustainable agriculture (ERA-Net Cofund).
- SFS-42-2016: Promoting food and nutrition security and sustainable agriculture in Africa: the role of innovation (RIA).
- SFS-43-2017: Earth observation services for the monitoring of agricultural production in Africa (RIA)*.

*Check 2017 update, to be published in the coming weeks!



Let's not forget the Horizon 2020 2014-2015 work programme



Horizon 2014-2015 and food safety: examples

- Improving the control of infectious epidemics and foodborne outbreaks through rapid identification of pathogens (<u>Societal Challenge 1</u>).
- Assessing the health risks of combined human exposure to multiple foodrelated toxic substances.
- Biological contamination of crops and the food chain.





Other opportunities?



Horizon 2020 dedicated SMS instrument 2016-17*

Aiming at accelerating company development and growth, from the very early stage to market introduction.

- SMEInst-07-2016-2017: Stimulating the innovation potential of SMEs for sustainable and competitive agriculture, forestry, agri-food and bio-based sectors
- SMEInst-03-2016-2017: Dedicated support to biotechnology SMEs closing the gap from lab to market
- SMEInst-05-2016-2017:Supporting innovative SMEs in the healthcare biotechnology sector
- SMEInst-08-2016-2017: Supporting SMEs efforts for the development deployment and market replication of innovative solutions for blue growth

*Check 2017 update, to be published in coming weeks!



Marie Skłodowska-Curie Actions*

Excellent Science	Excellent Science	Excellent Science
Marie Skłodowska-Curie Innovative Training Networks	Marie Skłodowska-Curie Co-funding of regional, national and inter	Marie Skłodowska-Curie Research and Innovation Staff Exchange
H2020-MSCA-ITN-2017	H2020-MSCA-COFUND-2017	H2020-MSCA-RISE-2016
Publication date: 14 October 2015	Publication date: 14 October 2015	Publication date:14 October 2015
Excellent Science	Excellent Science	Excellent Science
Marie Skłodowska-Curie Co-funding	Marie Skłodowska-Curie Individual	Marie Skłodowska-Curie Individual
of regional, national and inter	Fellowships	Fellowships
H2020-MSCA-COFUND-2016	H2020-MSCA-IF-2017	H2020-MSCA-IF-2016
Publication date: 14 October 2015	Publication date: 14 October 2015	Publication date: 14 October 2015
Publication date:14 october 2015	Publication date.14 October 2013	Publication date.14 October 2015
Excellent Science	Excellent Science	
Marie Skłodowska-Curie Research	Trans-national cooperation among	
and Innovation Staff Exchange	Marie Skłodowska-Curie National	
H2020-MSCA-RISE-2017	Contact Points	
	H2020-MSCA-NCP-2017	
Publication date: 14 October 2015	Publication date: 14 October 2015	

*Check 2017 update, to be published in the coming weeks!

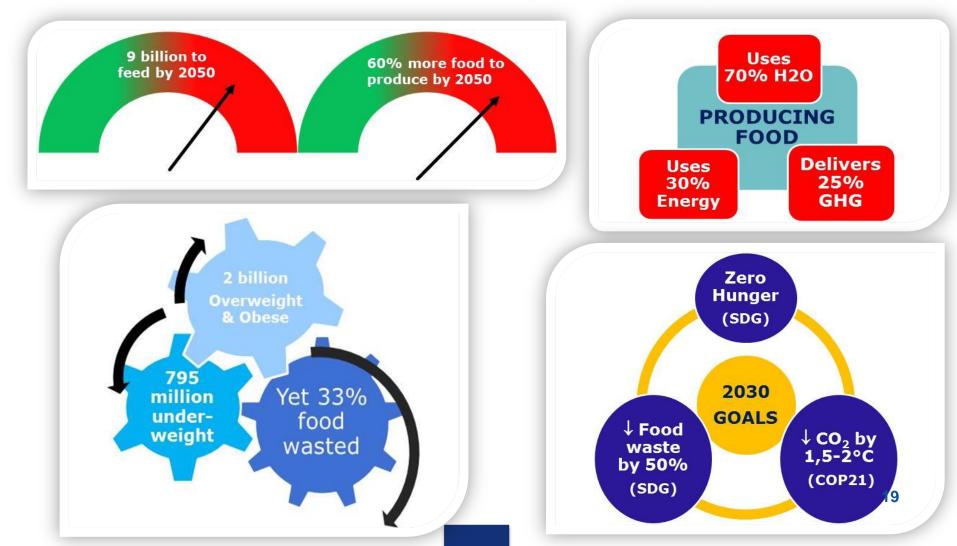




A High Level Event on Research and Innovation for Future-proofing our Nutrition and Food Systems



Food2030 Challenges & Targets





The Political Opportunity

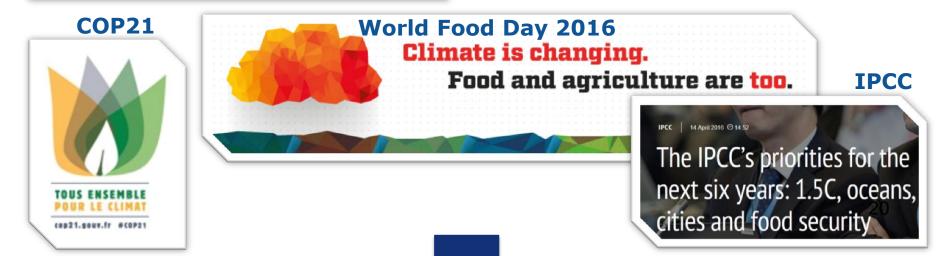
Juncker Priorities (EC)

04



SDGs Post-2015









Sustainability Business Models

FOOD 2030 Priorities for the Event



=> Nutrition: ↓ hunger & malnutrition, ↑ food safety & ↓ diet-related illnesses, and helping citizens adopt sustainable diets and healthy lives – e.g. EJP One Health



=> **Climate:** Building a climate and global change-resilient food system – e.g. PRIMA, EU/Africa HLPD



=> Sustainability: Implementing sustainability & circular economy principles across the whole food system – e.g. food waste, sustainable and resource-efficient food production



=> Innovation: ↑ market-creating innovation & investment, while empowering communities – e.g. FOOD PPP, FOOD KIC, regions and Agri-food Smart Specialisation, food in cities, synergies between funds (H2020, EFSI, RDF, etc.) ²¹



FOOD 2030 High Level Event



"Research and Innovation for Tomorrow's Nutrition and Food Systems"

Date: 12-13 October 2016

Venue: Square, Brussels, Belgium

http://ec.europa.eu/research/conferences/2016/food2030/index.cfm



Few messages to take home?



Horizon 2020 and Food Safety

- Research and innovation funding opportunities in the food safety area have been at the core of Horizon 2020 Societal Challenge 2, but also Societal Challenge 1.
- Different types of **funding instruments** are available (research and innovation actions, innovation actions, cofunding instruments for EU MS collaboration, SME instrument).
 Opportunities for bilateral collaboration with China and Africa are also available.
- Horizon 2020 still has 3 further years to come, with **new calls** that will cover the period **2018 to 2020**.
- The FOOD 2030 event will engage with stakeholders in discussing EU research and innovation policy coherence, yet with a global dimension, in food related areas.



Further info

Find your National Contact Point for H2020: <u>ec.europa.eu/research/participants/portal/des</u> <u>ktop/en/support/national_contact_points.html</u>

H2020 Work Programme: <u>www.ec.europa/research/horizon2020</u>

FOOD 2030:

http://ec.europa.eu/research/conferences/201 6/food2030/index.cfm





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Thank you for your attention!

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