



Research & Innovation for tomorrow's nutrition and food systems

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Research and Innovation



FOOD 2030 Prion CIRCULARIT

A "Perfect Storm"





FOOD 2030 Prion CIRCULARIT

Political Opportunity

Juncker Priorities & Modern CAP

10 priorities 01 Anew boost for jobs, growth and investment. 06 Image: Comparison of the priority of the priorit

Sustainable Development Goals



Next post 2020 EU Framework programme (FP9) New post 2020 EU Multi-Annual Financial Framework (MFF) Support to evolving EU policies COP21+

Research anc Innovation

IPCC





FOOD 2030

EU R&I Policy Framework to future-proof our nutrition & food systems



FOOD 2030 is Engaging with....



Research and

- MEMBER STATES
- INDUSTRY
- CIVIL SOCIETY...
- REGIONS:

Interregional cooperation:

Smart Specialisation Platform Agri-Food

>50 regions - 4 partnerships

Partnership 'High tech farming' Coordination Tuscany (IT)

Focus on value chai E.g. fruits, livestock, cereals, green houses





- CITIES:

Milan Urban Food Policy Pact - 159 signatory cities

Aim: stimulate action on food policy and practice from learning and exchange between signatory cities to the Pact

MPA 2017 Awards

Winner: **Ljubljana** Short Food Supply Chains In The City Of Ljubljana









Photosynthesis for Food & Energy



Response to SDGs:



Problem:

Increasing food and energy demand and decreasing area of available fertile land

The Goal:

Increasing crop yields though enhanced (C4) photosynthesis. Increase alternative energy production through artificial photosynthesis

R&I Needs:

Genetic research to boost crop production for food. Synthetic biology for artificial photosynthesis

Relevant Policies:

Climate action, Jobs & growth, Circular Economy



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Alternatives to Meat



Response to SDGs:



Problem:

Increased global demand for protein High carbon footprint of animal husbandry **The Goal:**

Increased healthy & sustainable protein consumption Reducing greenhouse gas emissions

R&I Needs:

Identify, assess, scale-up new or alternative protein sources

Characterisation of nutritional value & functionalities

Relevant Policies:

Food security, Climate action Circular Economy, Novel Food Regulation









Aquaponics for Agricultural Circularity



Response to SDGs:



Problem:

European consumers reject the use of aquaculture; Need to feed growing cities Limited land for food production

The Goal:

Ecologically friendly production of crop plants and fish: use of non-renewable resources with very high efficiency as indicated by near zero waste discharge

R&I needs:

Marketing plan and efficient communication strategies Raise awareness about this new technology Introduction of aquaponics as an economic activity and the organic certification of aquaponics products.

Relevant Policies:

Circular Economy, CAP modernisation









Personalised Nutrition



Response to SDGs:



Problem:

Unhealthy and unsustainable diets and eating behaviour have a negative effect on health, the environment and the economy

The Goal:

Develop personalised solutions to different population groups

R&I Needs:

Understanding behaviour, motivation, decision making – more social sciences

New dietary assessment methods

Technological development

Proof-of-principle studies to show effectiveness of personalised nutrition approaches

Relevant Policies:

Health strategy, Climate action, Jobs & growth









Fighting obesity with proper pre- and post-natal nutrition



Response to SDGs:



Problem:

>50% of world's adult population obese or overweight Childhood obesity present already in early pregnancy

The Goal:

New products & feeding practices in the pre-natal & childhood periods in order to prevent obesity

R&I Needs:

Research in physiology, development & programming Innovation in public health systems to enhance societal awarness & consumer behaviour

Relevant Policies:

European Health, European Global food security policy, Circular Economy









Towards a healthy and sustainable African Diet



Response to SDGs:



Problem:

Access to sustainable and nutritious food in Africa **The Goal:**

Resilient food systems even in times of crises & war Climate change adaptation & mitigation Eco-friendly low waste food for cities and export **R&I Needs:**

Agricultural systems delivering local nutrition for all Crop diversification for improved nutrition in line with local culture

Physiological knowledge of nutrition

Relevant Policies:

Africa – EU Partnership, EU as a global actor Food Security, Climate action, Common Agricultural Policy



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FOOD 2030 R&I ACTIONS

Nutrition	Circularity	Climate	Innovation
Alternative Proteins	Fighting Food Waste	Bio-fertilisers for Plants	Printing Healthy Meals for Elderly patients
Personalised Nutrition		Farmers as Natural Resource Managers	
26 21 28	Sustainable Use of Land		Cities - Urban Farming
Fighting obesity - pre- and post-natal nutrition		Boosting Photosynthesis	
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Milestones so far





FOOD 2030: Research & Innovation for Tomorrow's Nutrition & Food Systems High-Level Event, 12-13 October 2016, Brussels

Harnessing Research and Innovation for FOOD 2030 Science Policy Dialogue, 16 October 2017, Brussels



H2020 SC2 call 2018-2020 - A Response to the SDGs October 2017







Follow up with EP

- Negotiations for new MFF, FP9, and CAP reform gives scope for increasing investment for FOOD 2030.
- High Level Conference under the Bulgarian Presidency in Plovdiv on 14-15 June 2018.
- Welcome the opportunity to bring this all back to the EP on World Food Day 2018 for a joint discussion on progress.



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