Future-proofing our food and nutrition systems

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A "perfect storm"

- 9 billion to feed by 2050
- 60% more food demand by 2050

2 billion overweight & obese
795 million underweight
Yet 33% food wasted

Uses 70% H2O
Uses 30% Energy
Delivers 25% GHG

Zero Hunger (SDG)
↓ Food waste by 50% (SDG)
↓ CO₂ by 1.5-2°C (COP21)

2030 GOALS
Political Opportunity

Juncker Priorities

2. A connected digital single market.
3. A resilient Energy Union with a forward-looking climate change policy.
4. A deeper and fairer internal market with a strengthened industrial base.
5. A deeper and fairer Economic and Monetary Union (EMU).
6. A reasonable and balanced free trade agreement with the United States.
7. An area of justice and fundamental rights based on mutual trust.
8. Towards a new policy on migration.
9. Europe as a stronger global actor.
10. A Union of democratic change.

SDGs Post-2015

COP21

World Food Day 2016

Climate is changing.

Food and agriculture are too.

IPCC

The IPCC’s priorities for the next six years: 1.5C, oceans, cities and food security.
The Food System

Good soil, water, land & biodiversity

Connecting land & sea

Food & Feed: trade, relations, culture, jobs, etc

By 2030

Sustainable

Resilient

Responsible

Competitive

Diverse

Inclusive
FOOD 2030 - NEW LEVEL OF AMBITION, IMPACT AND FOCUS

- Food system approach
- New partnerships with Member States & business
- Map & close investment gap
- Game changing technologies
- New global platform
FOOD 2030 - Priorities

- NUTRITION for sustainable and healthy diets
- CLIMATE smart and environmentally sustainable food systems
- CIRCULARITY and resource efficiency of food systems
- INNOVATION and empowerment of communities
FOOD 2030 - Drivers

**Research**  ->  ICT, Food systems science & transdisciplinarity

**Innovation and Investment**  ->  Regional, Private sector collaboration

**Open Science**  ->  Open access and data sharing; engagement, education & skills

**International collaboration**  ->  Partnering with Member States, International Bio-economy Forum
High interest from all stakeholders

Agreement to raise ambition

Invitation by European Parliament

Next steps and actions

Speeches and presentations available on:
ec.europa.eu/research/conferences/2016/food2030
In summary

1. Food & nutrition security is strategic concern

2. New level of ambition for research and innovation required

3. FOOD 2030 will engage, mobilise and connect actors

4. Partner with Member States, public & private actors in food/nutrition, and international partners
FOOD 2030: Research & Innovation for Tomorrow's Nutrition & Food Systems
C-IPM Coordinated Integrated Pest Management in Europe

- 32 partners (research funders or managers of research programmes)

- Approx. 2M € EU contribution

www.c-ipm.org

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Not legally binding nor constituting commitment by the European Commission
C-IPM Objectives

- Define IPM-specific research agenda (Strategic Research Agenda, SRA)
- 'Major' and 'minor' crops
- Coordinatination and organisation of transnational calls

- Stakeholder consultation on the SRA
Integrated pest management (IPM)

IPM means careful consideration of all available plant protection methods and subsequent integration of appropriate measures that discourage the development of populations of harmful organisms and keep the use of plant protection products and other forms of intervention to levels that are economically and ecologically justified and reduce or minimise risks to human health and the environment. IPM emphasises the growth of a healthy crop with the least possible disruption to agro-ecosystems and encourages natural pest control mechanisms.

Integrated pest management (IPM)

- Define acceptable pest levels
- Responsible use of PPPs
- Decision support system-backed up by monitoring
- Mechanical/Biological controls
- Preventive cultural practices
Moving forward for sustainable use

Review of active substances in Europe
1993 - 2013

Progress with approval of "bio-based" substances
Microbiome potentials

1. Create collaborative international networks
2. Initiative to standardize terminology and protocols
3. Design big data management, with open access
4. Improve communication with policymakers, funding agencies, farmers, general public by building our case & story
5. Build our next generation workforce by microbiome education

Understanding the microbiome of our biosphere
USEFUL WEB LINKS

Participant Portal:

Cordis:

HORIZON 2020:
http://ec.europa.eu/research/horizon2020/index_en.cfm

BIOECONOMY:
http://ec.europa.eu/research/bioeconomy/

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Thank you