



An Roinn Talmhaíochta,
Bia agus Mara
Department of Agriculture,
Food and the Marine

Introduction, Background & Funding Overview

Patrick Barrett

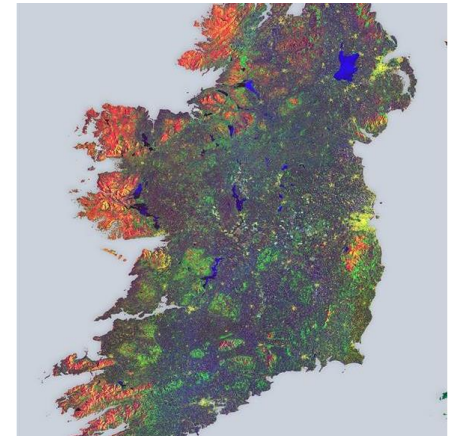
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Background

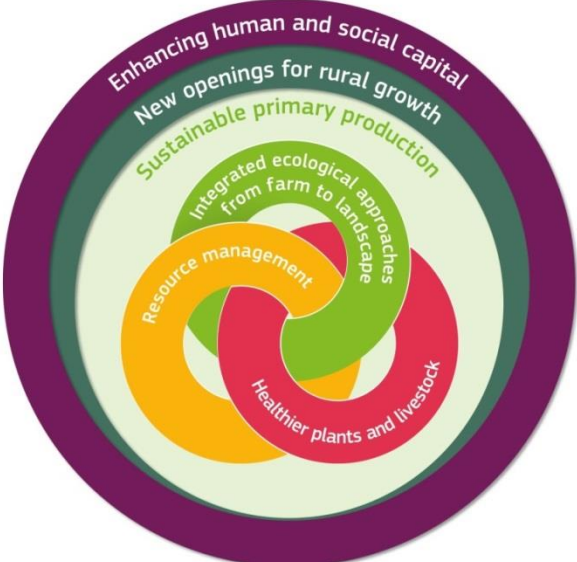
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Rialtas na hÉireann
Government of Ireland



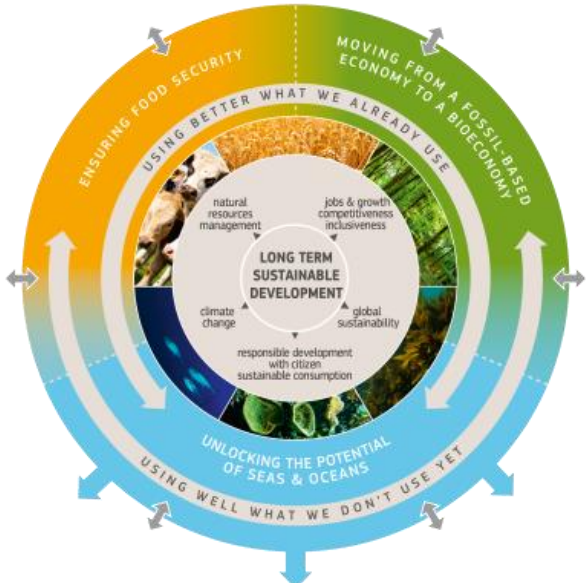
Underpinning EU R&I strategic approaches



Strategic approach to EU agricultural research and innovation



Food 2030 - Strategic approach to EU food & nutrition security



Bioeconomy strategy (R&I component)



FOOD 2030

R&I for tomorrow's nutrition & food systems



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

- **Perfect Storm: climate change, population growth, resource scarcity, malnutrition, obesity & NCDs**
- **Political opportunity: response to SDGs, COP21+, Junker priorities**
- **Investment opportunity: EU underinvesting in food & agri R&I despite high returns on investment**
- **Need for a systemic approach to future-proofing food systems via more impactful R&I**

Drivers



Research breakthroughs



Innovation and Investment



Open Science



International collaboration

 **#FOOD2030EU**

Sustainable food security topics (2020)

From functional ecosystems to healthy food

- Biodiversity in action
- Healthy terrestrial livestock microbial ecosystems for sustainable production
- Integrated health approaches
- Plant Health
- IPM
- Anti-microbials and animal production
- Genome and epigenome enabled breeding in terrestrial livestock

6 topics



Environment/ Climate-smart Food production and consumption

- Emerging challenges for soil management
- Forest soils

2 topics



Building capacities

- GenRes & pre-breeding
- Agri-Aqua labs
- ERANETs
 - ICT & Agri
 - Climate & Food
 - Veterinary vaccinology

2 topics – 2 EraNets

Targeted international cooperation

- EU-Africa
 - ✓ Sustainable intensification
 - ✓ Diversifying revenue in rural Africa through bio-based solutions
- EU-China
 - ✓ Healthy soils for healthy food production

3 topics



Societal challenge 2 calls

Rural renaissance topics (2020)

Dynamics & policies

- **Agricultural markets and international trade in the context of sustainability objectives**

Food & non-food Value chains

- **Connecting consumers and producers in innovative supply chains**
- **Innovative agri-food value chains – boosting sustainability-oriented competitiveness**
- **Reducing food losses and waste along the agri-food value chain**
- **Closing nutrient cycles:**
 - ✓ **Bio-based fertilisers from other by products**
- **Sustainable wood value chains**
 - ✓ **Resilient forest systems**

Taking advantage of the digital revolution

+ UNDER LEIT-ICT call

- **DT-ICT-09-2020 Boost rural economies through cross sector digital service platforms**

Innovation and human capital

- **Thematic networks compiling knowledge ready for practice (2019/20)**

Societal challenge 2 calls

Food and Natural Resources topics (2020)

Agri

- Strengthening the European agro-ecological research and innovation ecosystem
- Developing long-term monitoring and evaluation frameworks for the Common Agricultural Policy
- A comprehensive vision for urban agriculture
- Towards a European research and innovation roadmap on soils and land management
- Husbandry for quality and sustainability
- Defossilising agriculture – solutions and pathways for fossil-energy-free farming

Food

- FOOD 2030 - Empowering cities as agents of food system transformation
- Supporting the food safety systems of the future
- Sustainability of bio-based products – international governance aspects and market update

3

- Pilot action for the removal of marine plastics and litter
- Public engagement for the Bioeconomy
- Prospecting aquatic and terrestrial natural biological resources for biologically active compounds
- Industrial microbiomes – learning from nature
- Bio-based industries leading the way in turning carbon dioxide emissions into chemicals

Innovation and human capital

- Innovative textiles – reinventing fashion
- A network of European bioeconomy clusters to advance bio-based solutions in the primary production sector
- Enzymes for more environment-friendly consumer products
- Pilot circular bio-based cities – sustainable production of bio-based products from urban biowaste and wastewater



Call deadlines

Opening	Submission procedure	Stage	Deadline	Info to applicants	Grant Agreements
15 Oct. 2019	Single stage	Single stage	22nd Jan 2020	May/June 2020	Oct. 2020
	2-stages	1 st stage	22nd Jan 2020	April/May 2020	-
		2 nd stage	8th Sept 2020	Nov 2019	May 2021



€3.7 billion investments - Operates under H2020 – approx. €120 million per year

Objectives:

- **Resource efficiency**
- **Sustainable low carbon economy**
- **Increase economic growth in rural areas**

Focus

- **Feedstock: foster a sustainable biomass supply with increased productivity and building new supply chains**
- **Biorefineries: optimise efficient processing through R&D and demonstrate their efficiency and economic viability at large-scale demo/flagship biorefineries**
- **Markets, products and policies: develop markets for bio-based products and optimise policy frameworks**



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**Global Challenges and
Industrial Competitiveness**

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CLUSTER 5: Food and natural resources: what is in it?

7 intervention areas:

- Environmental observation
- Biodiversity and natural capital
- Agriculture, forestry and rural areas
- Sea and oceans
- Food systems
- Bio-based innovation systems
- Circular systems

Key Features:

CLUSTER 5: Food, Bioeconomy, Natural Resources, Agriculture & Environment

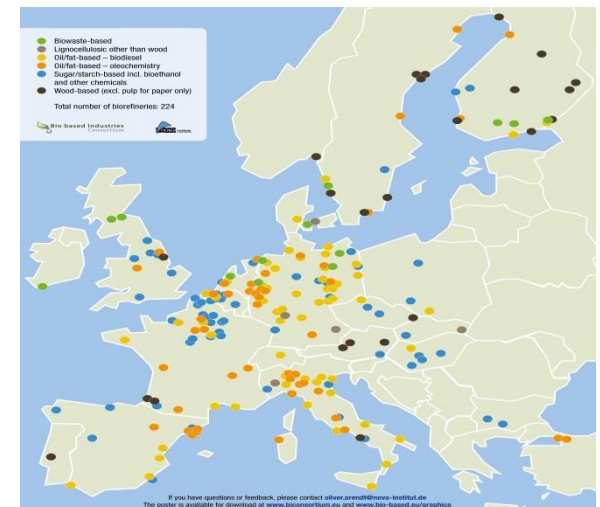
Mission: Soil Health & Food

Partnerships: Eight partnerships proposed

- **Accelerating farming systems transition: agro-ecology, living labs and research infrastructure**
- **Animal Health: Fighting Infectious diseases**
- **Environmental Observations for a sustainable EU Agriculture**
- **Rescuing biodiversity to safeguard life on Earth**
- **A climate neutral, sustainable and productive blue economy**
- **Safe and Sustainable Food System for People, Planet & Climate**
- **Circular bio-based Europe: sustainable innovation for a new local value from waste and biomass**
- **Water4all: water security for the planet**



Biorefineries in Europe 2017





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Thank you for your attention

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