Sustainable Food Security call

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Sustainable Food Security call

€ 431,5 million budget split in six areas to:

1. Improve farming and food systems' capacity to sustainably supply sufficient and healthy food to 9 billion people
2. Ensure global sustainable food and nutrition security
Key facts and figures about the agro-food sector

• **Agriculture**
  - Exports > €105 billion (7% of the total value of EU exports)

• **Food and drink industry**
  - Largest manufacturing industry in the EU
  - Annual turnover €1,017 billion (50% by SMEs)
  - 4.2 million jobs
Key facts and figures about Food security (1)

- 1 billion undernourished versus 1 billion overweight people (300 million obese)

- Average of 2,700 kcal/person/day currently available versus 2,200 kcal needed

- Addressing the yield gap: Agriculture could feed about 12 billion people (FAO)

- Up to 37% of food harvested is lost before it is consumed: during storage, processing, transport; in households

- Expansion of biofuel production of agricultural areas (x4 between 2000 – 2008)
Key facts and figures about Food security (2)

- **Environmental factors**
  (variability in rainfall, temperature, increased CO2 and ozone levels)

- **Resource depletion**
  (water, soil, nutrients, fossil fuels)

- **Current potential yield levels not guaranteed**

- **New and unknown interactions among crops, weeds, insects and diseases expected**
  (e.g. effect on pollination unknown)
Key facts and figures about Food security (3)

- Climate change: a major challenge
The Sustainable Food Security call at a glance

Consumers, diet & health

Food security

Primary production and food chain

Nutrients
Soil
Water

Natural Resources
Biodiversity

Climate
Main Policy objectives

• Physical and economic access for all people, at all times, to sufficient safe and nutritious food meeting their dietary needs and food preferences for an active and healthy life

• To support research into the production and processing of food, a key economic sector providing jobs, skills and training, attracting investments, supporting rural and urban economies and shaping landscapes

• To reverse the diminishing trend of productivity gains in primary production by 2020

• To support reaching a 20% gain in resource use efficiency

• To support food safety policy development in view of new scientific evidence

• To provide an integrated EU approach to contributing to reducing bad health due to poor nutrition, overweight and obesity.
Sustainable Food Security: our daily bread
€ 431,5 million to ensure sufficient, safe and good food for all while safeguarding natural resources

- Putting nature- and resource-based approaches at the heart of research investments
- Focusing on climate smart agro-food chains
- Putting nutritious and healthy food from land and seas on our plates
- Going global: 52 M€ for joint actions with Africa and China
Sustainable Food Security: 6 areas

- Environment/Climate-smart primary production
- Competitive food industry
- Resilient, resource efficient value chains
- Healthy and safe foods and diets
- EU-China Flagship
- EU-Africa Partnership

Sustainable Food Security

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European Commission
Budget distribution within the call (M€)

- Resilient and resource-efficient value chains; 206
- EU-China; 27
- EU-Africa; 25
- Environment/Climate-smart primary production; 64
- Competitive food industry; 24
- Healthy food and diets for all; 85.5
Sustainable food security topics

- Resilient, resource-efficient value chains
  - Abiotic stresses
  - Biotic stresses
  - Operationalising the resilience concept
  - Optimising/reducing the use of critical inputs
  - Specific actions for organic farming
  - Sustainable fisheries and aquaculture
  - ERANETs
  - SCAR support
  - 25 topics – 204 M€

- Environment/Climate-smart primary production
  - Carbon and nitrogen cycling in agro-ecosystems
  - Specific agro-ecological production systems (legumes, grasslands)
  - Ecosystem services
  - Socio-economics, demography and resilience of farms
  - 7 topics – 64 M€

- Competitive food industry
  - Understanding Food value chain dynamics
  - Innovative agri-food chains
  - Sustainable Food packaging
  - 3 topics – 24 M€

- Healthy food and diets for all
  - One-Health Co-fund (zoonoses)
  - Dietary choices of children; consumers and food safety;
  - Diet/impulsivity/compulsivity; obesity; sweeteners
  - 5 topics – 85,5 M€
Sustainable food security topics

**EU-Africa Partnership**
- ERANET Cofund
- Innovation for promoting food and nutrition security and sustainable agriculture in Africa
- Earth observation services for the monitoring of agricultural production in Africa

**EU-China Flagship**
- Water retention in soils
- Breeding of protein crops
- Urban agriculture
- Food safety
- Authentication and traceability

3 topics – 25 M€

5 topics – 27 M€
Resilient, resource-efficient value chains

25 topics – 206 M€

- **Abiotic stresses** (water, nutrients) and efficient resource use
- **Biotic stresses** (Plant and animal health; IPM approaches; diagnostic tools; bee health)
- **Operationalising the resilience concept** (diversity; genetic resources, plant and animal breeding)
- **Optimising/reducing use of (critical) inputs** (robotics (CNECT), weeding, pesticides)
- **Specific actions for organic farming**
- **Sustainable fisheries and aquaculture management**

+ **ERANETs + SME**

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Environment and climate-smart primary production

7 topics – 64 M€

- Carbon and nitrogen cycling in agro-ecosystems
- Specific production systems (legumes, grassland)
- Ecosystem services (soil based, pollination, pest predators, economics of ES)
- Socio-economics, demography and resilience of farms
- ERA-NETs
3 topics – 24 M€

- Understanding Food value chain dynamics
- Innovative agri-food chains: unlocking the competitiveness and sustainability potential
- Sustainable Food packaging;

+ ERA-NET + SME
Healthy and safe foods and diets for all

5 topics – 85,5 M€

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ERA-NETs 2016

ERANET COFUND – Public-Private Partnerships in the Bioeconomy

A – Organic farming and food production
B – Sustainable food production and consumption
C – A knowledge platform for the intestinal microbiome

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ERA-NETS 2017

European Research Area

OTHER-3: Specific Grant Agreements for ERANET Cofund Actions supporting Joint Actions towards Public-Private Partnerships in the Bioeconomy

- **A** - Sustainable crop production
- **B** - Innovative forest-based bioeconomy
- **C** - GMO research
- **D** - Nutrition/epigenome

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Thank you for your attention!

Find out more:
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www.ec.europa/research/horizon2020