

# Sustainable Food Security call

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**EC, DG RTD**

OMEK 25/09/2015



# Sustainable Food Security call

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

- ➔ Improve farming and food systems' capacity to sustainably supply sufficient and healthy food to 9 billion people
- ➔ 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)

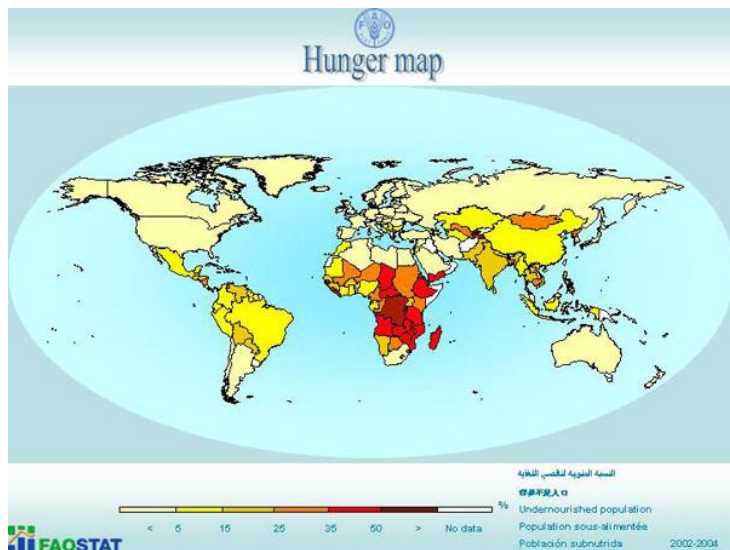
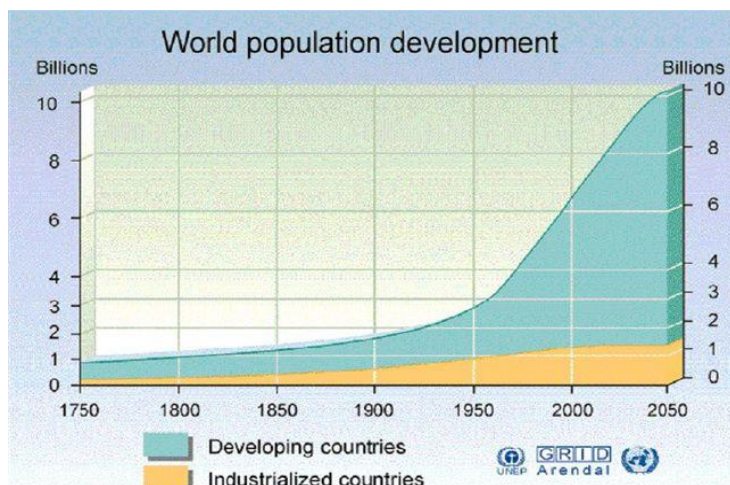


- **Food and drink industry**

- ✓ Largest manufacturing industry in the EU
- ✓ Annual turnover €1,017 billion (50% by SMEs)
- ✓ 4.2 million jobs

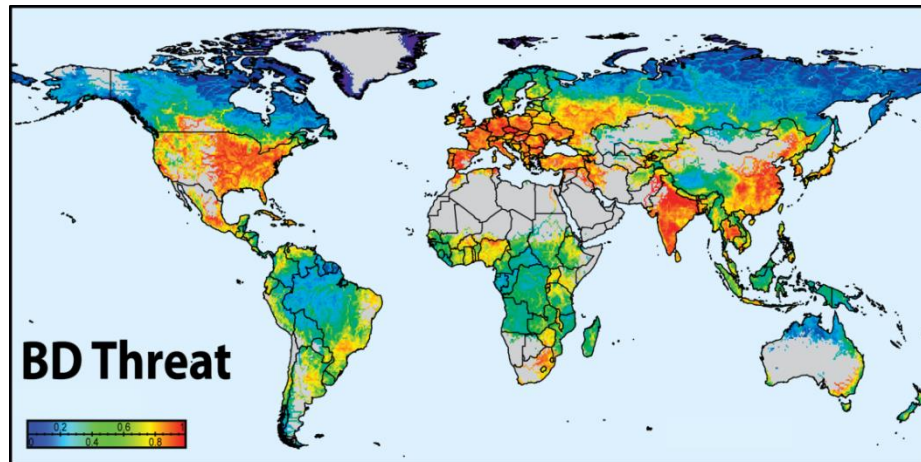
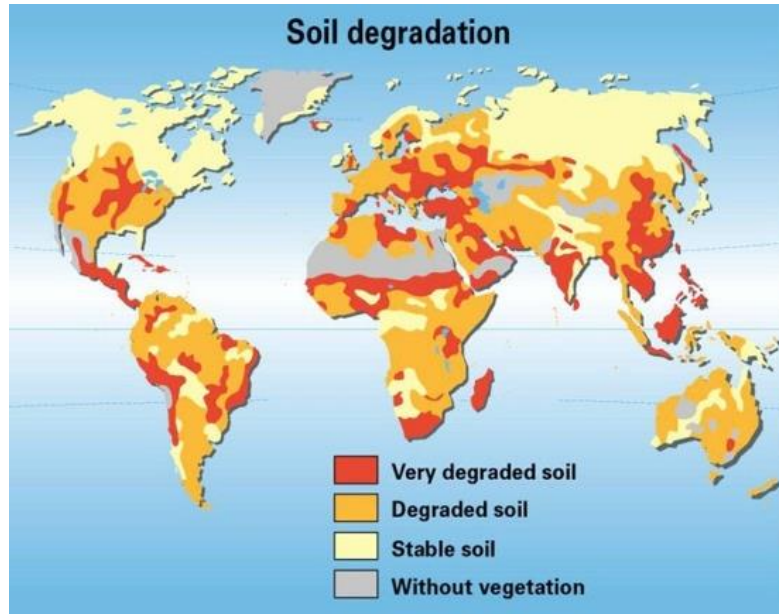


# Key facts and figures about Food security (1)



- **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)

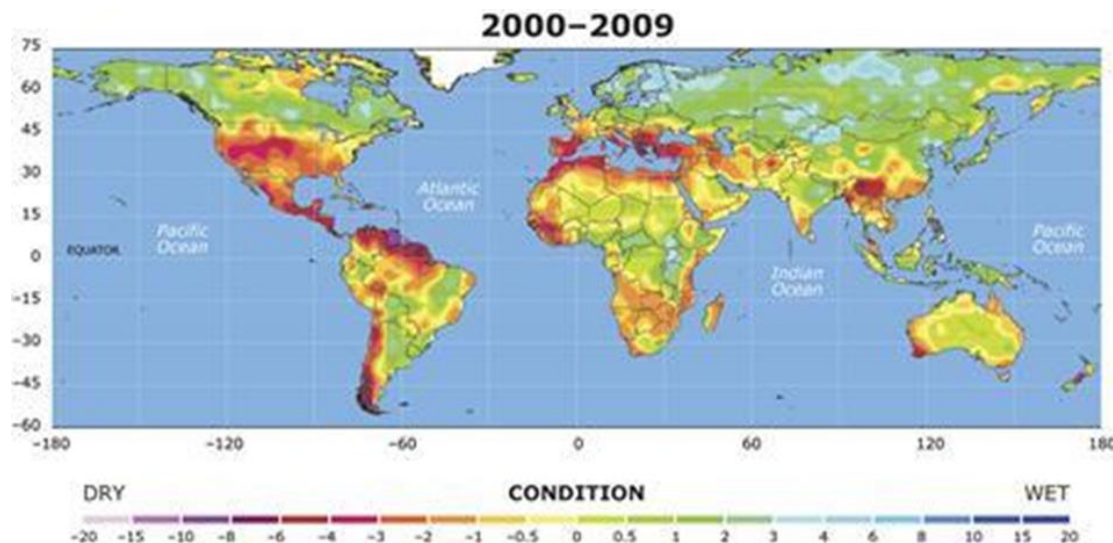
# Key facts and figures about Food security (2)



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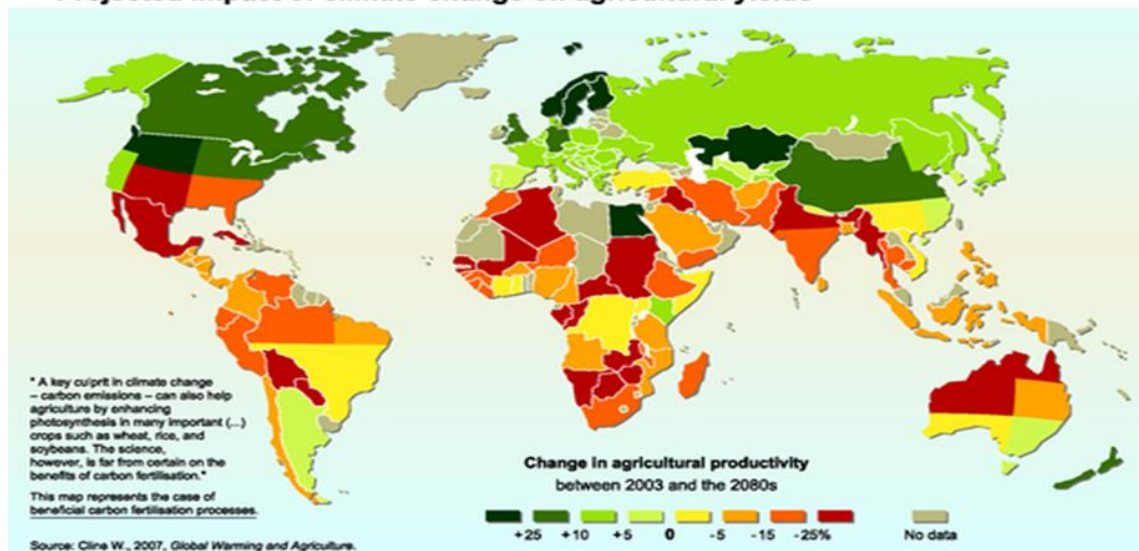
- **Environmental factors**  
(variability in rainfall, temperature, increased CO<sub>2</sub> and ozone levels)
- **Resource depletion**  
(water, soil, nutrients, fossil fuels)
- **Current potential yield levels not guaranteed**
- **New and unknown interactions among crops, weeds, insects and diseases expected** (e.g. effect on pollination unknown)

# Key facts and figures about Food security (3)

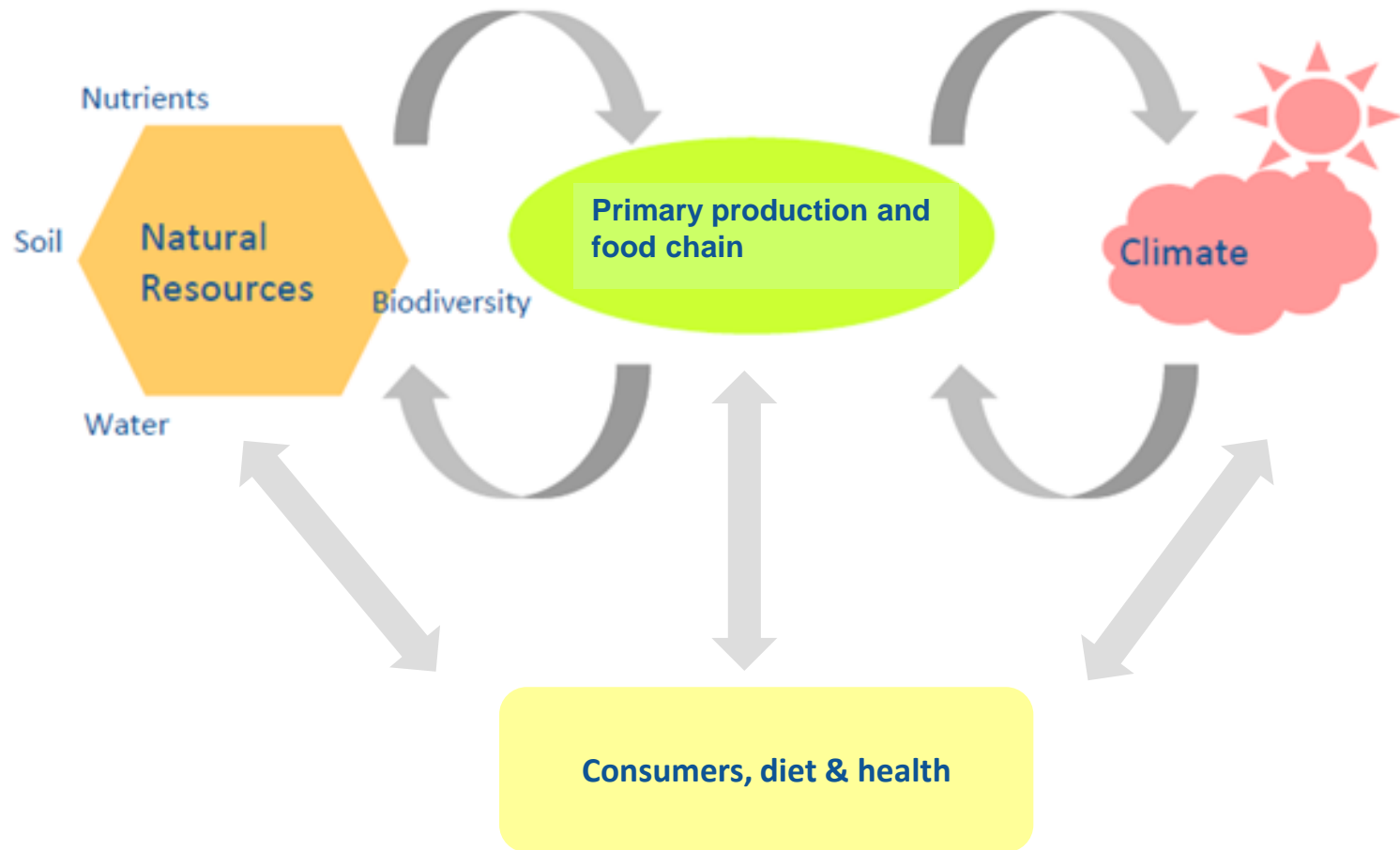


- Climate change: a major challenge

Projected impact of climate change on agricultural yields



# The Sustainable Food Security call at a glance





# 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.

*Development  
Agenda*

*CAP/CFP/  
Biodiversity  
Strategy*

*Resource  
Efficiency  
Roadmap*

*Health/  
Consumer  
Policy*



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

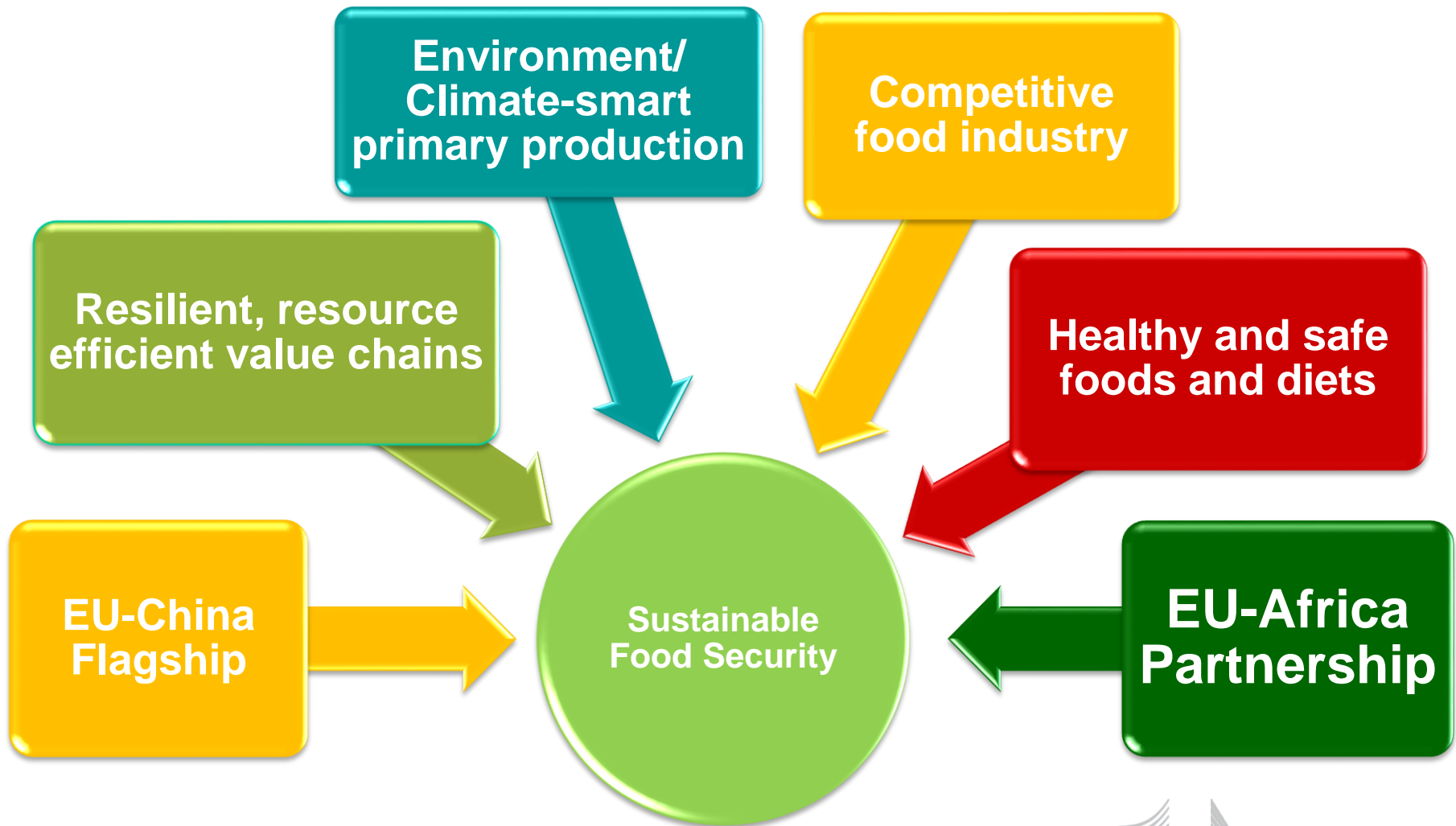


Putting nutritious and healthy food from land and  
seas on our plates

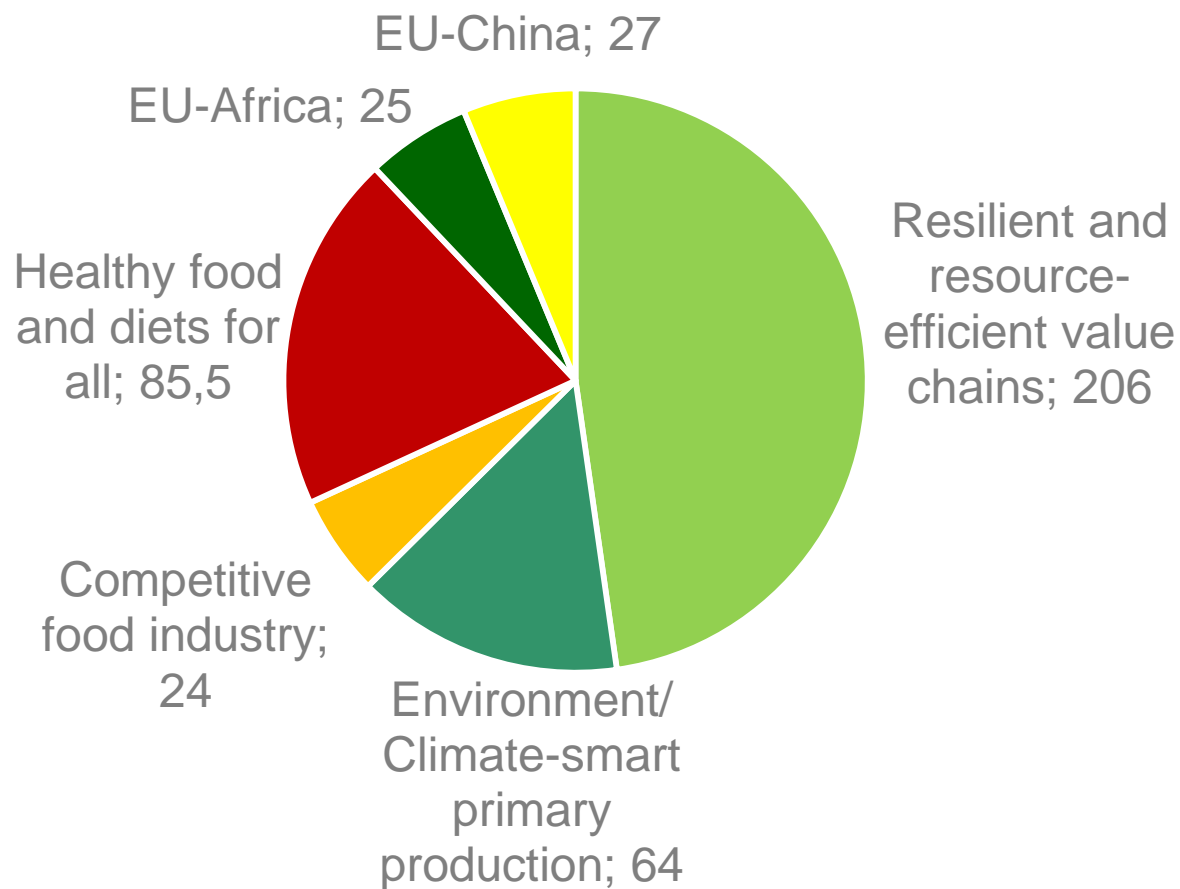


Going global: 52 M€ for joint actions with Africa  
and China

# Sustainable Food Security : 6 areas



## Budget distribution within the call (M€)



# 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**

**3 topics – 25 M€**



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## EU-China Flagship

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

**5 topics – 27 M€**



**European  
Commission**

# 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**



# 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**



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# Competitive food industry



## 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**



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# Healthy and safe foods and diets for all



**5 topics – 85,5 M€**

- **One-Health Co-fund (zoonoses)**
- **Dietary choices of children; consumers and food safety;**
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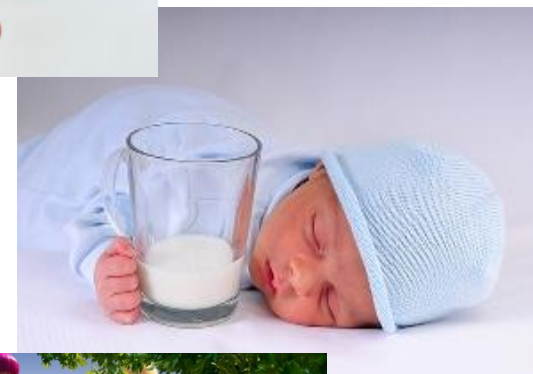
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**+ ERA-NETs**



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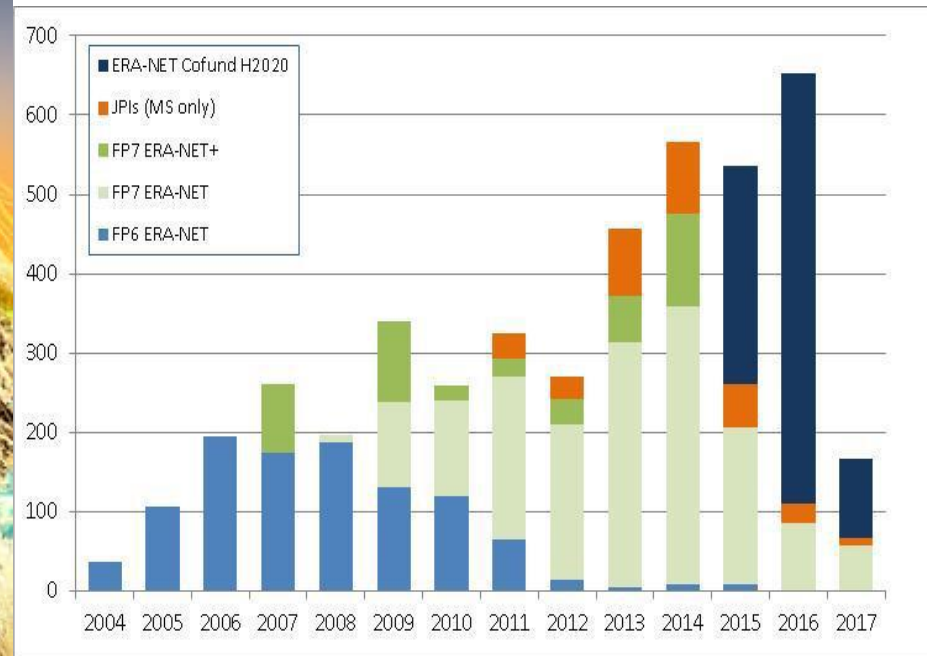
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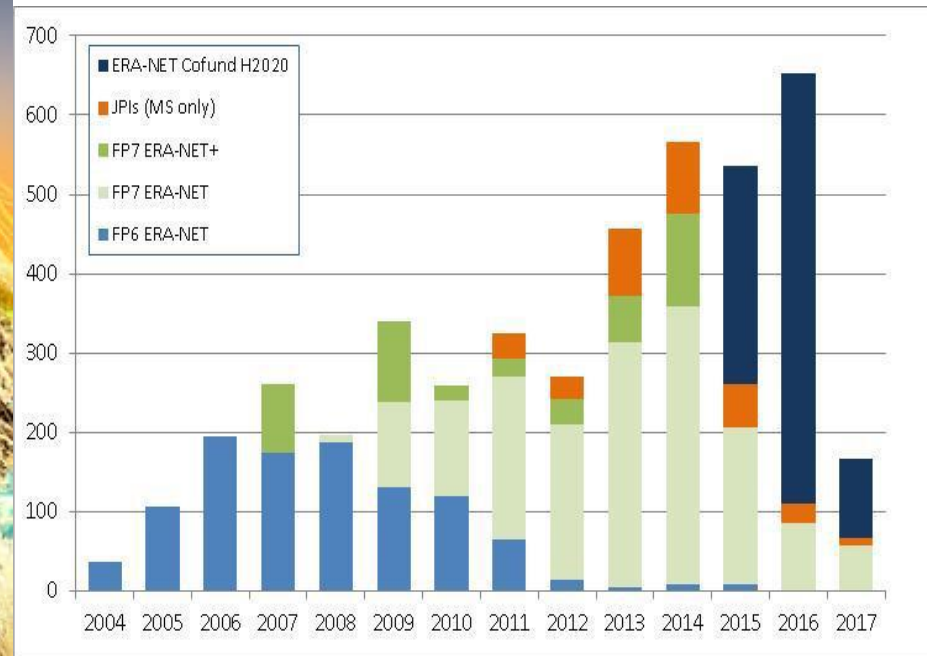
# ERA-NETs 2016



## 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

# ERA-NETS 2017



## 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](http://www.ec.europa/research/horizon2020)**

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