

## Research & Innovation Future-proofing our Nutrition and Food Systems



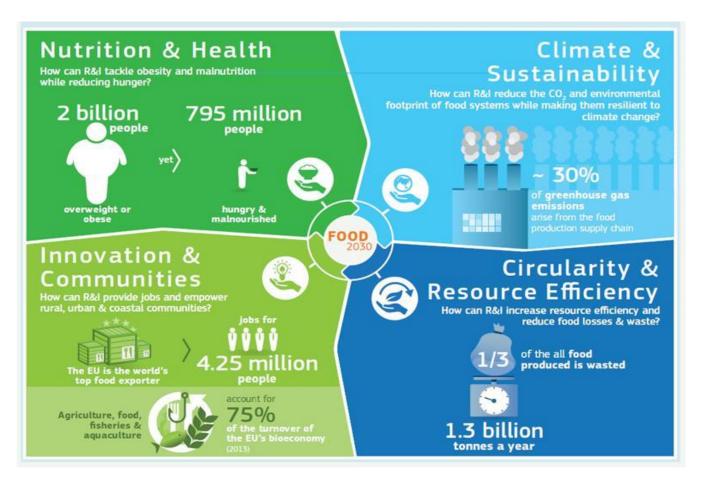
### FOOD VISIONS 2030 Workshop 12 Oct 2016

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#### **The Perfect Storm**







#### The Food System

Good soil, water, land & biodiversity

**Connecting land & sea** 

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



**Sustainable** 

Resilient

Responsible

**Diverse** 

**Competitive** 

**Inclusive** 





# How can R&I make our future Food Systems simultaneously...

**Sustainable:** with respect to natural resource scarcity and in staying within planetary boundaries;

**Resilient:** with respect to mitigating and adapting to climate and global change, including extreme events and migration;

**Responsible:** with respect to being safe, ethical, transparent and accountable;

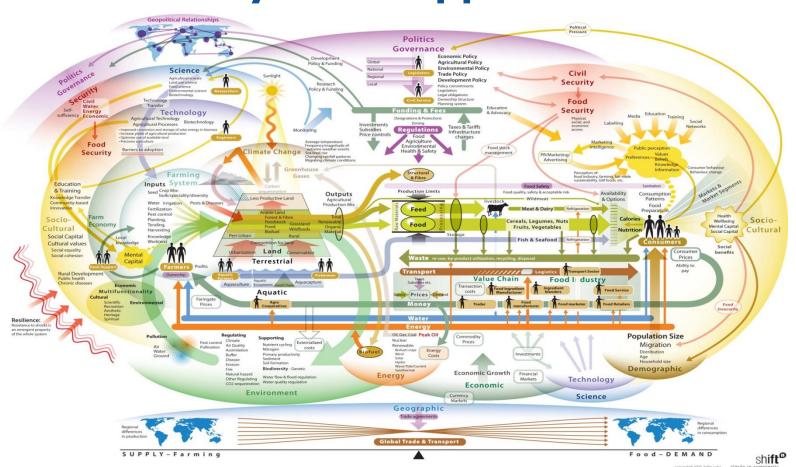
**Diverse:** with respect to being open to a wide range of technologies, practices, approaches, cultures and business models;

**Competitive:** with respect to providing jobs and growth;

**Inclusive:** with respect to engaging all food system actors, including civil society, fighting food poverty, and providing healthy food for all people.



# Such a complex system requires a "systems approach"







#### **Political Opportunity**

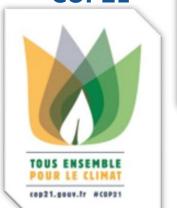
#### **Juncker Priorities**



#### **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





# Opportunities for R&I Breakthroughs

Aquaponics Re-use-of-food-waste
Climate-resilient-crops Smart-Personalised-nutrition
Food-fortification Biosensors-in-agriculture
Organics Smart-Precision-FarmingNew-food
Multifunctional-business-modelsScaling-up-aquaculture
Artificial-Photosynthesis<sub>Insects</sub> Food-water-health-energy-nexus
Drone-food-delivery Alternative-sources-of-protein
Off-shore-agricultureFood-industry-innovation
Urban-agriculture
Plant-based-meat-similars
Sustainable-food-cities3-D-food-printing
usiness-modelsSoil-carbon-capture
Microbiome Agroforestry
Circular-farms





#### **FOOD 2030**

- 1. To promote a **food systems approach to R&I**
- 2. To better **structure**, **connect and scale-up EU R&I**, in a global context
- 3. To **step-up EU investment** ambition (public and private)
- 4. To mobilise diverse international stakeholders to **tackle global societal challenges**

## NEED FOR NEW LEVEL OF AMBITION, IMPACT AND FOCUS





#### **FOOD 2030 Priorities**



**Nutrition** for sustainable, healthy, safe food & diets



Climate smart & environmentally sustainable food system



Circular & resource efficient food systems



**Innovation** & empowerment of communities





#### **FOOD 2030 Drivers**

- **Open Innovation ->** Investment, Regional Innovation, PPP, Quadruple Helix for co-creation, (e.g. RIS3 Agri-Food Platform)
- Open Science -> Open access to data & knowledge; engagement, education & skills (e.g. Microbiome)
- **Research Breakthroughs** -> ICT, Food systems science & transdisciplinarity (e.g. smart personalised nutrition, consumer behaviour, multi-actor approach)
- **Open to the world ->** Global collaborations; MS R&I alignement and support (e.g. International Bioeconomy Forum, Africa HLPD on FNSSA)





### Take home messages

- Food and Nutrition Security is a key priority for EU Research
   Innovation
- 2. Nutrition and food systems face a "perfect storm"
- 3. A new level of R&I ambition, impact and focus is needed for future-proofing our food systems and ensuring FNS
  - => **FOOD 2030** aims to engage, mobilise and connect





#### **FOOD 2030 High Level Event**

- Venue: Brussels SQUARE
- Day 1- four parallel workshops & cocktail
- Day 2- conference proper (all in plenary)
- Conference background document (in infopacks tomorrow)
- Use of twitter #FOOD2030EU (hashtag & wifi code on badges)





#### **Food Visions 2030 Workshop**

- Today we welcome: tomorrow's speakers, a few experts, tomorrow's moderator, & EC staff for a collective leap into the future
  - Speakers: welcome to take inspiration from the day & feed it forward during discussion panels
- Opportunity to share ideas & connect to inspire next steps & catalyze future actions & partnerships
- Today following workshop: networking cocktail & opening of food village exhibit
  - Photos/videos (consent form)
  - Outcome report/newsletter





### **'Conference Proper'**

- Tomorrow's agenda: policy framing, FOOD 2030, four discussion panels, food in cities, closing
- Info for speakers only:
  - > EC panel organisers: Petra, Hans Joerg, Claudia, Sandra, Wim & Karen
  - Reserved seating in plenary (front rows) room will be packed!
  - Please connect with your panel organiser and moderator today!
  - Prior to taking the stage (during breaks) meet in 'speakers room' 15-20 min before start
  - Director John Bell welcomes speakers to special 'speakers lunch'



#### EU Policy Lab at the JRC

What we do...

The EU Policy Lab is both a physical space and a way of working that combines
FORESIGHT
BEHAVIOURAL INSIGHTS and DESIGN THINKING to explore, connect and find solutions for better policies.

Tools we use....

Foresight explores long-term futures and creates shared visions for policymaking.

How can policy-making deal with complexity and uncertainty?

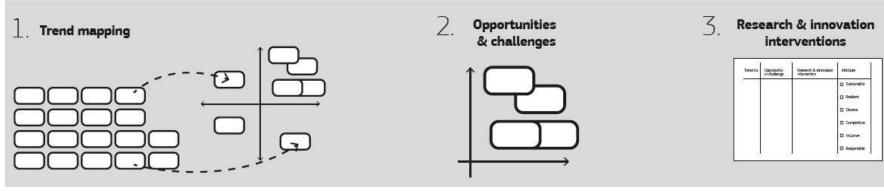
What are the trends that will shape our future?



#### FOODVISION 2030

- To provide DG DEVCO with insights in order to engage EC services on aligning policies towards sustainable food system(s) and SDGs
- Approach:
  - Food systems/sustainability of future food systems
  - Trends analysis
  - Policy mapping
  - Trade-offs, synergies, leverage points for change in EU policy
- Support DG RTD on FOOD2030 to align processes and outcomes
- Flagship project on megatrends





- 14.00 Welcome and introduction
- 14.15 Icebreaker
- 14.30 Session 1: Trend mapping and prioritisation
- 15.00 Session 2: Opportunities and challenges
- 16.00 Coffee break
- 16.15 Session 3: Identifying Research and Innovation interventions
- 17.00 Reporting back and plenary discussion
- 17:45 Closing
- 18.00 Food Village



#### Session 1: Trends mapping

- 8 groups in 4 FOOD2030 categories
  - NUTRITION for sustainable and healthy diets
  - CLIMATE smart and environmentally sustainable
  - Circularity and RESOURCE EFFICIENCY
  - Innovation and EMPOWERMENT OF COMMUNITIES
- 18 trends to place in a TRENDS MATRIX
  - Vertical axis: well-understood misunderstood underestimated
  - Horizontal axis: High impact by 2030 to low impact by 2030
- Groups to discuss where the trends should be placed in the matrix in relation to the group's category
  - misunderstood/high impact quadrant

• E.g. Trend on climate change in the context of nutrition by 2030 could be placed in

Trend mapping

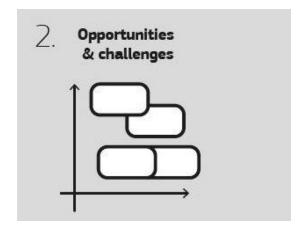
Time allowed: 30 minutes



#### Session 2: Opportunities and Challenges

- Discuss how trends in the upper right quadrant are likely to affect the group's topic area (30 min)
- Identify at least 3 challenges and/or opportunities that arise out of the trend analysis (30 min)
- One member of the group notes down the 3 challenges/opportunities on the template provided

Time allowed: 60 minutes





## Session 3: Research and Innovation interventions

- Identify 3 research and innovation interventions that could address the 3 challenges and or opportunities identified in the previous session (10 min per intervention)
- Indicate under which 'attribute' of a future-proof food system the intervention falls (more than one category is possible) (15 min)

Research & innovation interventions

| Town of the Company | Repeated | Abstract | Company | Research | Company | Co

Time allowed: 45 minutes



#### Reporting back

- Task: You meet Commissioner Moedas (Research and Innovation) in a lift, you have 1 minute to pitch him an idea about research and innovation needs for future food systems
- Each group has 1 minute to pitch 1-2 key messages to come out of group discussion
- Plenary discussion on the findings, feasibility of the interventions, level of difficulty and major (policy) bottlenecks

Time allowed: 45 minutes





### Thank you & enjoy the day!

