



**INRAE**

science for people, life & earth

## ➤ Our missions and our means

- to produce and share scientific knowledge contributing to solve major challenges in Europe and in the world concerning **agriculture, food and the environment**
- to build on our **research** in order to foster **innovation**, provide expertise, and lend **support to public policy makers** at international, European and national level



- Agronomy & Environment
- Plant Biology & Breeding
- Plant Health & Environment



- Animal Genetics
- Animal Physiology & Livestock System
- Animal Health



- Human Nutrition & Food Safety
- Food & Bioproducts Sciences
- Microbiology of Food Chain



- Ecology of Forests and Terrestrial Ecosystems
- Water Resources & Uses



- Mathematics, Computer Sciences & AI
- Sciences for Action & Sustainable Development
- Economic & Social Sciences

Our staff in 2020:  
**11,000+ people**

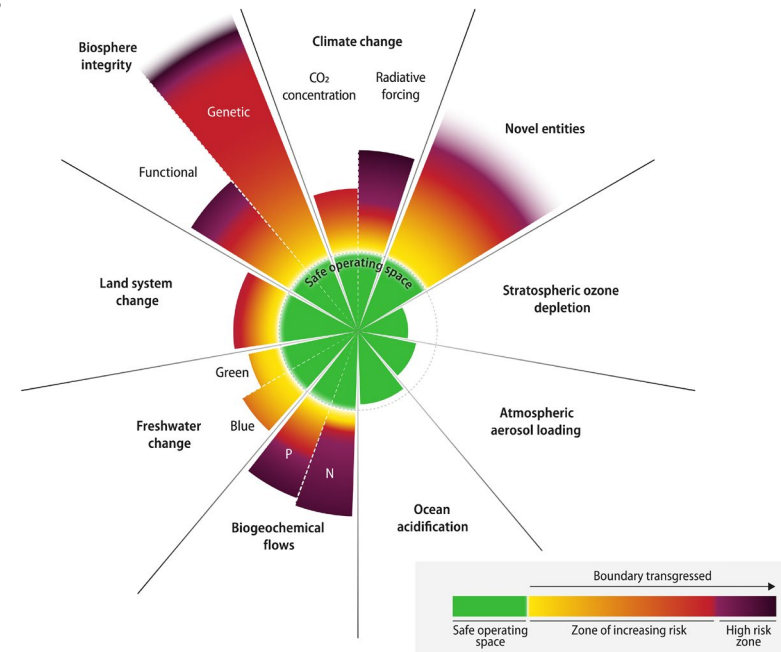
# ➤ von der Leyen's questions

(1) “How can **farmers, and the rural communities** they live in, be given a better perspective, including a fair standard of living ?

(2) How can agriculture be supported within the **boundaries of our planet** and its ecosystem?

(3) How can better use be made of the immense opportunities offered by **knowledge and technological innovation**?

(4) How can a bright and thriving future for **Europe's food system** be promoted in a competitive world?”



Katherine Richardson *et al.* (2023) Earth beyond six of nine planetary boundaries. *Sci. Adv.* 9, DOI: [10.1126/sciadv.adh2458](https://doi.org/10.1126/sciadv.adh2458)

**INRAE 2030**  
**Building a sustainable future through  
shared science and innovation**

5

scientific priorities  
(SPs)

3

policy priorities  
(PPs)



<https://www.inrae.fr/inrae2030>

**SP 1** Responding to environmental challenges and their associated risks

**SP 2** Accelerating agroecological and food transitions while answering socioeconomic challenges

**SP 3** Building a bioeconomy based on the efficient circular use of resources

**SP 4** Promoting a holistic approach to health

**SP 5** Facilitating transitions by mobilizing data sciences and digital technologies

**PP 1** Placing science, innovation, and expertise at the centre of society-policy dialogue

**PP 2** Reinforcing our engagement with academic, European, and international partners

**PP 3** Establishing social and environmental responsibility as a common objective

## **1. Responding to environmental challenges and their associated risks**

- Climate change: mitigation and adaptation strategies
- Biodiversity: a powerful tool and a valuable inheritance
- Organismal adaptations: tools for guiding genetic selection and preserving biodiversity
- Assessment and management of natural and climatic risks

## **2. Accelerating agroecological and food transitions while answering socioeconomic challenges**

- An exploration of transitions and obstacles to autonomy
- Agricultural systems free from synthetic pesticides
- Farming transitions
- Creation of high-quality diets
- Healthy, sustainable, accessible and satisfying food for all

## **3. Building bioeconomies based on the efficient circular use of resources**

- Carbon, nitrogen, and phosphorus cycles in terrestrial ecosystems
- Water cycles - relationships large and small
- Treatment and usage of biomass, by-products, wastewater, and organic residues
- Biobased products: developing new market relationships and social dynamics

#### 4. Promoting a holistic approach to health

- Emerging and re-emerging infectious diseases that move within and among environments, agricultural systems, and food production systems
- Pollution, contaminants, and the exposome
- Preventive nutrition for improved human and environmental health



#### 5. Facilitating transitions by mobilizing data sciences and digital technologies

- Complex and mutable systems
- Sensors and data acquisition systems
- Agricultural equipment for the agroecological transition information technologies, networks, and new capabilities



## ➤ Strategic dialogue guidelines

G1. The **time for change is now**

G2. Cooperation and dialogue across the food value chain are critical

G3. **Policy measures** must be coherent and create powerful enabling environments based on fruitful synergies

G4. Food and agricultural production play a strategic role in the new geopolitical context, as an essential part of European security

G5. The role of young people in agriculture and rural areas and the diversity of European food and farming systems are an important asset

G6. **Economic, environmental and social sustainability** can reinforce each other

G7. Markets should drive sustainability and value creation across the chain and better **internalise externalities**

G8. **The opportunities of technology and innovation should be leveraged to support the transition towards more sustainable agri-food systems**

G9. The shift towards **balanced diets that are healthier and more sustainable** is essential for a successful transition

G10. Attractive rural areas are of crucial importance for food security, the future viability of society, and liberal democracy

# ➤ Main conclusions for INRAE research agenda

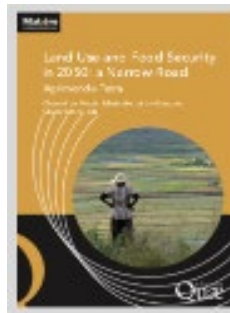
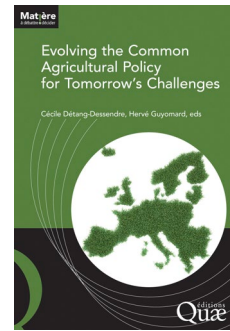
**in line with our position : changes is now reaffirming our scientific priorities**

- Sustainable agri-food system ➔ systemic approach, thinking together supply and demand sides (food production and consumption, diet)
- Technology and innovation to serve sustainable agri-food system
- Coherence of Policy design (importance of policy support by research expertise)

Bring to the fore the frame of **Planet boundaries**

**One point for discussion:** Economic, environmental and social sustainability can reinforce each other

➔ not all the time, potential trade-offs







➤ Thank you for your attention