

> January 1st 2020, INRAE is launched



French National Research Institute for Agriculture, Food & Environment



NRAE 2030, Strategic priorities for the next ten years

Scientific orientations

OS 1

Responding to environmental issues and managing associated risks

OS 2

Accelerating agroecological and food transitions, taking into account economic and social issues

OS 3

A bioeconomy based on a sober and circular use of resources

OS 4

Promoting an approach one global health

OS 5

Mobilizing data science and digital technologies for transitions

General policy orientations

GPO 1

Putting science, innovation and expertise at the heart of our relationship with society to **strengthen** our culture of impact

GPO 2

To be a committed player in university sites in France and a leader in European and international partnerships

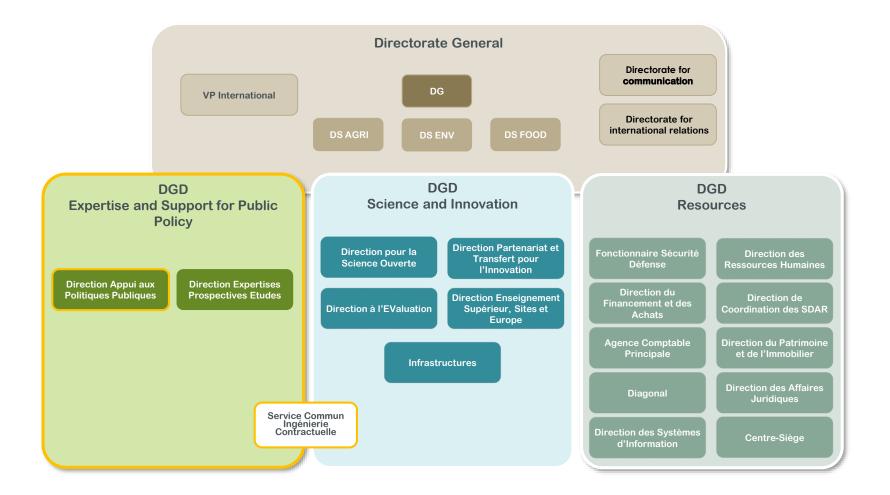
GPO3

The Social and **Environmental** Responsibility strategy: a collective priority



https://www.inrae.fr/inrae2030





A dedicated Directorate for scientific expertise and policy support inside a public research institute

= a meaningful and unique structure addressing challenges for INRAE



> A new Directorate to support public policies

Acting at the crossroads between science, society, and governmental action, INRAE's expertise and support for public policies function synergistically with the institute's research activities

- > Promote and maintain the institute's internal work on emerging societal challenges
- **Help** policy-makers and scientists construct new research projects that provide support for public policies in France and abroad
- **Develop** innovative tools and participatory processes to provide expertise and support for public policies

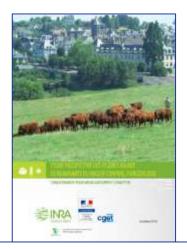


> Expertise and policy support: A full set of actions

Scientific assessments



Foresight studies





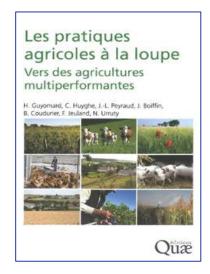
Advanced studies and evaluations



Scientific and technical support for the implementation of public policies

(Knowledge platform, methods, indicators,

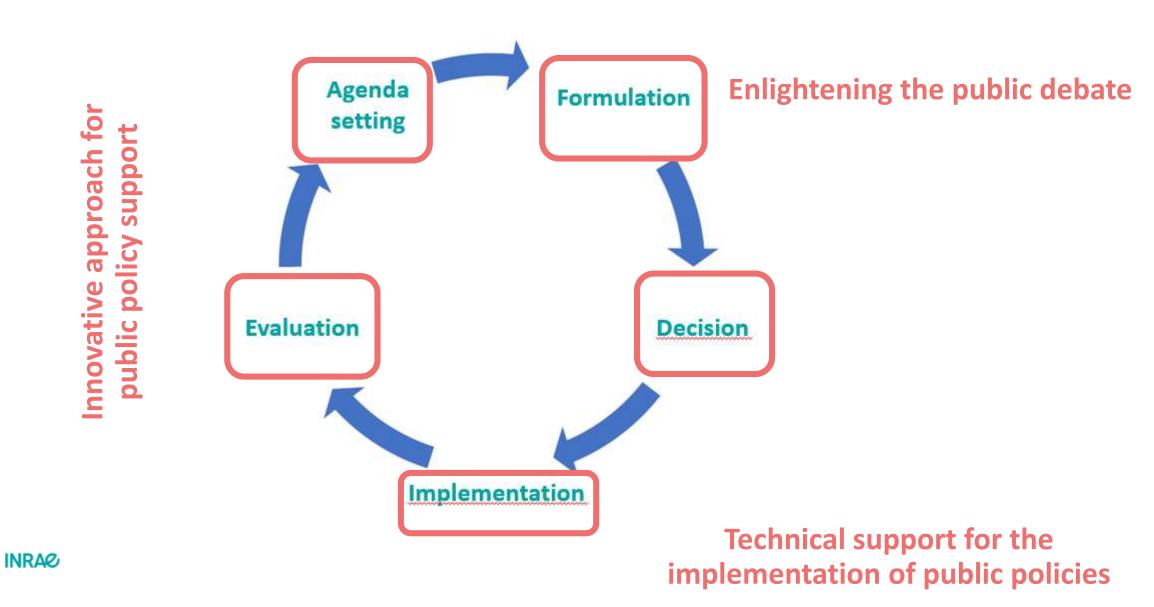
normalisation, expertise)



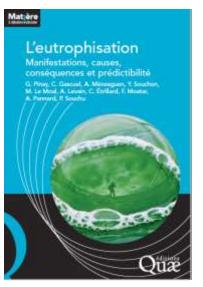


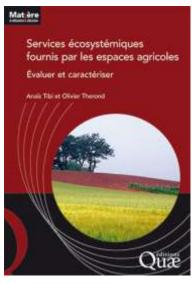


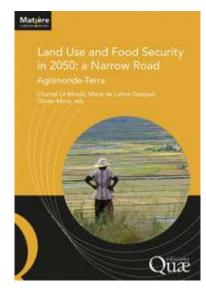
> INRAE's main activities on the public policy cycle



> Enlightening the public debate







- Documentation, monitoring, Scientometrics
- Data analysis
- Coordination
- Mediation, Writing, Communication

- Collective scientific assessment: state of the art in response to a question asked by external public actors
- **Study:** a collective scientific assessment contextualised with additional data often comimng from simulation models
- Foresight: building possible futures of a studied system, as commissioned by external actors or by INRAE



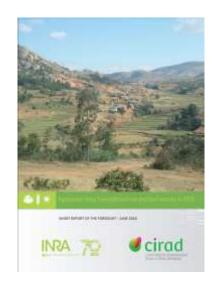
> Enlightening the public debate

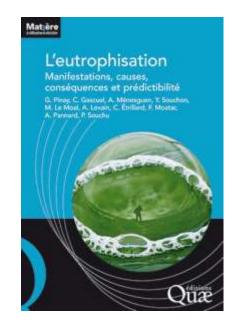
1. Foresight study "AgrimondeTerra - Land use and food security in 2050"

- Coordinated by INRAE & CIRAD (French agricultural research organization for development in the South and the French overseas regions) - published in July 2020
- A set of scenarios to explore possible futures for global food systems and provide new fuel for the debate on land use and food security
- That will fuel the debate and help decision-makers and the scientific community pinpoint new research questions to facilitate the building of healthier, more sustainable food systems.

2. Collective scientific expertise - "Eutrophication: Appearances, causes, consequences and predictability"

- Coordinated by CNRS, INRAE, IFREMER
- Launched at the request of the French Government (Ministries of Agriculture, Environment) (2018)
- Sets out the available scientific knowledge on this phenomenon; identifies existing levers for action to monitor and combat eutrophication
- Eutrophication has a major disruptive effect on aquatic ecosystems and an impact on assets and associated services, human health and economic activities





> Technical support for the implementation of public policies; innovative approach

Pôle Animation

- Élaborer et porter l'offre
- Coordonner et animer les partenariats

Pôle Valorisation

 Valoriser et mettre en visibilité l'activité et les produits

Pôle Accompagnement

 Accompagner les équipes

Network
of 14 representatives
in our scientitic
departments





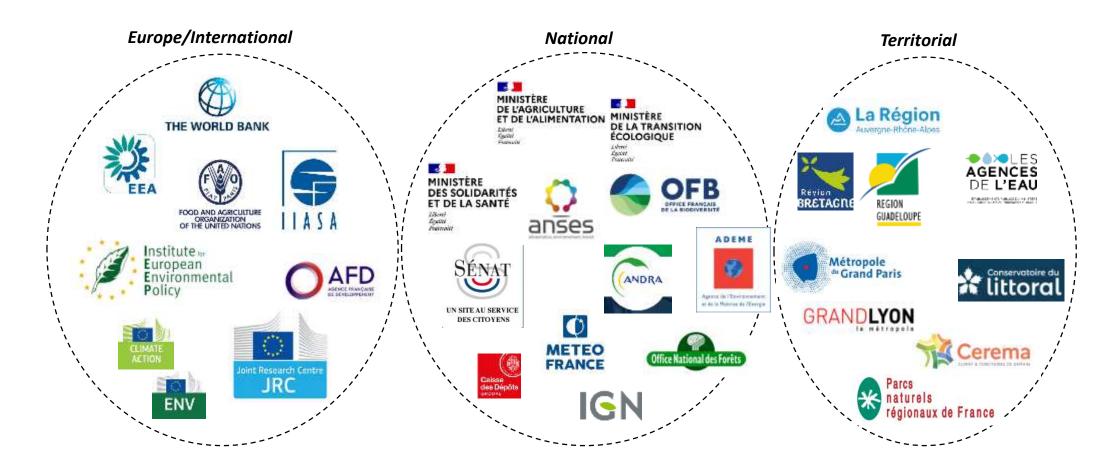




- ✓ Interface transversale, coordination
- ✓ Mise en visibilité des activités, reconnaissance
- ✓ Service apporté aux collectifs : cadre méthodologique, partage des bonnes pratiques, expertise nationale et internationale, interfaces avec les acteurs, ...

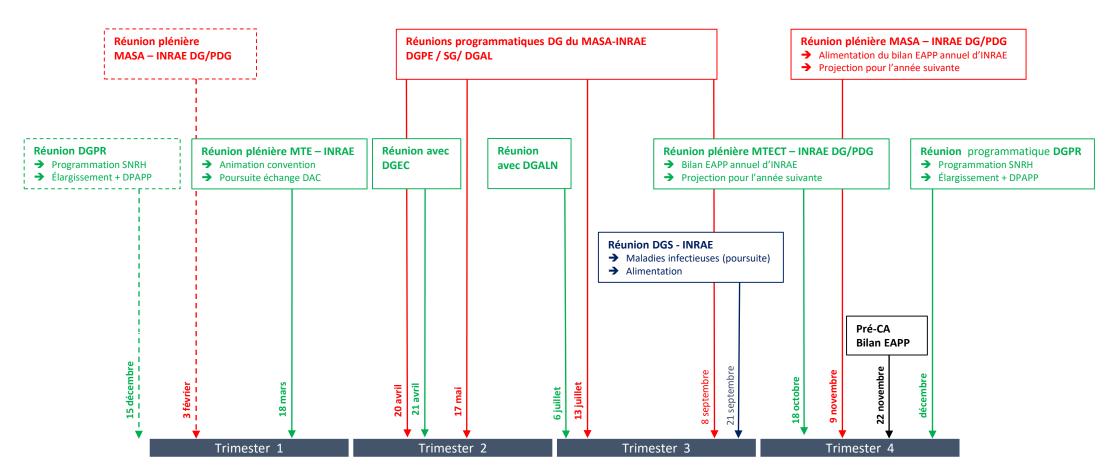


> Partners and contacts at every scale





> A very organized schedule with Ministries to program and follow activities



Decision makers: Ministry of Agriculture and Food, Ministry of ecological transition and territories, Ministry of Health



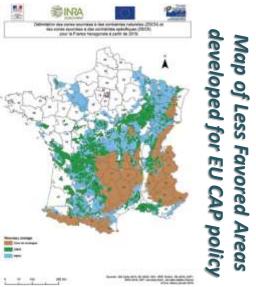
> Technical support for the implementation of public policies: examples on soil

1) Technical support for the implementation of public policies: a Service Unit for Soil Mapping and Surveillance "INRAE InfoSol Unit"

- Coordination of soil survey and soil monitoring for France, in strong relation with Ministries of agriculture and environment
- Responsible for the National Soil Information System
- Increase access to soil data and support public policies
- Research on digital soil mapping, soil inventories and monitoring

2) Technical support for the formulation of public policies: a study on Soil

- Study published in June 2019, commissioned by the French Ministry for Agriculture and Food and by French Agency for Ecological Transition
- On potential carbon storage in national soils
- Using a novel methodology to evaluate this potential and estimate its costs region by region, with the aim to reach the 4 for 1 000 carbon storage objective (COP21).
- 3) Technical support for the formulation of public policies: INRAE in EU expert group INRAE as member of the Expert Group on the implementation of the EU Soil Strategy





Other activities

- Internal call for expressions of interest of our scientists to foster projets for new ways of doing science for policy
- Capacity building, training and summer schools
- Evaluation of Science for policy: at the institute scale, at the research unit scale, and assessment of professional trajectories
- Sharing experience with an informal network of French research institutes on various topics (nuclear, agriculture, digital, climate, etc); organization of a joint webinar with the JRC (May 2022); first time description of the French national ecosystem (Laura Maxim's report)



Remaining challenges

- Stakeholders and the public should be more involved within the scientific process (through open science and participatory approaches), notably at the local scale (tackling with integrated challenges, and using interdisciplinarity)
- Societal challenges and SDGs should foster more reactive research, able to produce solutions, transitions even transformations, along with high level science
- We should find the way to communicate with the uncertainty, and even diverging views, related to the scientific evidence and the policy options
- We need to have more scientists trained in SPI interface (cf. "summer schools") and civil servants (in ministries and national agencies) more aware of challenges research is addressing and how it can help design public policies, and the difference of timescales between research and decision making
- The evaluation of research activities, incl. expertise and policy support, is essential and should be done considering the synergy between research and expertise in all steps of professional career of researchers and professors



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