

Nutrients Recycling under the EIP-AGRI and Horizon 2020



European nutrient event
19 October 2017

Gaëtan DUBOIS
European Commission – DG AGRI
Unit B2 - Research & Innovation

The AGRI R&I team



Breaking the silos between the R&I and the Agricultural policies



EIP-AGRI



Horizon 2020

*Co-management of the
Societal Challenge 2 with DG
Research & Innovation*



Contents outline

- *EIP-AGRI in a nutshell*
- *The EIP-AGRI Network*
 - **Focus Group on Nutrient recycling**
How to improve the agronomic use of recycled nutrients (N and P) from livestock manure and other organic sources?
- *RDP support to Operational Groups*
- *Horizon 2020 R&I projects & Thematic Networks*



The European Innovation Partnerships (EIPs)

- New approach under the **Europe 2020 Strategy** for smart, sustainable and inclusive growth
- Flagship Initiative "**Innovation Union**": EIPs as a new tool for **fostering innovation through linking existing policies and instruments**
- EIPs should provide favourable conditions for research and innovation partners to co-operate and achieve better and faster results compared to existing approaches



Agriculture
and Rural
Development



European Innovation
Partnership on Active
and Healthy Ageing

EIP-AGRI - in short

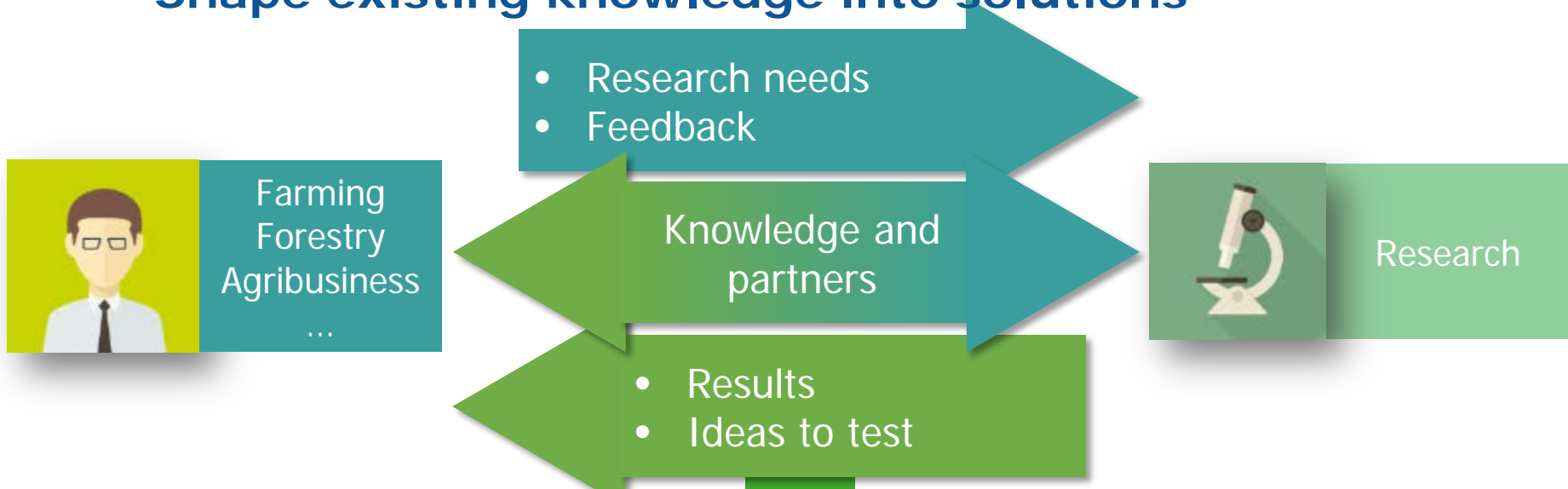


Launched by the Commission in February 2012 (COM (2012)79)

Aim: Fostering a competitive and sustainable agriculture and forestry sector that '*achieves more from less*'

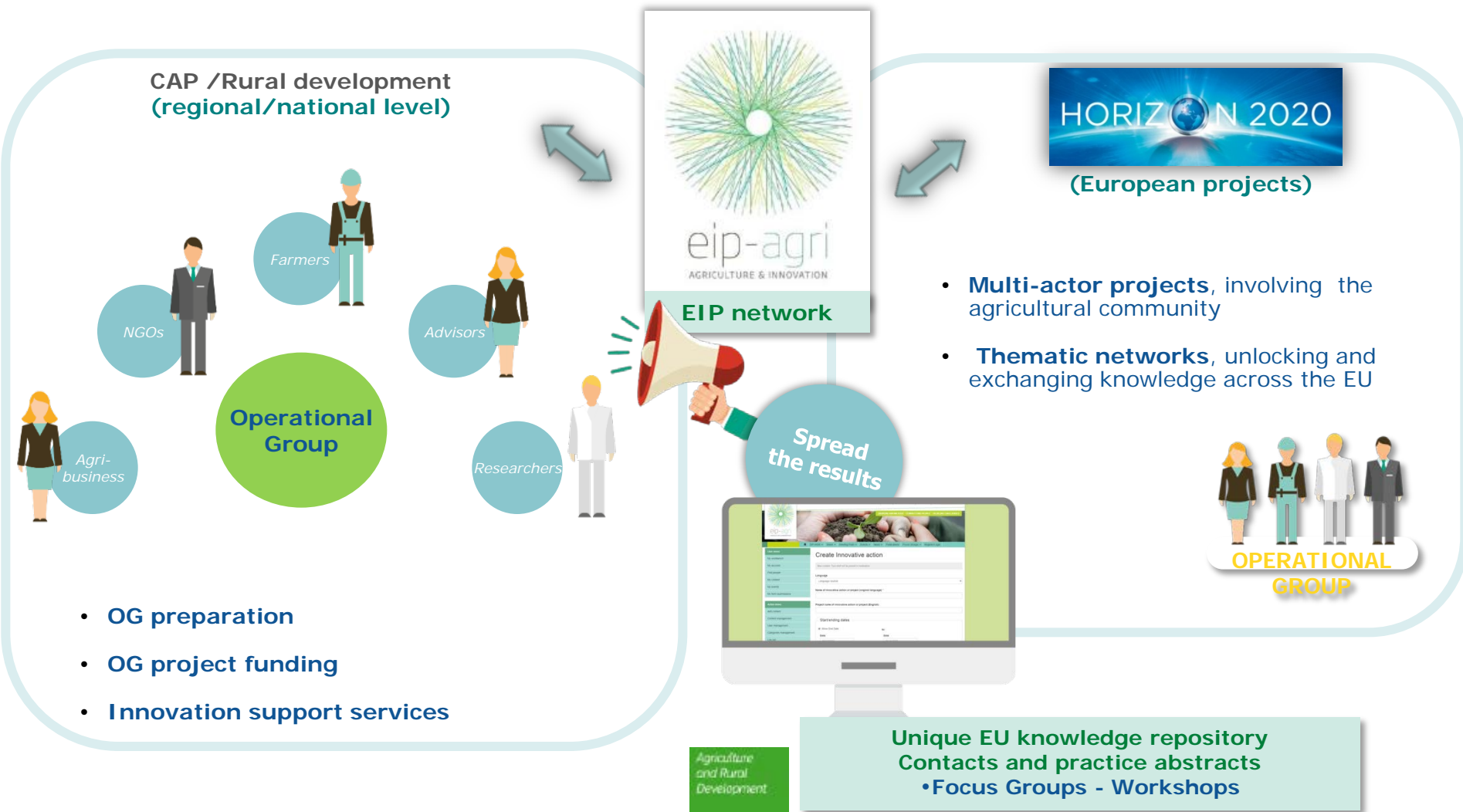
Approach: **Closing the innovation gap** between research and practice and forming partnerships by:

- **Using the interactive innovation model**
- **Linking actors through the EIP-AGRI Network**
- **Shape existing knowledge into solutions**





Connecting policies



EIP-AGRI network



The EIP-AGRI Network and its Service Point



servicepoint@eip-agri.eu

+32 2 543 73 48

EIP-AGRI Service Point
Avenue de la Toison d'Or 72
1060 Brussel
Belgium



HELPDESK

FOCUS GROUPS

WORKSHOPS & SEMINARS

Connecting farmers, researchers, advisors,
businesses, environmental groups,
consumer interests groups or other NGOs

EIP-AGRI Service Point

SHARING KNOWLEDGE - CONNECTING PEOPLE - TACKLING CHALLENGES

SERVICES

HELPPDESK

FOCUS GROUPS

WORKSHOPS & SEMINARS

Connecting farmers, researchers, advisors,
businesses, environmental groups,
consumer interest groups and other NGOs

Online & Printed Publications

Database

Funding opportunities
Research needs from practice
Experts
Case Studies
Finding partners



Newsletter

Press

Social Media

Website

Events

Help agricultural innovations spread across Europe fast

Connecting
Research & Practice

Connecting
Scientists & Farmers

Connecting
Within & Across
European Countries



EIP-AGRI network



EIP-AGRI Focus Groups tackling agricultural challenges



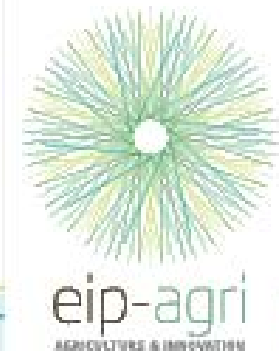
EIP-AGRI Focus Groups are

- temporary groups of selected experts
 - focusing on a specific subject,
 - sharing knowledge and experience.
-
- Open calls for interest of participation
 - 20 participants, different types of actors
 - Short duration, focused
 - Inspiration to set up Operational Groups
 - 28 Focus Groups (FG) to date



<http://ec.europa.eu/eip/agriculture/en/content/focus-groups>

Focus Group Nutrient recycling



Erik MEERS
Coordinating expert of the FG
Ghent University



funded by

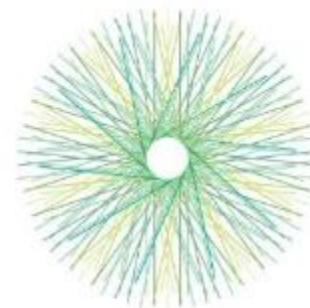


Composition of the Focus Group

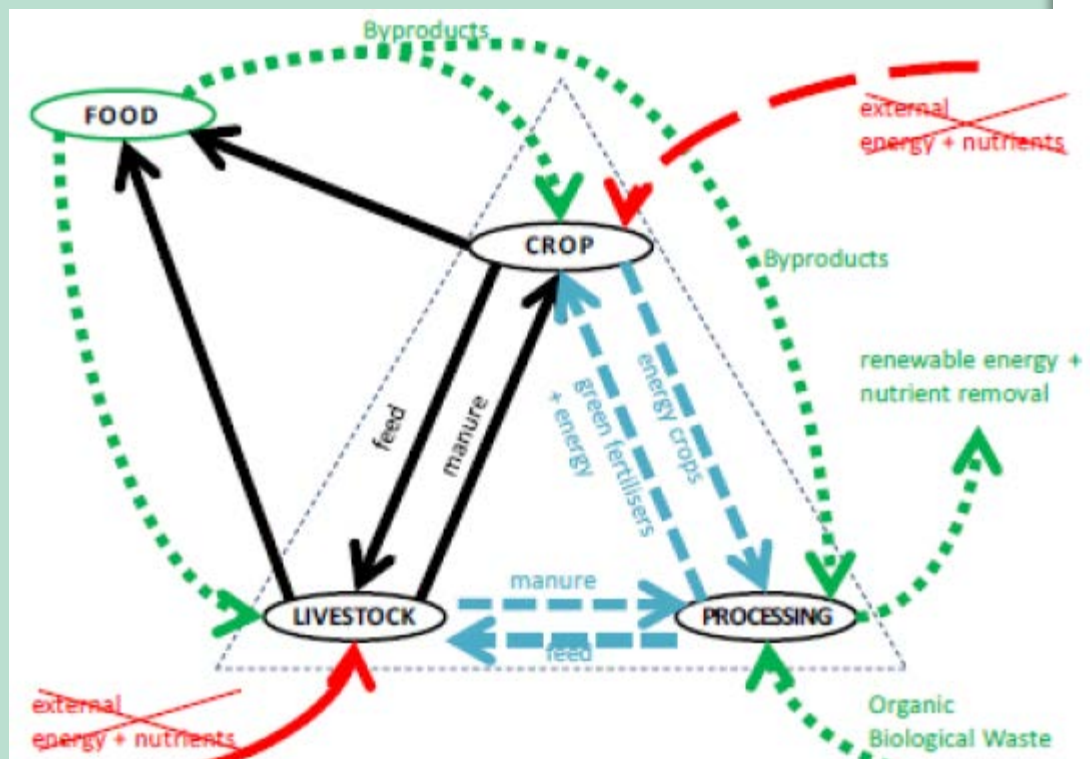


Name	Country	Professional background
Fabrizio Adani	Italy	Scientist
Jean-Philippe Bernard	France	Expert from agricultural organisation
August Bonmatí	Spain	Scientist
Jeanet Brandsma	Netherlands	Farmer
Susanna Klages	Germany	Expert from agricultural organisation
Vea Eory	United Kingdom	Scientist
David Fangueiro	Portugal	Scientist
Patrick Forrestal	Ireland	Scientist
Zoltan Hajdu	Hungary	Farm advisor
Dolores Hidalgo	Spain	Scientist
Lars Stoumann-Jensen	Denmark	Scientist
Christian Kabbe	Germany	Expert from industry
Airi Külvet	Estonia	Farmer
Erik Meers	Belgium	Scientist
Giorgio Provolo	Italy	Scientist
Filip Raymaekers	Belgium	Agricultural consultant
Kaisa Riiko	Finland	Expert from NGO
Emilie Snauwaert	Belgium	Other type of advisor
Edward Someus	Hungary	Expert from industry
Chris Thornton	France	Expert from European association
Adrie Veeken	Netherlands	Agricultural consultant

Central figure in the Starting Paper & End-report

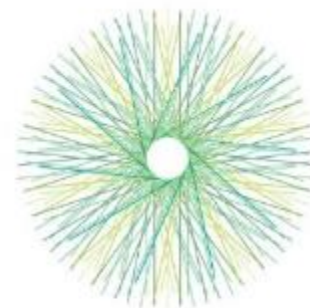


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AGRICULTURE & INNOVATION



Agro-processing of residues could serve to reconnect nutrient cycles between plant and animal production

Papers drafted in frame of the Focus Group “Nutrient Recycling”



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AGRICULTURE & INNOVATION

Mini-paper 1

Available technologies for nutrients recovery from animal manure and digestates

David Figueiro et al.

Mini-paper 2

On Farm Tools for accurate fertilisation

Emilie Snauwaert et al.

Mini-paper 3

On Farm Practices

Kaisa Riiko et al.

Mini-paper 4

Towards increasing the mineral fertiliser replacement value of biobased fertilisers

Patrick J. Forrestal et al.

Mini-paper 5

The value of recycling organic matter to soils: Classification as organic fertiliser or organic soil improver

Adrie Veeken et al.

Mini-paper 6

End-user requirements for recycled and biobased fertiliser products

Lars Stoumann Jensen et al.

Mini-paper 7

Regulatory environment effecting nutrient recycling

Christian Kabbe et al.

Mini-paper 8

Assessing the environmental effects of nutrient recycling from organic materials used as fertilisers

Vera Eory et al.

Research Needs



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- *Organic contaminants*
- *Standardisation of LCA methodologies/risk assessment*
- *Assessment of the Nutrient Use Efficiency*
- *Acceptance of the use of organic fertilisers*
- *Development of tailor-made products*
- *Use of remote sensing*
- *Development of farm tools*



Suggestions for Operational Groups



Process demonstration (general)

Product demonstration (focusing on the products and the farmer)

Integration of nutrient management in certifying schemes

Cooperative business models

Through the eyes of the farmer

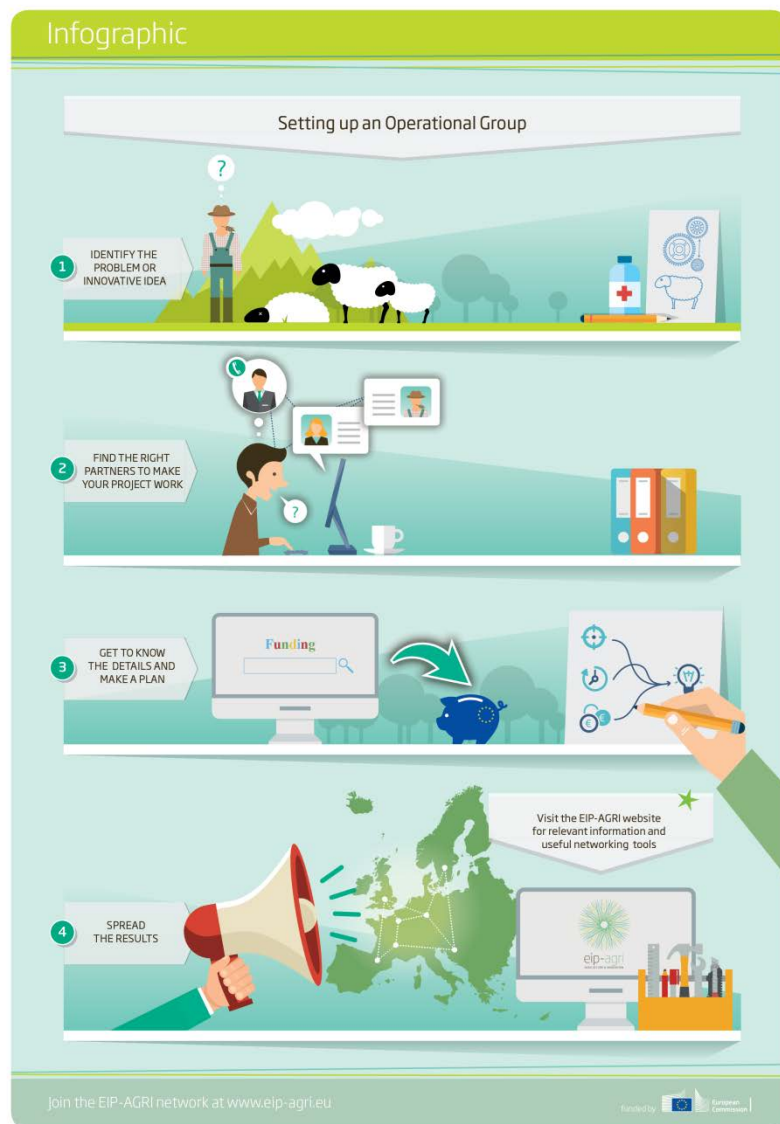


Operational Group



What is an Operational Group (OG)?

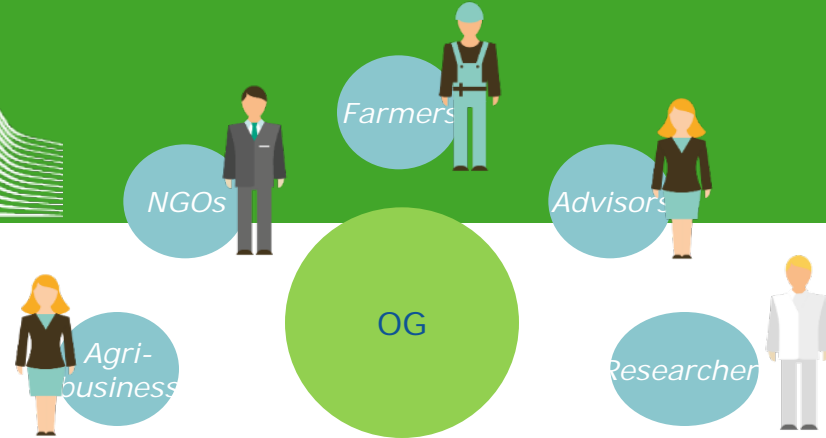
- project-based in order to **tackle a certain practical problem or opportunity** which may lead to an innovation
- tailored to this problem/opportunity and **makes the best use of different types of knowledge** (practical, scientific, technical, organisational, etc.) in an interactive way.
- multi-actor, composed of **key actors** (farmers, advisors, researchers, businesses, NGOs etc.) which are in the best position to realize the project's goals and **to share experiences broadly**.



Operational Group



What is an Operational Group (OG)?



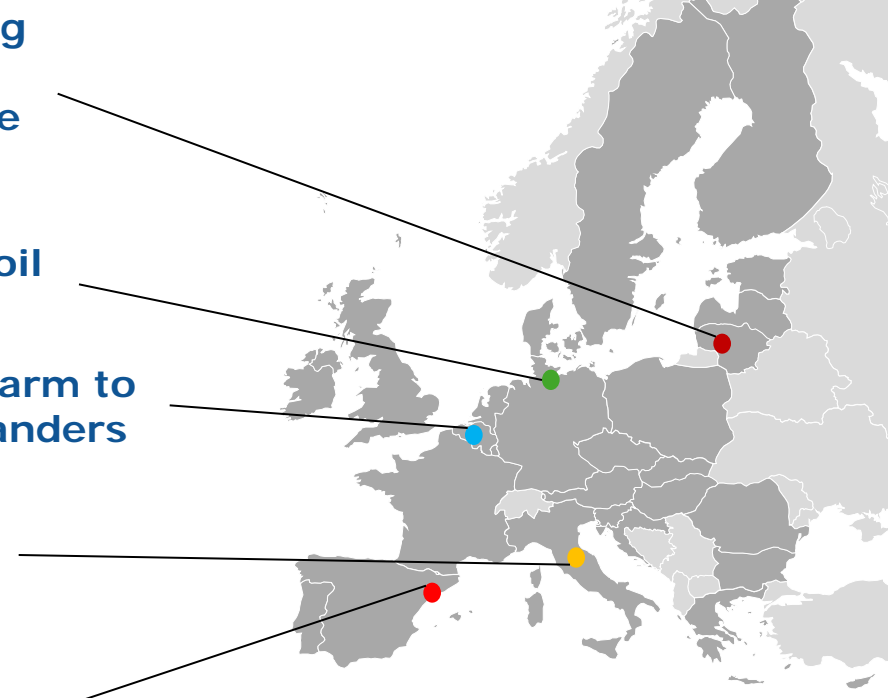
A group with a project **becomes an OG** if its **project is selected** in a call organised by the regional/national Rural Development managing authorities

Common Agricultural Policy support to EIP Operational Groups

118 Rural Development Programmes 2014-2020

- The EIP implementation via RDPs aims at a **flexible and open system** for the creation of a multiplicity of operational groups (OGs) projects, contributing to all RDP priorities and focus areas.
- **98 regions/MS** in 27 MS will be implementing the EIP in their 2014-2020 RDPs with **regular calls for OG projects** during this period
- **Over 3 200 planned OGs** in 2014-2020 covering a broad range of activities

Examples of starting OGs

- Soil structure and quality improvement using microorganisms. Reduction of nitrogen compounds emissions, while maintaining the productivity of plants. 615,125€ - Lithuania
 - Innovation compost systems in optimizing soil fertility. 194,311€ - DE/Schleswig-Holstein
 - Feasibility of a nitrogen balance on a dairy farm to reduce ammonia emission. 33,140€ - BE/Flanders
 - Digestate_100% - Innovative integrated system for digestate use in fertigation. 139,244€ - IT/Emilia-Romagna
 - PET TREATS production pilot project to obtain high added-value by-products of slaughter. 267,142€ – ES /Cataluna
 - Conservative management of biomasses, nutrients and soil fertility in small family farms in Mayotte island and the transfer of information: Biofer– 101,853€ FR / Mayotte island
- 

Operational Groups



For more information on OGs...

Discover the dedicated OG area on the EIP website

European Commission > EIP-AGRI > My EIP-AGRI > Operational Groups

Operational Groups



Inspirational ideas: SMART – an innovative look at sustainability performance

Through operational management, farmers can contribute to an improvement of sustainability while adapting their farm to future challenges

[Read more](#)

REGISTER OR LOGIN TO "EIP-AGRI"

ASK A QUESTION OR PROVIDE FEEDBACK

Relevant documents

EIP-AGRI DOCUMENT
Operational Groups represented at the EIP-AGRI Seminar 'Moving EIP-AGRI implementation forward'

[Read more](#)

EIP-AGRI DOCUMENT
Operational Groups represented at the EIP-AGRI Workshop 'Operational Groups: First experiences'

[Read more](#)

FACTSHEET
EIP-AGRI Factsheet Operational Groups

[Read more](#)

BROCHURE
EIP-AGRI Brochure Operational Groups Update 2016

[Read more](#)

REPORT
EIP-AGRI Workshop 'Operational Groups: First experiences': Final report

[Read more](#)

[VIEW MORE](#)

Latest projects

SPAIN - 08 MAY 2017
Control of Monilinia spp. in stone fruit: use of prediction models and cultural practices

[Read more](#)

GERMANY - 02 MAY 2017
A new approach to fertilization and weed control in organic rapeseed production

[Read more](#)

GERMANY - 02 MAY 2017
Development of a learning network to enhance awareness and willingness to improve health management in pig production to reduce the use of antibiotics

[Read more](#)

GERMANY - 02 MAY 2017

Key questions & information

EIP-AGRI Concept

Links to existing Operational Groups

What is innovation?

EIP-AGRI Operational Groups – basic principles

Innovation support services (including advisors with a focus on innovation)

EIP-AGRI networking

Links to other policies

EIP-AGRI common format

<https://ec.europa.eu/eip/agriculture/en/my-eip-agri/operational-groups>

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<http://ec.europa.eu/eip/agriculture/en/content/eip-agri-brochure-operational-groups-update-2016> OG leaflets

OG brochure



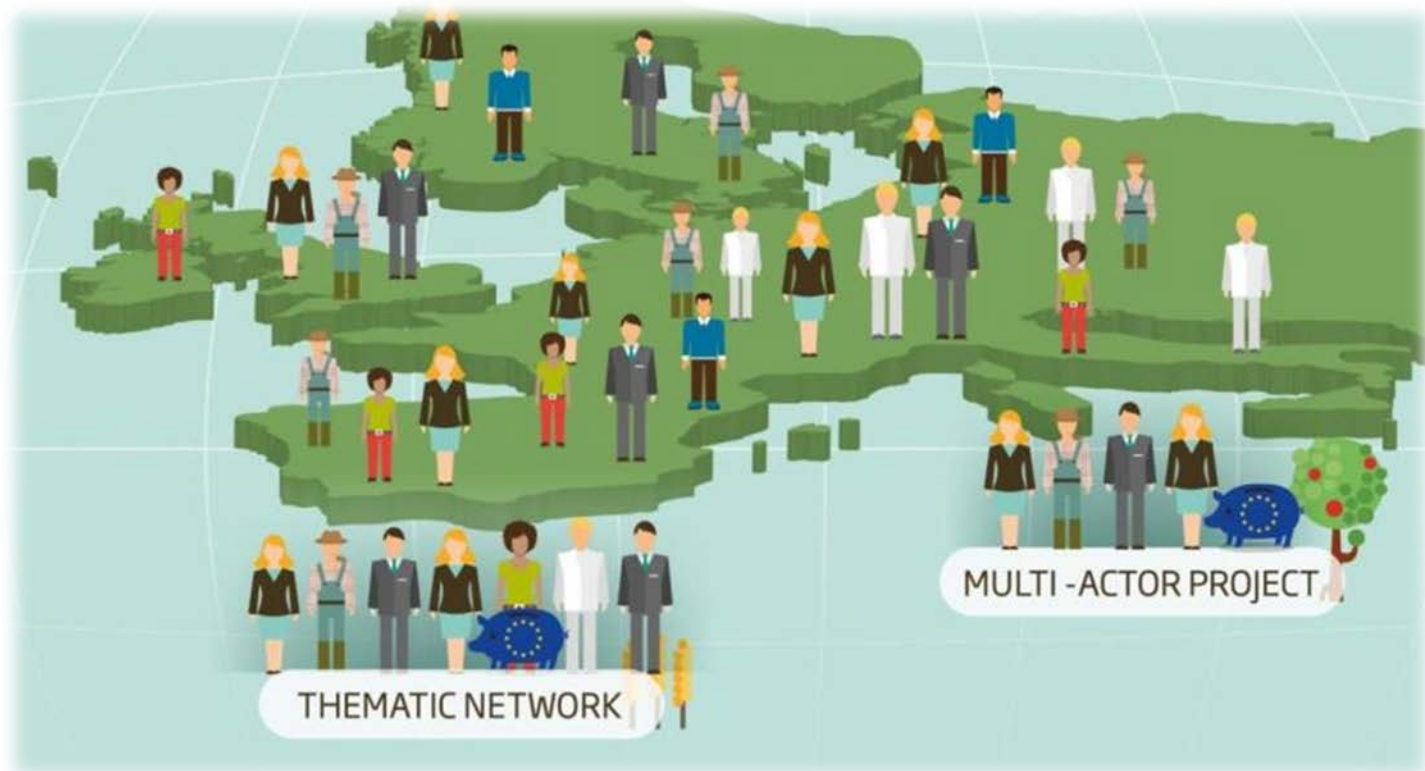
<http://ec.europa.eu/eip/agriculture/en/content/eip-agri-workshop-operational-groups-first-experiences>



<https://youtu.be/7WhhGlocMO8>

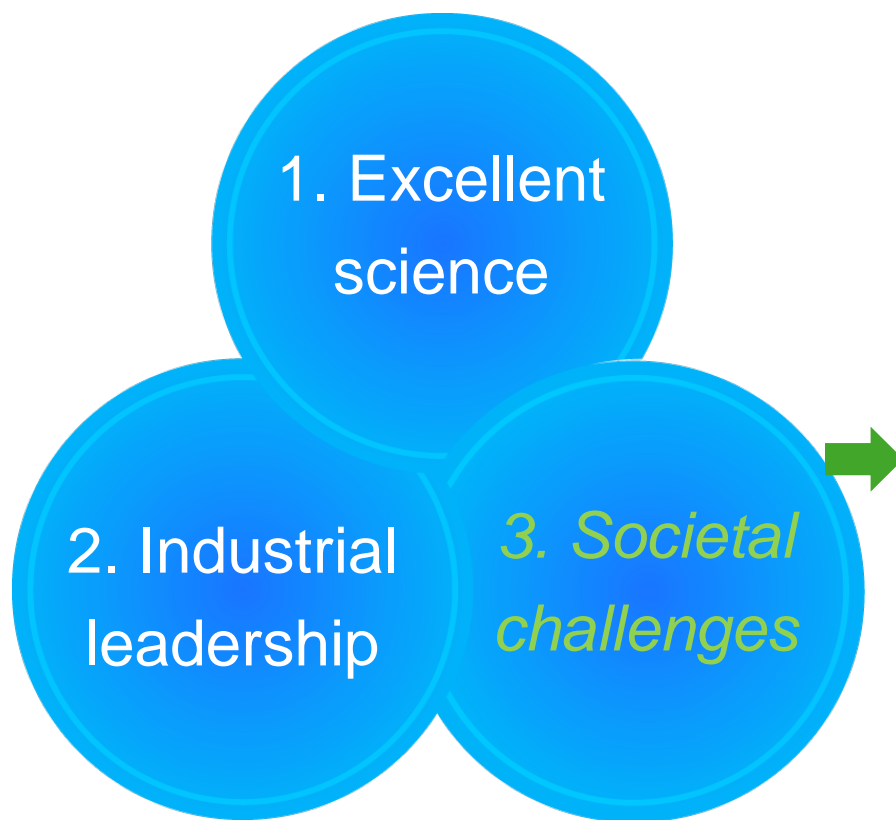
Horizon 2020

Support to multi-actor projects under Horizon 2020





Horizon 2020 Overall Structure



1. Health, demographic change and wellbeing

2. Food security, sustainable agriculture and forestry, marine and maritime and inland water research and the bioeconomy
EU 3.851 billion (including JTI BBI)

3. Secure, clean and efficient energy

4. Smart, green and integrated transport

5. Climate action, resource efficiency and raw materials

6. Inclusive, innovative and reflective societies

7. Secure societies



RUR-04-2016 Water farms – improving farming and its impact on the supply of drinking water

Just starting – common launch event the 6th December in Brussels



FAIRWAY

4 year project: 2017 - 2021

Budget: 4,999,865 EURO

Participants: 23 partners from Netherlands, France, Norway, Slovenia, Italy, Germany, Portugal, England, Ireland, Romania, Greece and Denmark.

<http://www.fairway-project.eu>

Contact (coordinator): Gerard Velthof, Wageningen Research
gerard.velthof@wur.nl

Overview of the case study sites in FAIRWAY



WATERPROTECT

3 year project: 2017 - 2020

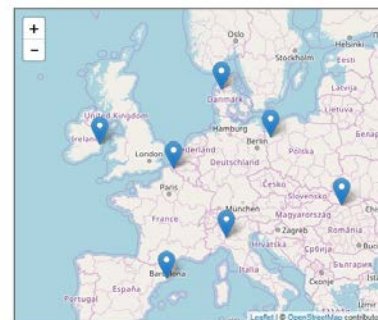
Budget: 4.997.006 EURO

Participants: 27 partners from Belgium, Ireland, Italy, Poland, Spain, Romania, the United Kingdom and Denmark.

<http://water-protect.eu>

Contact (coordinator): Piet Seuntjens, VITO piet.seuntjens@vito.be

TheWaterProtect project is centred around action labs in 7 EU Member States





SFS-30-2017 Closing loops at farm and regional levels to mitigate GHG emissions and environmental contamination - focus on carbon, nitrogen and phosphorus cycling in agro-ecosystems

Under evaluation – two projects to be funded soon...

TOPIC : Closing loops at farm and regional levels to mitigate GHG emissions and environmental contamination - focus on carbon, nitrogen and phosphorus cycling in agro-ecosystems

Topic identifier: SFS-30-2017

Publication date: 14 October 2015

Types of action: RIA Research and Innovation action

DeadlineModel: two-stage

Opening date: 04 October 2016

Deadline: 14 February 2017 17:00:00

2nd stage Deadline: 13 September 2017 17:00:00

Time Zone : (Brussels time)

H2020 – WP 2018/19



Pre-publication of the Work Programme 2018-2020

Coming soon in the SC2 calls:

- **SFS – Sustainable Food Security**
- **RUR – Rural Renaissance**



- *CE-SFS-25-2018: Integrated system innovation in valorising urban biowaste*
- *CE-SFS-39-2019: High-quality organic fertilisers from biogas digestate*
- *CE-RUR-08-2018-2019-2020: Closing nutrient cycles*
 - A.[2018] Understanding properties and impacts of bio-based fertilisers
 - B.[2019] Bio-based fertilisers from animal manure
 - C.[2020] Bio-based fertilisers from otherby-products of the agro-food, fisheries, aquaculture or forestry sectors
- *RUR-09-2018: Realising the potential of regional and local bio-based economies*
- *CE-RUR-10-2019: Circular bio-based business models for rural communities*
- *RUR-15-2018-2019-2020: Thematic networks compiling knowledge ready for practice.*

<https://ec.europa.eu/programmes/horizon2020/en/what-work-programme>

<https://ec.europa.eu/programmes/horizon2020/en/food-security-sustainable-agriculture-and-forestry-marine-maritime-and-inland-water-research-and-0>

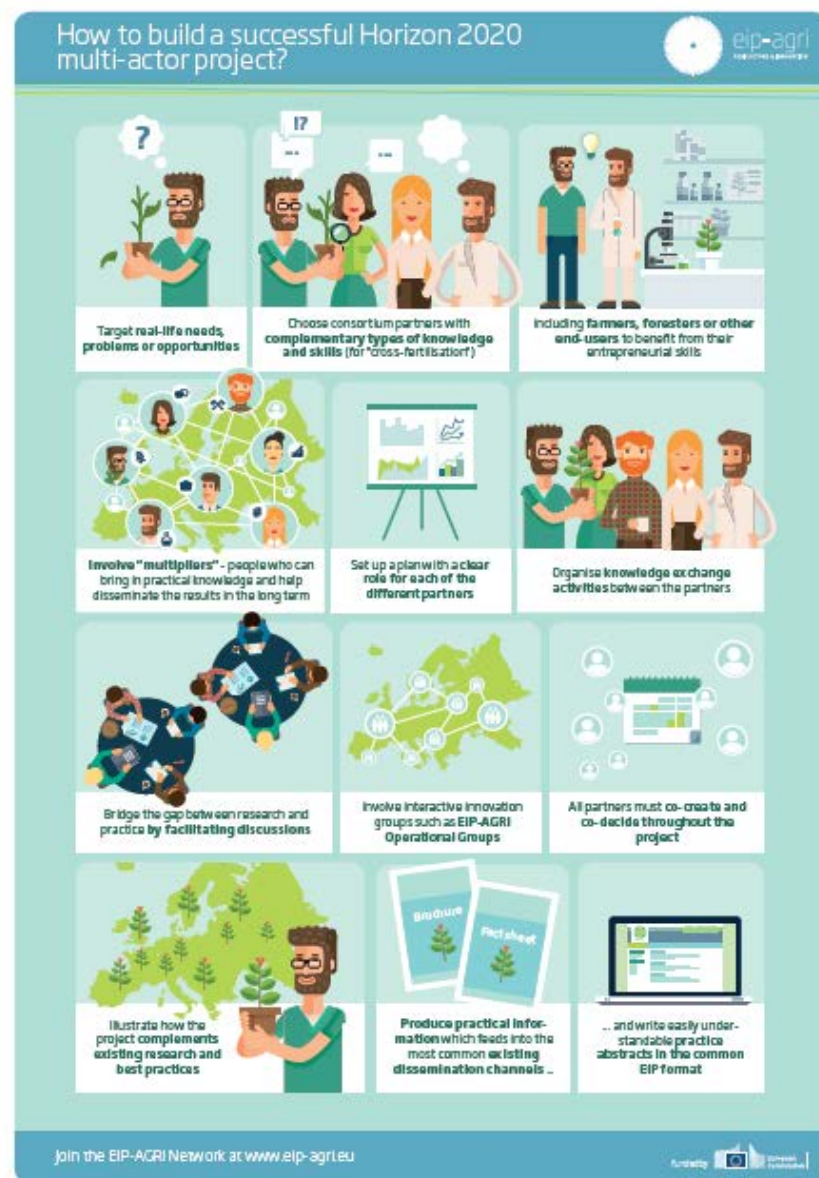
Multi-actor approach



Multi-actor projects aim to produce impact:

A multi-actor project needs to **demonstrate**:

- how the project proposal's **objectives** and planning are **targeted to needs / problems and opportunities of end-users**
- **complementarity** with existing research and best practices
- sufficient involvement of **key actors with complementary types of knowledge** (scientific and practical) should be **reflected in the composition of the project consortium** to reach the project objectives and make its results broadly implemented.

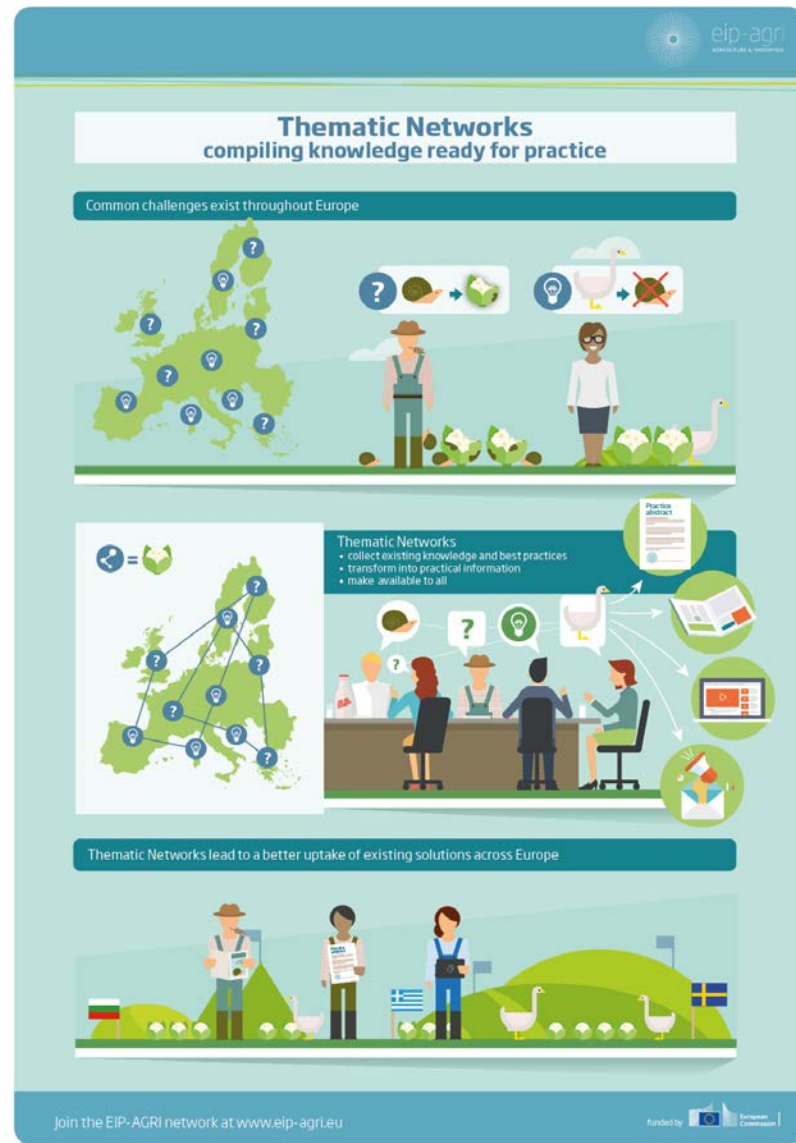


Thematic networks



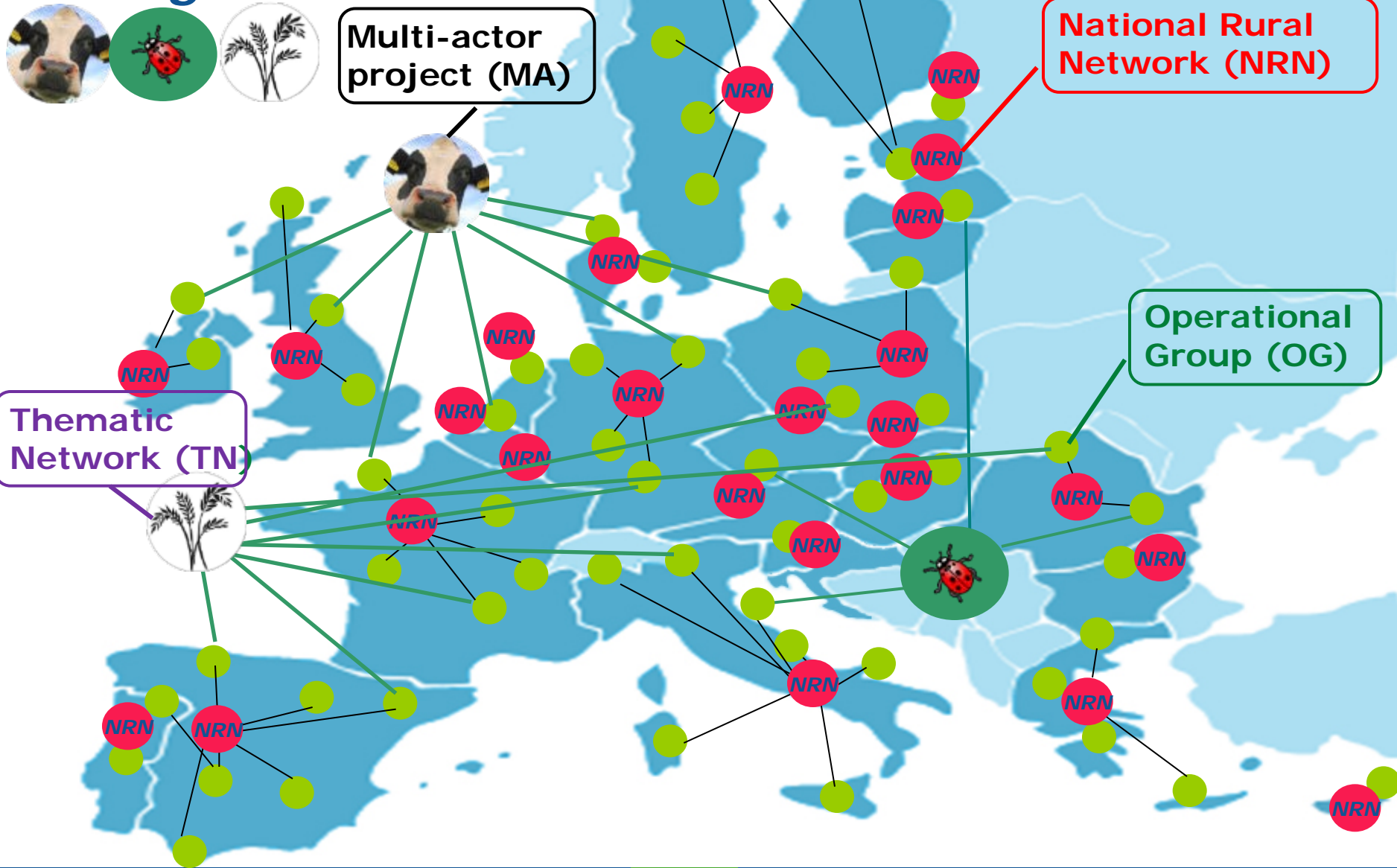
Thematic networks compiling knowledge ready for practice

- *foster cross-border knowledge exchange*
- *establish links with and between the OGs*
- *involve a wide range of concerned actors covering both science and practice on specific themes: no pure research networks*
- *synthesise, discuss and present **existing scientific knowledge & best practices**: what do we have/what do we miss to be used*
- *Develop **end-user material**:*
 - *info sheets in a common format*
 - *audio-visual material*
 - *Available in the long-term and easily understandable,*
 - ***shared through the EIP** (input for education and a research web-database for end-users)*



An EU wide EIP network, supported under Rural development policy

Linking with H2020





More information...

Pre-publication of Horizon 2020 Work Programme 2018/2019

https://ec.europa.eu/programmes/horizon2020/sites/horizon2020/files/h2020-sc2-2018-2020_09_19_2017_-_pre-publication.pdf

SC2 Infoweek of Horizon 2020 register here by 20 October

<https://ec.europa.eu/programmes/horizon2020/en/news/horizon-2020-societal-challenge-2-infoweek-including-high-level-policy-events>

Brochure on Thematic Networks under H2020:

<http://ec.europa.eu/eip/agriculture/en/content/eip-agri-brochure-thematic-networks-under-horizon-2020>

Brochure on "Multi-Actor Approach" under H2020:

<https://ec.europa.eu/eip/agriculture/en/news/brochure-%E2%80%9Cmulti-actor-approach%E2%80%9D>

Projects on AGRI R&I webpage

http://ec.europa.eu/agriculture/research-innovation/projects/index_en.htm

<https://ec.europa.eu/eip/agriculture/en/my-eip-agri/operational-groups>

Focus Group on Nutrient recycling:

<https://ec.europa.eu/eip/agriculture/en/focus-groups/nutrient-recycling>



Questions?