

The European Innovation Partnership (EIP) "Agricultural Productivity and Sustainability"

Moving Innovation in Agriculture Ahead!



Co-innovation seminar - Wageningen - 28 October 2013 Inge Van Oost - DG Agriculture and Rural Development





Context

- The establishment of European Innovation Partnerships (EIPs) in different sectors represents a new approach under the <u>Europe 2020 Strategy</u> to advance EU research and innovation.
- The Europe 2020 Flagship Initiative "Innovation Union" specifies European Innovation Partnerships (EIP) as a new tool for <u>fostering innovation through linking existing policies and</u> <u>instruments</u>
- EIPs are challenge-driven, focusing on societal benefits and rapid modernisation. EIPs should provide favourable conditions for research and innovation partners to co-operate and achieve better and faster results compared to existing approaches





The EIP-AGRI in short

- Agricultural Productivity and Sustainability (Communication Feb 2012)
- Overarching concept in CAP-RD and Research funds, et al
- Based on interactive innovation model
- Key entities: Operational Groups
- EIP network for communication, partnering and knowledge flows

http://ec.europa.eu/agriculture/eip/documents/eipopportunities en.htm#eip-origins-of-eip-agri





What is Innovation?

In short: ideas put into practice with success

- new, improved or successfully applied <u>products</u>, <u>processes or</u> <u>services</u>, for instance products with adapted quality, new <u>production methods</u>, opening to new <u>markets</u> and new forms of <u>organization</u>
- •<u>innovation</u> is more than dissemination of research results: it occurs as a result of the creativity and interplay between actors for combining new and/or existing (tacit) knowledge
- •In the end, it is <u>only when</u> a new creation really becomes more or less mainstream that it is called an "innovation"
- → Interplay and mediation between actors is key





1. The EIP interlinking policy instruments

for synergy





Areas of Innovative Actions as outlined in the EIP Communication (COM (2012)79)

(non-exhaustive list: finally the content will emerge bottom up)

- <u>Primary production</u>: technical solutions to increasing productivity and economic viability
- Resource management: eco-system services, soil functionality, water management, and genetic resources ("public goods")
- <u>Bioeconomy</u>: innovative technology for the bio-based economy bio-refinery; new products; reduction of post harvest loss
- <u>Supply chain</u>: integrated supply chain solutions; new services; logistics, and management systems
- Quality and consumers: food quality, food safety, and healthy lifestyles (consumer information and consumer choice)





The Interactive Innovation Model

- The innovation model under the agricultural EIP goes <u>far</u>
 <u>beyond</u> speeding up transfer "from laboratory to market"
 through diffusion of new scientific knowledge (referred to as a "<u>linear</u> innovation model").
- The EIP adheres to the "interactive innovation model" which
 focuses on forming demand-driven partnerships using
 bottom-up approaches and linking farmers, advisors,
 researchers, businesses, and other actors in Operational
 Groups.
- This knowledge "exchange" will generate new insights and ideas and mould existing tacit knowledge into focused solutions that are quicker put into practice thanks to the coownership generated during projects. Such an approach will stimulate innovation from all sides and will help to target the research agenda.

Development



Key Acting Entities Within the EIP - Operational Groups -







EIP-AGRI's Key Entities: Operational Groups (OG)

- Built around concrete innovation projects
- A combination of different competencies (practical and scientific), needed for implementing concrete project objectives
- Action- and result-oriented groups aiming to benefit from interaction for <u>co-creation and cross-fertilisation</u> (interactive innovation)
- An OG may have various sources of funding:















"la confrontation des esprits fait jaillir les idées





2. What could an EIP Operational Group look like?





Key Acting Entities Within the EIP

- Operational Groups -



"Operational Groups" are no stakeholder networks, no stakeholder boards, no thematic coordination groups, nor discussion groups

An OG = actors working together in a project targeted at innovation and producing concrete results





100 % bottom-up innovation projects under Rural Development

"Innovation" = ideas put into practice with success

In the end, it is only when a new creation really becomes more or less mainstream that it is called an "innovation". So, it is <u>impossible</u> to classify a concrete action in advance as being "innovative" or not.

criteria for innovative projects may be related to:

- relevance of the project for actors and end-users*
- targeted composition of the partners in view of co-creation*
- quality & quantity of knowledge exchange & cross-fertilisation
- demonstrating competences on state of play/avoiding repetition
- easy understandable & long-term communication effect
- (*evidence from examples collected by the KT & I focus group (ENRD)





Key Acting Entities Within the EIP - Operational Groups -



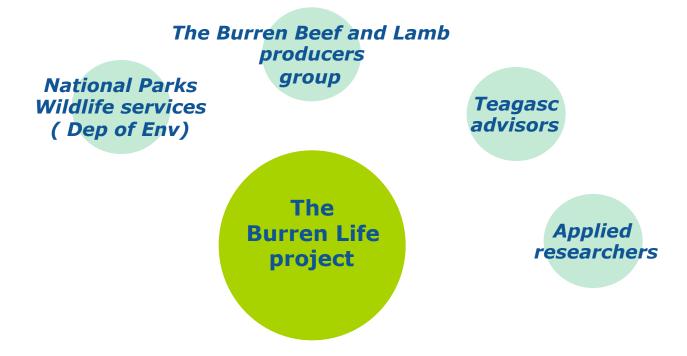
Example 1





An example of an interactive group similar to future OGs:

the Burren Life project (IE)



<u>Project objective:</u> Improving preservation of a priority habitat area (The Burren) with particular farming methods & developing a marketable value-added "conservation" meat





Key Acting Entities Within the EIP

- Operational Groups -



Example 2





An example of an interactive group similar to future OGs:

the CASDAR project "Simplified Implantation techniques" (FR)

AOC Soils farmers group

Chambre d'agriculture advisors

Simplified Implantation techniques group

Soil conservation Researchers from regions and universities

<u>Project objective:</u> Develop simplified cultivation techniques which also reduce use of pesticides





Key Acting Entities Within the EIP - Operational Groups -

Agribusiness

Operational Group

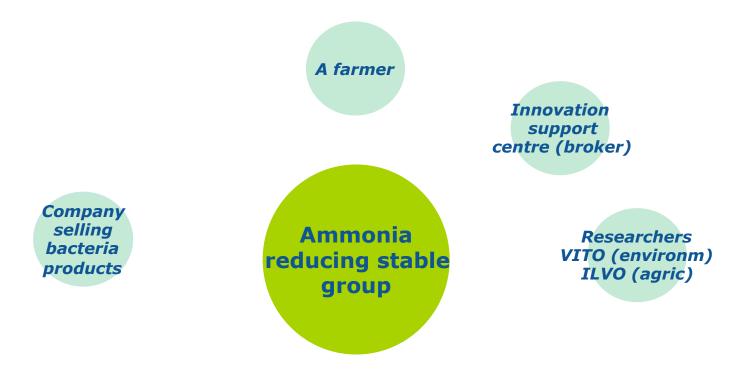
Researchers

Example 3





An example of an interactive group similar to future OGs: Project "Ammonia reducing pig stable" (BE)



<u>Project objective:</u> develop a pig stable reducing ammonia emissions by 50 % in a more cost-efficient way than existing stable systems (idea from a farmer, brokered by the Innovation Support Centre)



Key Acting Entities Within the EIP - Operational Groups -



Example 4





An example of an interactive group similar to future OGs:

Project on developing certified native plants (IT)

Natural Parc of MontebarroFoundation Miniprio

3 agencies for advertising the product 10 plant nurseries

Group developing certified native plants

University
Of Padua:
Centre of
Autochtonous flora

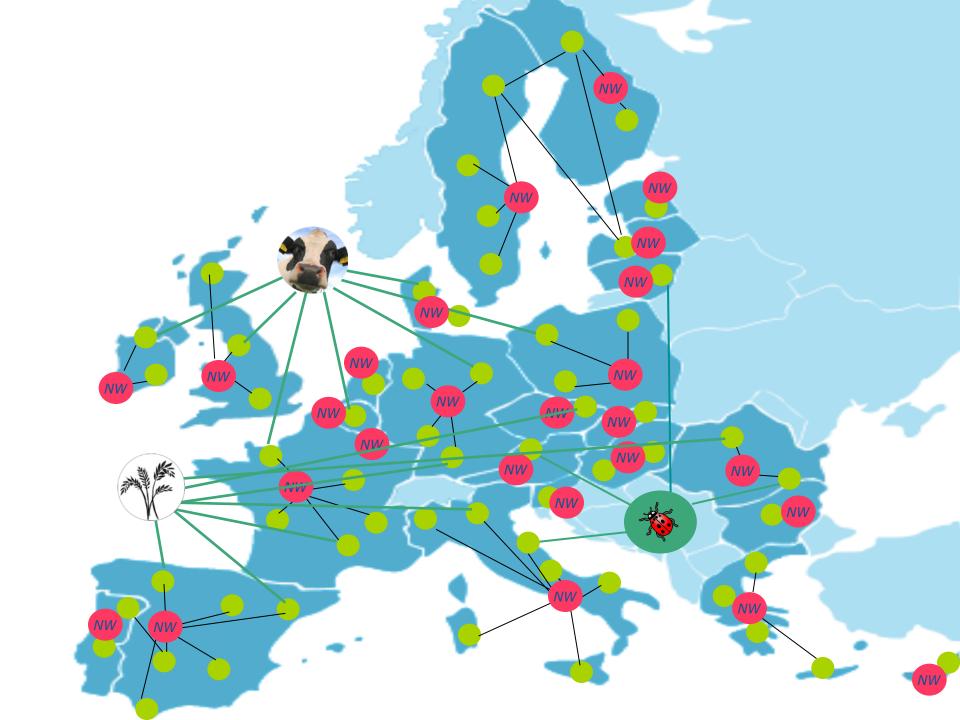
<u>Project objective:</u> develop protocols for certified cultivation of native plants in ornamental nurseries & creation of a specific supply chain responding to market demand for native plants





3. The EU wide EIP network





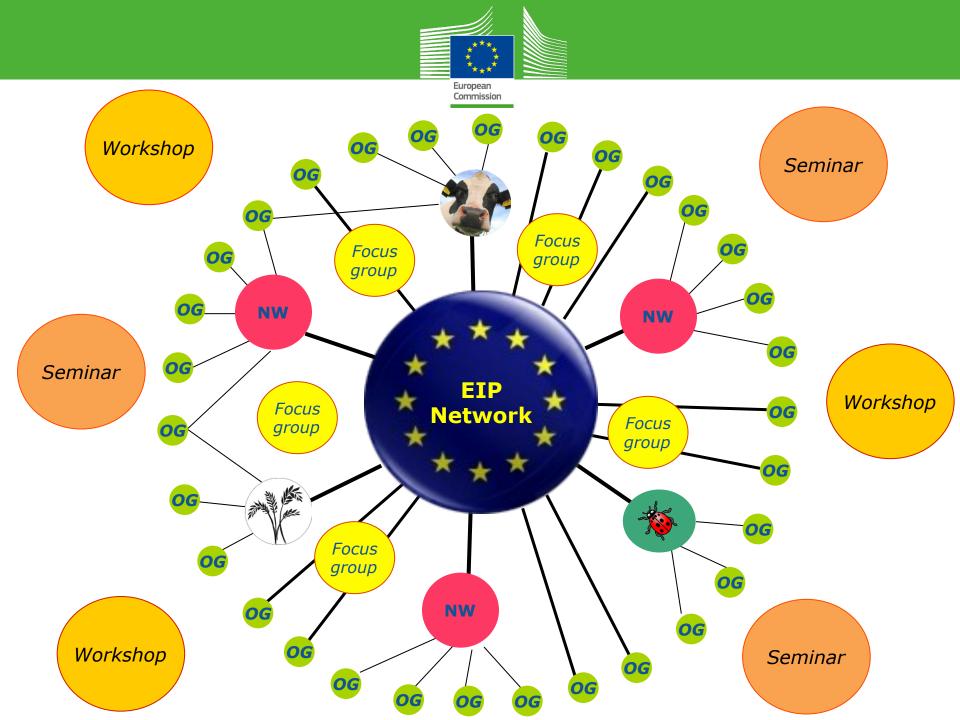




Network Function of the EIP (Service Point)

- <u>Collect</u> information (research and innovation projects etc.) and best innovation practices
- Effective <u>flow of information</u> (website, databases)
- Give advice on opportunities within policies (helpdesk function)
- Sharing knowledge on concrete practical work and <u>connect</u> actors
- Systematic <u>feedback</u> to the scientific community about practice needs (Art.12 H2020)







4. EU support under Rural Development:

Co-financing & Innovation guidelines





EIP Implementation via Rural Development Programmes

- The EIP aims at a <u>flexible and open system</u> for the creation of a <u>multiplicity of operational groups</u>
- Innovation is a <u>horizontal priority</u> in RD program: establishment of operational groups (Art. 62, 36 and other) can be 100% bottom-up (calls without determining specific project themes upfront)
- Bottom-up approach towards defining composition and operational purpose of a single operational groups: each operational group must establish its <u>plan on expected</u> results and **share results** within the EIP network
- Possible <u>combination</u> of co-operation in "operational groups" with other measures such as knowledge transfer, advisory services, investment aid, quality schemes etc.





RD Support for innovation & knowledge exchange

Rural Development funds provide for **financing** if the Member State makes it part of its Rural Development Plan(s):

- Support for the use of advice by farmers, the setting up of farm advisory services and for the training of advisors: 50% cofinancing
- Co-operation support: 80% co-financing
- Support for knowledge transfer & inf. actions (e.g. demonstration projects): 80% co-financing
- (40%) + **extra 20% support** rate for investments for operations supported in the framework of the EIP

National rural networks EIP networks must provide **network activities for innovation** (advisors, innovation support centres, operational groups)



Art 36 - "Cooperation measure" for OGs

Support for Operational Groups (OGs) covers

- setting up EIP OGs
- funding their operations:
- Support for the <u>development of **new**</u> products, practices, processes and technologies
- Support for "pilot projects", pursuing the testing and adaptation of technologies, processes etc. to "new" geographical/environmental contexts (i.e. contexts in which they have not yet been used)

The cooperation measure also supports many other activities which pursue the objectives of the EIP, e.g. support for networks, which bring together a variety of actors and by sharing needs and knowledge may initiate actions of OGs and/or support actions of existing groups.





Innovation brokerage under rural development

Innovation brokering is:

- discovering innovative ideas, and refining them
- connecting partners,
- finding funding, and
- preparing a project proposal on which <u>all actors want to</u> <u>engage and agree</u> that it will bring what they expect to be a targeted solution or the development of an opportunity

(produce self-sustaining innovation)

An "<u>innovation broker</u>" is an person that could help this process by acting as a <u>go-between</u>. The broker is not necessarily involved in the actual innovation project

A close connection of the innovation broker with agriculture is important





Innovation brokerage: incentives under Rural Development Programmes

Raising awareness and animating the participation in innovative actions are key for getting innovation projects up and running. Single actors might have difficulties in finding partners and getting an innovation project started.

To help setting up a multiplicity of operational groups formed around concrete projects, innovation brokerage can be supported under RDPs. Different approaches may be useful e.g. vouchers etc ("coffee money").

If through the innovation brokering <u>a good innovation project</u> <u>plan is born</u> - whoever is the broker or the funder - it will have a better chance of passing a selection process for innovation projects from whatever funding source.

(ex. of an innovation broker: 500 for small project till 12.000 euro for very big projects)

3



an innovation project plan & team



Searching for possible support program



Searching for adequate partners



Finding the idea & refining it

Innovation broker process: acting as a mediator

Innovation and valorization potential is high if co-created and bottom-up

A close connection of the innovation broker with agriculture is important





Communicating the project results



racilitating / coordinating the project



The innovation project is selected and funded

In case the project gets selected and funded, a **facilitator** may be useful for the coordination and the facilitation of processes between actors within the innovation project

This is not the core business of the innovation broker





3. Multi-actor projects and Thematic networks to boost innovation

In the EU 2014-2020 Research Framework programmes "Horizon 2020"





How will Horizon 2020 boost interactive innovation?

- Challenge-driven approach (basic and applied research)
- Close-to-user activities (farm experiments, demonstrations and pilots)
- Innovation
- Fostering co-creation of knowledge in research and innovation projects through the so-called "Multi-actor approach"
- Fostering knowledge exchange through multi-national
 Thematic Networks
- Establishment of research and innovation priorities **taking account of the needs** channelled through the European Innovation Partnership (Art. 12)





Multi-actor projects in Horizon 2020 Work Programme 2014-2015

- "multi-actor" is more than a strong dissemination requirement or what a broad stakeholders' board can deliver
- "all along the project" *: a clear role for the different actors in the work plan, from the participation in the planning of work and experiments, their execution up until the dissemination of results and the possible demonstration phase.
- Project proposals should illustrate sufficient quantity and quality of knowledge exchange activities

This should generate **innovative solutions that are more likely to be applied** thanks to the <u>cross-fertilisation*</u> of ideas between actors, the co-creation and the generation of co-ownership for eventual results.

(*legal base in Specific Programme)





Multi-actor projects in Horizon 2020 Work Programme 2014-2015

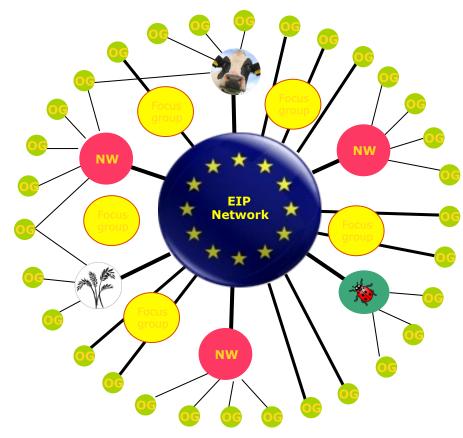
A multi-actor project needs to take into account

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

Facilitation between actors and openness to involve additional partners during the project, for instance **EIP operational groups**, are strongly recommended.









Thematic networks: can connect with other EU MS and OGs around specific themes of common interest





Thematic networks under Horizon 2020

- Projects involving all concerned stakeholders (researchers, farmers, advisors, enterprises, education, NGOs, administration, regulatory bodies...): no pure research networks
- Stocktaking, mapping and state-of-the-art of existing scientific knowledge & best practices: what do we have/what do we miss to make used
- Projects must develop end-user material to facilitate the discussion on, sharing and dissemination of knowledge in an easy accessible way: input for education and a research database for end-users (long term availability of results in a common format)





Thematic networks under Horizon 2020

- **Themes** can be be linked to sectors, e.g. arable crops, fruit&veg, pig,...) or subjects, e.g. crop rotation, certain farming practices, energy, eco-system services, social services, bio-based products, short supply chains,...etc
- As they bring together possible actors, thematic networks help the connecting and building of EU operational groups & multiactor projects
- Possible subnetworks may have a more limited focus, e.g. the local/regional/national level or a specific crop/product/farming practice





Thematic networks in Horizon 2020 WP 2014-2015

ISIB 2 "Closing the research and innovation divide: the crucial role of innovation support services and knowledge exchange"

- •1 Network on "exchange and development of methods for innovation brokering": methods for better exploiting research results and capturing innovative ideas from practice connecting services throughout the diversity of European regions and farming systems
- •4 Networks on spec. themes: "Synthesising, sharing and presenting best practices and research results that are near to be put into practice, but not known or tested by practitioners"
- •Support to OGs: "making available science and practice based information is a condition for setting up of OGs"





Innovation is an idea put in practice with success

"The value of an idea lies in the using of it."

Thomas Alva Edison





The EIP can help: Let's move on to make innovation happen...



...and engage all actors in the EU





To an "Agriculture of Knowledge"

Connect for added value..... Join the EIP

Thank you for your attention!

http://ec.europa.eu/agriculture/eip/index_en.htm

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