

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

#### The role of the innovation broker



Accademia dei Georgofili – 10 March 2016 - Brussels Inge Van Oost - DG Agriculture and Rural Development





## 1. The EIP-AGRI





#### EIPs - a new Europe 2020 Strategy approach

- The Europe 2020 Flagship Initiative "Innovation Union" specifies European Innovation Partnerships (EIP) as a new tool for <u>speeding up innovation</u> through linking existing policies and instruments
- EIP 'Agricultural Productivity and Sustainability' (COM (2012)79): Fostering a competitive and sustainable agriculture and forestry sector that 'achieves more from less': synergies between CAP RD and H2020 policies





#### The EIP-AGRI in short

 Overarching "Open innovation" concept based on the interactive innovation model (applied in Operational Groups and Multi-Actor projects):

Collaboration between various actors to make best use of <u>complementary types of knowledge</u> (scientific, practical, organisational, etc) in view of co-creation and diffusion of solutions/opportunities <u>ready to implement in practice</u>.

• **EU wide EIP network** linking actors: communication, partnering, dissemination, knowledge flows and collecting practice needs (*Open science*)

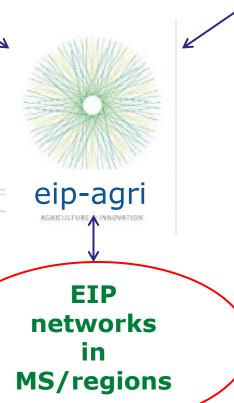
\* In line with the main recommendation of the 2015 Milan Scientific Committee on transdisciplinarity, implementation and impact: 'more research into practice'



#### European Innovation Partnership EIP-AGRI

#### Rural Development

- Funding for <u>setting up</u>
   of an "Operational
   Group": farmers,
   advisors, agribusiness,
   researchers, NGOs, etc)
   <u>planning an innovation</u>
   <u>project</u> (Art 35)
- Project funding for the Operational Group's project (Art 35). This cooperation could be combined with other RD measures (e.g. investment, knowledge transfer, advice)
- Supporting innovation support services



#### Horizon 2020

- Research projects, to provide the knowledge base for innovative actions
- Interactive
   innovation formats
   such as multi-actor
   projects and
   thematic networks
   genuinely involving
   farmers, advisors,
   entreprises, etc...
   "all along the
   project"

Involvement of OGs is strongly recommended





## Interactive innovation is: an idea put into practice with success!

- an idea: interactive innovation occurs as a result of the <u>creativity</u> and interplay between actors for combining new and/or existing (tacit) knowledge
- **put into practice:** <u>ready to apply</u> by co-creation of concrete innovative solutions and making the best use of different types of knowledge (scientific, practical, organisational knowledge etc ):
- with success: in the end, it is only when a new creation really becomes more or less mainstream that it is called an "innovation": generate co-ownership through involving end-users and multipliers
  - => in interactive projects, communication and dissemination starts when the project starts





"I not only use all the brains that I have, but all that I can borrow"

Woodrow Wilson – President of the USA, 1913-1921





### What is an Operational Group (OG)?

- EIP operational groups funded under rural development programmes are multi-actor, project based and tackle a certain practical problem or opportunity which may lead to an innovation
- The operational group is tailored to this problem/opportunity and makes the best use of different types of knowledge (practical, scientific, technical, organisational, etc) in an interactive way.
- The operational group is composed of those 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.
- A group with a project only becomes an OG if selected in a call organised by the regional/national RD managing authorities





## Operational Groups - All Rural Development Programmes 2014-2020 have now been approved

- The EIP implementation via rural development programmes aims at a **flexible and open system** for the creation of a multiplicity of operational groups (OGs)
- 94 MS/regions will be implementing the EIP in their 2014-2020 Rural Development programmes with regular calls for Operational Group projects during this period
- 3205 planned OGs in 2014-2020
- Situation in your MS/region: see

http://ec.europa.eu/agriculture/rural-development-2014-2020/country-files/index en.htm





## 2. Innovation brokering and Innovation Support Services

### The basics

"The EIP aims at a flexible and open system for the creation of a multiplicity of operational groups"





## Innovation support services, including advisors focusing on innovation

Experience learns you need a supporting environment to incentivise cross-fertilisation in innovation projects.

Various types of support are useful, in particular if done by persons well connected to agricultural world and well networked:

- Help to start up a specific group = prepare the project (innovation broker)
- Help to facilitate the project (facilitator, intermediate)
- Innovation support service (covering all this and more)





#### Innovation brokering is:

- discovering innovative ideas,
- 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 (find winwin)

If through the innovation brokering <u>a good innovation project</u> <u>plan is born</u>, 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 )





## Task of the innovation broker: How to encourage interaction and co-creation?

Selection criteria can be related to:

- Needs and objectives of farmers/foresters (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
- spreading easy understandable results on the long-term

The broker should make a good interactive innovation project plan





## The innovation brokering process:

A plan & team for an innovation project **Searching for possible support program Searching for adequate partners** Finding the idea & refine it

Matchmaking, including the marriage contract



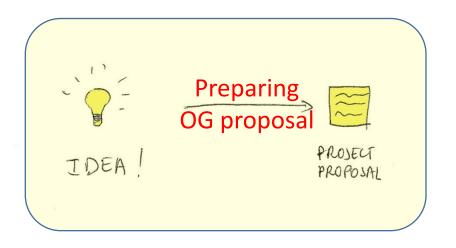


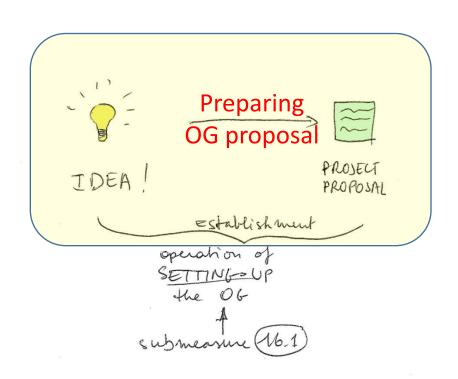
## 3. Innovation brokering

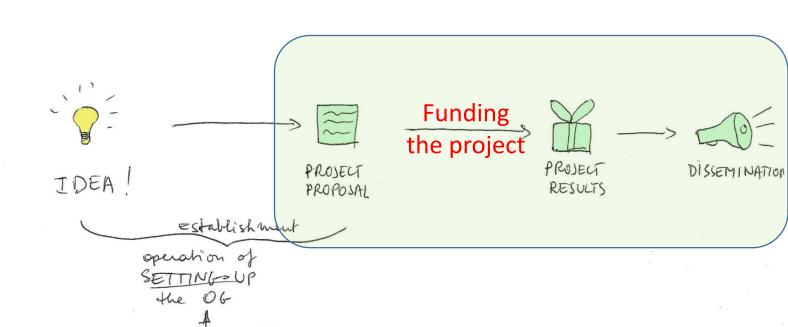
in RDPs 2014-2020

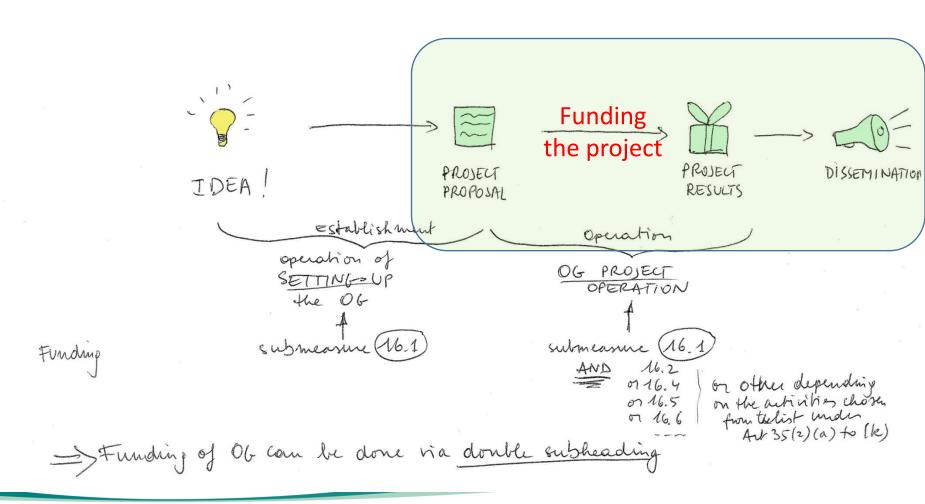
"The EIP aims at a flexible and open system for the creation of a multiplicity of operational groups"

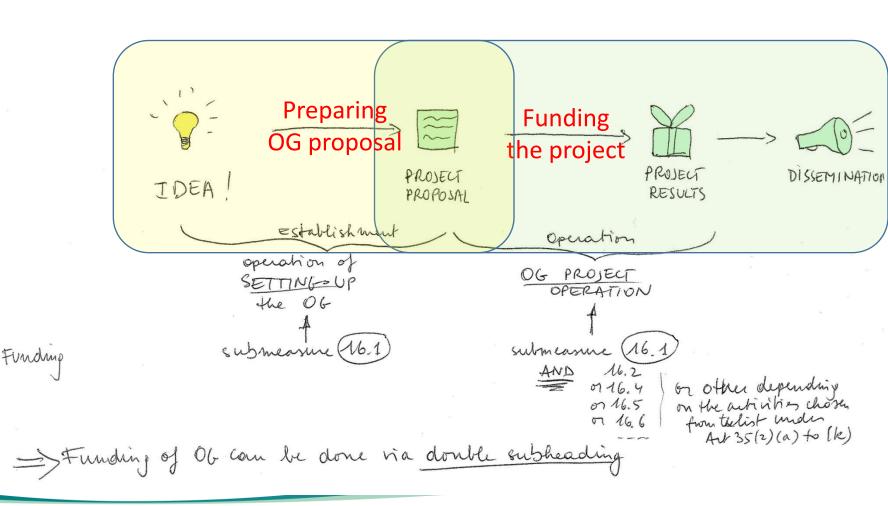




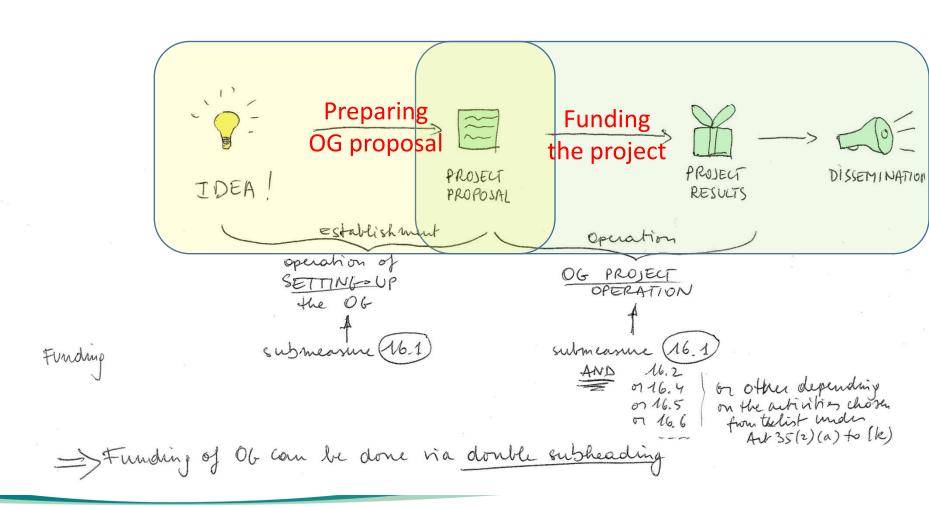








#### **New roles for farm advisors**





## Support for innovation brokering under Rural Development

- Technical Assistance, National Rural Networks (NRNs), or dedicated EIP networks could install or contract an innovation brokerage service. NRNs must foster innovation ("provision of networking activities for advisors and innovation support services").
- The costs of innovation brokering to set up an operational group and prepare a project proposal could be covered under the cooperation measure
- Innovation support and brokering could also be offered by (a branch of existing) advisory services supported under the advisory measyre





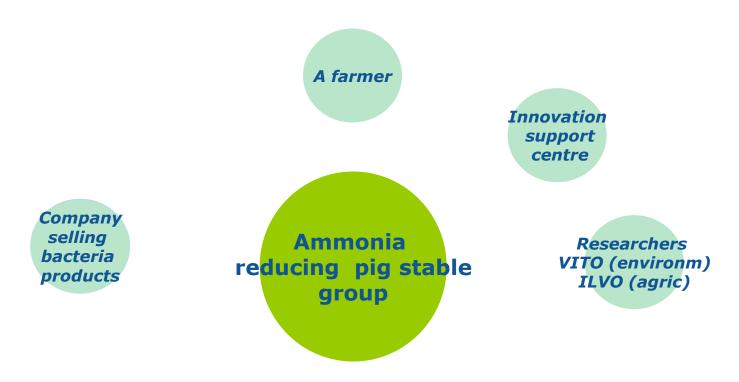
## Examples (BE): Innovation Support Service (workshop 1 Berlin EIP seminar)

- Innovation advice and promotion
- Coaching farmers towards innovation
- Brainstorming events and animation
- Brokering function
- Coordination and facilitation of projects as an intermediate between partners
- Dissemination of innovative results
- Connect with SME and other innovation services and funding





## Example of a BE Innovation Support Service one to one innovation brokering



<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)



## "la confrontation des esprits fait jaillir les idées"



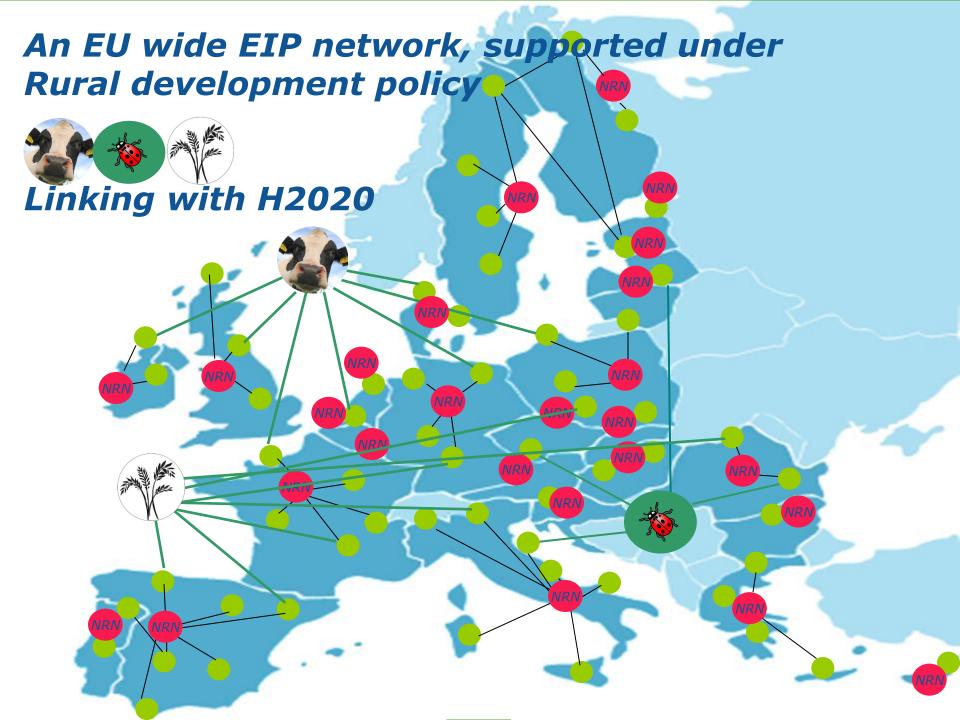


## Focus on the role of EIP networking at national/regional level by NRNs:

Connecting actors and animating innovative actions (Art.54):

- The action plan of the National Rural Network (NRN) should <u>foster innovation</u> and cover <u>at least</u>
  - the **search of partners** for Operational Groups
  - provide networking for advisors and innovation support services
- So, the NRN activities should connect within the region/country to existing networks and experience, and link to innovation brokers, advisors and other actors to incentivise innovation projects and sharing needs from practice and information
- NRNs will make use of the info in the EIP common format for connecting partners and projects







## 4. The multi-actor approach under Horizon 2020 WP 2016 -2017

Also needs brokers and facilitators



Videostreamed presentation on Multi-actor approach and thematic networks in call 2016: (from 0:53:00 till 01:47:00) <a href="https://scic.ec.europa.eu/streaming/workshop-on-multi-actor-approach-and-thematic-networks-under-horizon-2020">https://scic.ec.europa.eu/streaming/workshop-on-multi-actor-approach-and-thematic-networks-under-horizon-2020</a>

#### **Basic info + questions & answers**

Workshop "Interactive innovation in motion: multi-actor projects and thematic networks under Horizon 2020" 24/11/2015:

#### Event page:

https://ec.europa.eu/programmes/horizon2 020/en/news/interactive-innovationmotion-multi-actor-projects-and-thematicnetworks-under-horizon-2020

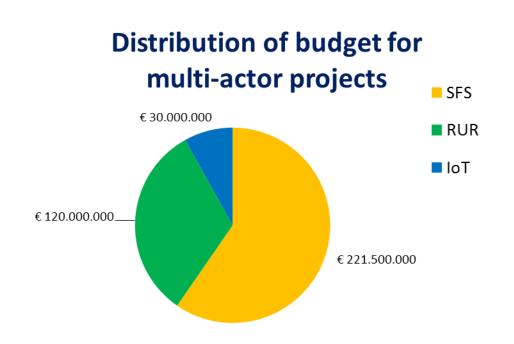


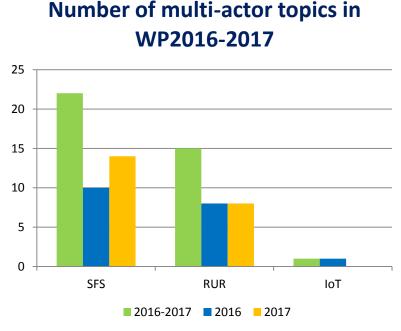


## The Multi-actor approach in WP2016-2017

WP 2014-2015 X 2,5  $\rightarrow$  **371,5 Million euros** 

38 topics in 3 calls: SFS (221), RUR (120), IoT (30)









## H2020 after 2017: Designing the path – Agricultural Research and Innovation Strategy Conference 26-28 Jan 2016

Preparing next WP 2018 – 2020 and beyond (all pre-events, plenary and parallel sessions videostreamed)

https://ec.europa.eu/programmes/horizon2020/en/news/designing-path-strategic-approach-eu-agricultural-research-and-innovation

USEFUL: in parallel session 6 on 28/1 (11:00 – 13:00): a best practice example of a **multi-actor project** (Treasure) and of the activities of the **EIP network** (NRN) at national level (Germany)



Having potential innovative knowledge is one thing, turning it into reality is another.

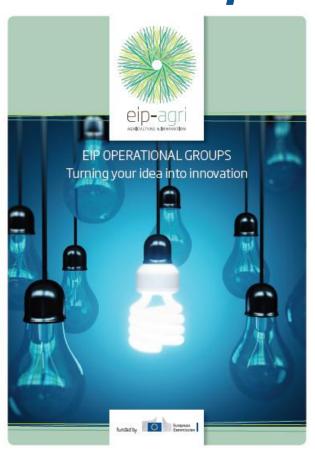
# "The value of an idea lies in the using of it."

Thomas Alva Edison – inventor of the light bulb





## Innovation is: an idea put into practice with success!



Thank you for your attention

To an "Agriculture of Knowledge"

Join the EIP

www.eip-agri.eu

Inge.Van-Oost@ec.europa.eu



#### Multi-actor projects in WP 2016-2017

Total budget for all multi-actor projects and thematic networks in the first 2 Horizon 2020 Workprogrammes amounts **around 500 mio euro** 

The **rationale** for multi-actor approach is **explained** in the introduction of the WP on p.10 after "To permeate the systems..."

**WP SC 2** Food security, ...2016-17:

http://ec.europa.eu/research/participants/data/ref/h2020/wp/201 6 2017/main/h2020-wp1617-food en.pdf

The Work programme **defines the requirements for multi-actor projects** after the bullet "The multi-actor approach aims at..."

All multi-actor projects have the following sentence in the description of the topic: "Proposals should fall under the concept of multi-actor approach"



#### IMPACT! Multi-actor projects in WP 2016-2017

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

- how the project proposal's objectives and planning are targeted to needs / problems and opportunities of endusers
- complementarity with existing research and best practices

[What is the project's **added value**? - **Avoid recycling** projects: repetition and continuation of former projects – more of the same]

 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.

[Include partners beyond scientists, such as farmers, farmers' groups, advisors etc - Don't forget to think about involving multipliers to strengthen impacts]





#### IMPACT! Multi-actor projects in WP 2016-2017

#### A multi-actor project:

 As a minimum, should result in substantial easily understandable practical knowledge for broad dissemination in the common EIP format

[focus on concrete and concisely written results (not project activities description): possibly some 100 EIP practice abstracts in a practitioners/farmers' language, best practices resulting from the projects' work, some qualitative audio-visual material, etc

Do not reinvent the wheel: use existing long term available dissemination channels for practitioners, lasting beyond the project period, eg websites of Ministries, farmers' organisations, advisors ...]

Facilitation/mediation between actors and involving for instance
 RD operational groups, are strongly recommended

[but don't make impossible promises and mix up funding sources and policies: H2020 consortia cannot start up Operational Groups]





#### IMPACT! <u>Demand-driven</u> innovation in Multi-actor projects

- "multi-actor" is more than a strong dissemination requirement or a broad stakeholders' board
- "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

**Actor**: a partner taking part in project activities

<u>Stakeholder</u>: person expressing a **view**/**stake** at a certain moment during the project





• Projects involving all actors relevant for the chose theme (e.g. researchers, farmers, advisors, enterprises, education, NGOs, administration, regulatory bodies, EIP project groups...):

[no pure research networks, use funding efficient: not as many actors as possible but chose those actors that are complementary and can really contribute]

Provide a comprehensive description of the state of the art:
 Partners should summarise, share and present existing scientific knowledge & best practices that are not sufficiently known (and applied) by practitioners

[when defining objectives: illustrate the **added value**, **relevance of the theme**, **needs and potential for farming/forestry**. Get input from the existing projects from <u>various</u> funding sources and avoid recycling of projects and project partners]



# H2020 calls 2015: 16 new Multi-Actor projects,

including / Inematic Networks								
SFS-1C-2015	iSAGE	Sustainability of terrestrial livestock						
SFS-2B -2015	SOILCARE	Soil cropping improving systems						
SES E 201E	NEURICE	Crop productivity strategies (Genetics x Environment x						

**Smart Farming Technology:** 

**Agriculture automation and robotics** 

Biological contamination of crops and food chain

Sustainable food chains: EU quality policy and public sector

Support HNV farmlands through knowledge and innovation

Data and sensor driven decision making on dairy farms

Biodiversity, Animal care, and Socio-economic resilience

quality, sustainability of production systems

**Optimize water and nutrient use efficiency:** 

**Improved forest management models** 

Farm Management Information Systems, Precision Agriculture and

Valorization of biomass side-streams from agriculture and forest

Practice-based innovations in dairy farming: resource efficiency,

fruit: cultivar development, minimise residues, storage and fruit

dbase on innovative technologies and practices for fertigation of

Management)

procurement

horticultural crops

- SFS-5-2015
- GoodBerry **TomGEM**

SFS-13-2015

SFS-20-2015

ISTB-2-2015:

**Thematic** 

**Networks** 

ISIB-4b-2015

WATER-4b-

2015 (TN)

**MyToolBox** 

**MycoKey** 

Strength2Food

**Smart-AKIS** 

**HNV-Link** 

**AGRIFORVALOR** 

**4D4F** 

**EuroDairy** 

**EUFRUIT** 

**ALTERFOR** 

**FERTINNOWA** 



#### 4 Thematic networks - call 2014



http://agrispin.eu/
Innovation brokering and support



http://www.winetwork.eu/
Wine diseases



http://www.ok-net-arable.eu/
Organic agriculture arable crops

http://www.hennovation.eu/
Animal welfare hens







#### Clearer focus on primary production's needs:

- Themes must focus on the most urgent needs of agricultural or forestry production sectors, or on important or promising cross-sectoral issues, including where primary production needs to improve its linkages to the supply chain
- Themes to be chosen **bottom-up**, contributing to a more competitive sustainable agriculture and forestry

[can be linked to **products or sectors**, e.g. arable crops, fruits, vegetables, pig,...etc) or a broad range **of cross-cutting subjects**, e.g. crop rotation, certain farming practices, energy, implementation approaches of a directive, eco-system services, social services, biobased products, short supply chains,...etc]





#### Expected impact:

- Support for the EIP through interaction with operational groups, and delivery of a substantial number of "practice abstracts" in the common EIP format [provide a good description & quantification/qualification of the outputs]
- Long term available

[KISS, no new temporary fancy IT tools/platforms]

Using the main existing dissemination channels most used by practitioners

[where the material stays available after the project finishes]

- Audio-visual material wherever possible
  - [farmers/end-users learn with their eyes]
- Greater user acceptance and dissemination of end-user material



#### Thematic networks are not:

- networks for discussion
- research projects
- networks intended to prepare a research agenda. Thematic networks aim to put existing research into practice by focusing on end-user material feeding into the EIP network for broad dissemination
- awareness-raising or supply chain platforms/networks.

  Thematic networks intend to spread practical knowledge, and to make this happen they should be involving practitioners (farmers/foresters) in a multi-actor approach and working bottom-up starting with farmers and their needs.



# Thematic networks call 2014 – an example Compiling knowledge ready for practice

- Objectives targeting the needs of end-users (Imp): Key wine diseases (Grapevine Trunk Diseases and Flavescence Dorée) representing a threat for the economic viability of the entire sector, have been identified as a priority by winegrowers, many winegrowers are testing innovative sustainable approaches to fight these diseases.
- Multi-actor approach (Exc): collecting data and discussion through a network of <u>facilitator</u> agents, several regional technical working groups and one European scientific working group. Capturing ideas and <u>sharing</u> between EU countries: 10 regions from 7 countries representing more than 90% of the EU wine production. Many knowl. exchange activities & experience bottom-up interactive processes
- Consortium (Impl): 11 partners from science, advisory and practice; regional technical working groups already defined in the proposal (no vague promises http://www.winetwork.eu/

& complementary knowledge)



# How to support putting results from projects into practice "with success"?

 The common EIP format for "practice abstracts" was developed, building on Member States' experience (KISS – act against information overload) and agreed at EU level thanks to the work of the Standing Committee for Agricultural Research (SCAR SWG AKIS)

https://ec.europa.eu/eip/agriculture/en/content/eip-agri-common-format

- It will contribute to the **visibility and rewarding of researchers' work** in practice-oriented interactive innovation
  projects (e.g. thematic networks, multi-actor projects, rural
  development operational groups, etc)
- The unique EU repository of practice abstracts on the EIP website may help **measuring impact** of research on practice, similar to the research abstracts in peer reviewed journals.





# Common format for practitioners ('practice abstracts'): info shared through the EIP network

- Short and easily understandable **title** (one key sentence, max 150 char.)
- Short **summary** in easily understandable language (max 1500 char.):
  - What problem will the knowledge generated solve for the end-user? What will be the main benefits to the practitioner?
  - Main outcome/recommendation (2-3 main results)
- Contact data: Project coordinator (+ address, e-mail, telephone), text editor, project partners (+ address, e-mail, telephone), geographical location, project period, funding source & budget, link to project website and to a website where info stays long-term available





### Sustainable Food Security (SES)

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SFS-1	Solution	s to mul	tiple	and	con	nbined	stress	ses in	crop	pro	ducti	on	10 1	√lio ŧ
0F0 0		r		_		. 1		·• .	r	•	1.	• .		

Teaming up for good: Exploiting the benefits of species diversity in

SFS-2 5 Mio €

cropping systems

Weeding - strategies, tools and technologies for sustainable weed SFS-6 7 Mio € management Organic breeding – Increasing the competitiveness of the organic SFS-7 8 Mio €

7 Mio €

12 Mio €

7 Mio €

10 Mio €

9,5 Mio €

5 Mio €

Spotlight on critical outbreak of pests: the case of Xylella fastid.

Legumes - transition paths to sustainable legume-based farming

Promoting food and nutrition security and sustainable agriculture

Challenges for disease management: Perennial crops in the

The impact of consumer practices in food safety: risks and

Breeding livestock for resilience and efficiency

systems and agri-feed and food chains

in Africa: the role of innovation and Report

breeding and farming sectors

tropics and sub-tropics

mitigation strategies

SFS-9

SFS-11

SFS-15

SFS-26

SFS-37

SFS-42



#### **Multi-actor 2016 - Rural Renaissance (RUR)**

RUR-1	Consolidated policy framework and governance models for synergies in rural-urban linkages	6 Mio €
RUR-4	Water farms – improving farming and its impact on the supply of drinking water	5 Mio €
RUR-6	Crop diversification systems for the delivery of food, feed, industrial products and ecosystems services - from farm benefits to value-chain organisation	20 Mio €
RUR-7	Resource-efficient and profitable industrial crops on marginal land	6 Mio €
RUR-8	Demonstration of integrated logistics centres for food and non- food applications	12 Mio €
RUR-10	Thematic Networks compiling knowledge ready for practice	10 Mio €
RUR-11	On-farm demonstrations: deepening farmer-to-farmer learning mechanisms	2 Mio €
RUR-14	Advisors' roles in the functioning of AKIS and advisory policies boosting innovation in sustainable agriculture	5 Mio €

Agriculture and Rural Development



Multi-actor 2017. Sustainable Food Security (				
SFS-4	New partnerships and tools to enhance European capacities for in-	2 Mio €		
	situ conservation			

Organic inputs – contentious inputs in organic farming

Science-based regionalisation of the Common Fisheries Policy

Functional biodiversity – productivity gains through functional

and environmental contamination - focus on C, N and P cycling

Closing loops at farm and regional levels to mitigate GHG emissions

biodiversity: interplay of crop pollinators and pest predators

Emerging diseases in plants and terrestrial livestock

Permanent grassland – farming systems and policies

Innovative agri-food chains: unlocking the potential for

contribution to the EU-China Urbanisation Partnership

Resource-efficient urban agriculture for multiple benefits -

How to tackle the childhood obesity epidemic?

Bee health and sustainable pollination

Innovations in plant protection

competitiveness and sustainability

SFS-8

**SFS-10** 

**SFS-16** 

**SFS-17** 

**SFS-20** 

**SFS-27** 

SFS-28

SFS-30

SFS-34

SFS-39

SFS-48

8 Mio €

15 Mio €

9 Mio €

6 Mio €

10 Mio €

10 Mio €

12 Mio €

6 Mio €

20 Mio €

7 Mio €

10 Mio €



#### **Multi-actor 2017 - Rural Renaissance (RUR)**

	_	_
RUR-2	Coastal-rural interactions: Enhancing synergies between land and sea-based activities	5 Mio €
RUR-5	Novel public policies, business models and mechanisms for the sustainable supply of and payment for forest ecosystem services	8 Mio €
RUR-9	Business models for modern rural economies	9 Mio €
RUR-12	Networking European farms to boost thematic knowledge exchanges and close the innovation gap	7 Mio €
RUR-10	Thematic Networks compiling knowledge ready for practice	10 Mio €
RUR-13	Building a future science and education system fit to deliver to practice	7 Mio €
RUR-15	The benefits of working with others – fostering social capital in the farming sector	3 Mio €
RUR-16	Optimising interactive innovation project approaches and the delivery of EU policies to speed up innovation in rural areas	5 Mio €



### Multi-actor 2016 – Internet of Things (IoT) Cross-cutting activities

Pilot 2	Smart farming and food security	30 Mio €





#### More info

**Brochure** on Funding opportunities under Horizon 2020:

http://ec.europa.eu/eip/agriculture/en/content/eip-agri-brochure-funding-opportunities-under-horizon-2020-calls-2016

### Looking for partners in Horizon 2020 multi-actor projects or thematic networks?

http://www.linkedin.com/groups/Partner-Search-Horizon-2020-Food-7416906

Follow the **EIP website** (montly newsletters, brochures, examples, etc):

http://ec.europa.eu/agriculture/eip/index\_en.htm

