

The European Innovation Partnership (EIP) „Agricultural Productivity and Sustainability“

Moving Innovation in Agriculture Ahead !



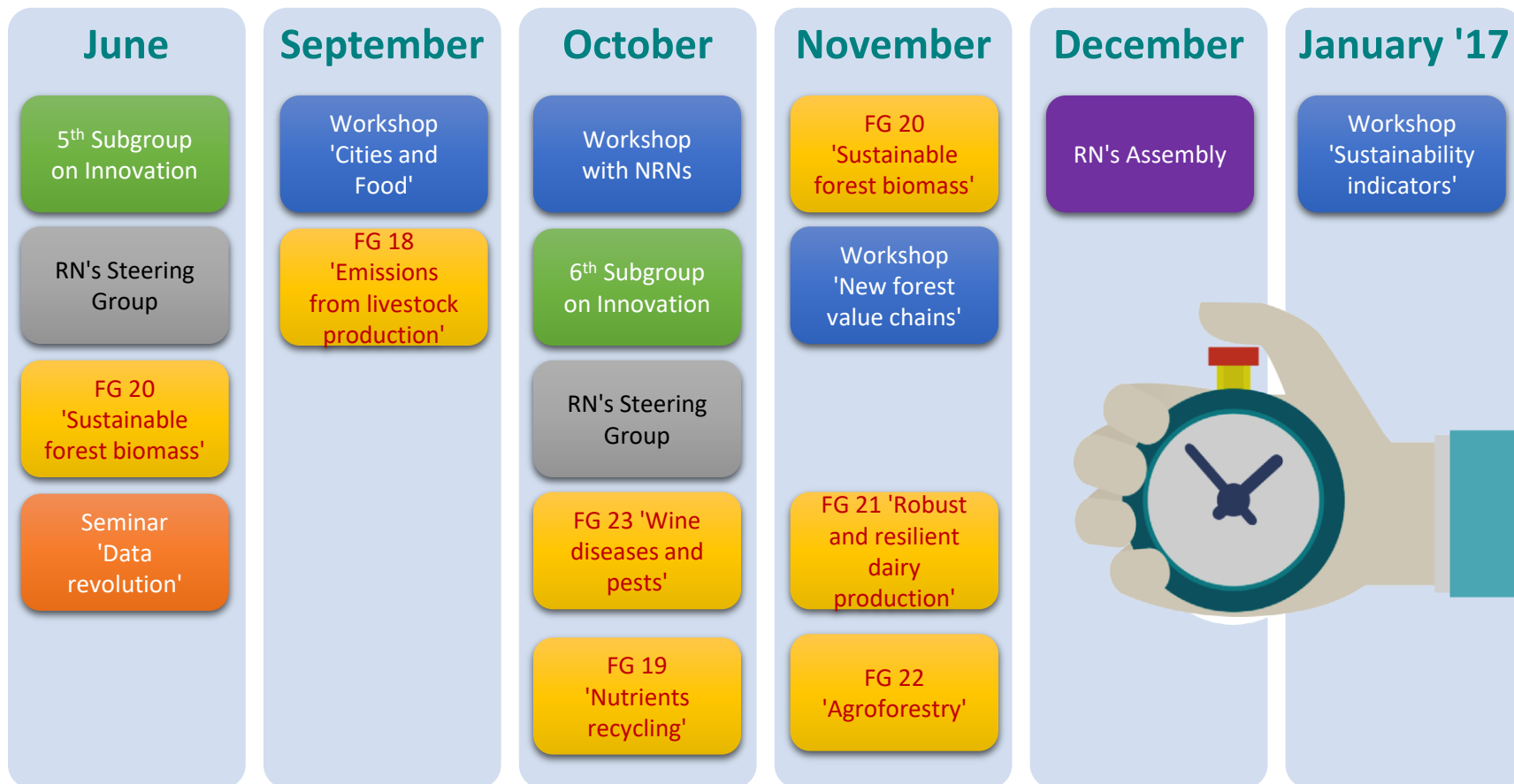
SCAR AKIS 4 – Budapest – 7 October 2016

Inge Van Oost - DG Agriculture and Rural Development

1. EIP Workprogramme activities

EIP-AGRI network activities overview 2016

2nd half of the year



Focus groups 2013-2016

- 18 Focus Groups (FG) finished/ongoing
- Call for 2 Focus Groups 23 February 2016, starting up activities now:

FG19 – Agronomic use of recycled nutrients

FG20 – Mobilising forest biomass – sustainably

3 new Focus Groups 2016

- Robust and resilient dairy production systems
- Agroforestry: introducing woody vegetation into specialised crop and livestock systems
- Diseases and pests in viticulture

Over 240 experts applied

Call closed on 11 July 2016

The Focus Group experts were selected in September 2016.

EIP-AGRI seminar 'Data revolution: emerging new business models in the agri-food sector'

22-23 June 2016 in Sofia, Bulgaria

Aims:

- identify and discuss existing and potential data driven business models in the agricultural sector, including the whole supply chain
- identify enabling conditions for these business models and strategies to support their development
- bring people together to further develop data driven business models

https://ec.europa.eu/eip/agriculture/sites/agri-eip/files/eip-agri_seminar_data_revolution_final_report_2016_en.pdf

EIP workshop "Cities and Food: Connecting consumers and producers" 21-22 September, Krakow Poland

Combines the **2 perspectives** from cities and producers

- 1. Cities:** collaborating with the Milan Urban Food Policy Pact (MUFPP) which has the intention to move towards linking the city with food producers in a sustainable way.

The Milan Urban Food Policy Pact (MUFPP) was signed in October 2015 by 53 cities from 15 EU members states (in total by 116 cities worldwide). By signing the Pact, cities commit themselves to upgrade their policies on sustainable food systems, to engage all sectors in the food system (e.g. small scale producers, private sector and civil society) and to take action to address the food system. After all, the majority of EU population is located in cities, and this represents an enormous potential for producers engaged in supply chains in and near the cities. In particular the MUFPP **actions on 'Food production' and on 'Food supply and distribution'** are important in this regard (see the text of the Pact on <http://www.foodpolicymilano.org/wp-content/uploads/2015/10/Milan-Urban-Food-Policy-Pact-EN.pdf>). Questionnaires sent to the Cities and from their replies **20 cities were invited** to this workshop

EIP workshop "Cities and Food: Connecting consumers and producers" 21-22 September, Krakow Poland

Combines the 2 perspectives from cities and producers

2. Farmers: improve producer incomes, promote sustainable farming systems

Both perspectives aim at the building a **city-region food system approach**, giving city populations the opportunity to get easy access to fresh, safe and healthy food produced in the local environment, benefiting local and regional producers and entrepreneurs involved.

This workshop combines the networks of the EIP-AGRI and the MUFPP, by connecting "**trios**" (1=city/2=RD man.auth/3=farmers) + experts

Connecting Consumers and Producers - Why ?

- Current challenges for food systems : how to **adapt to consumer needs/wishes and to producers' challenges** (fresh minimal processed foods, traditional, regional (local) and artisanal prepared food for different consumer groups (age, lifestyle, health and culture)
- We need innovation to make smart and sustainable food systems: **rethinking the organisation of the food value chains**, empowering consumers and local, short(er) value chains where farmers, cooperatives and small companies are an important engine
- **Cities' food system policies** are key and can incentivize new business models and a food system approach (MUFPP)
- *Listen to Moya Kneafsey in this workshop on 21 Sept*

(1) Rural Development Programmes (within RD prog areas)

- **Operational groups** (setting-up of groups and funding for their projects from 30.000 till 1 mio €)
- *Listen to Bastien Farges explaining the funding for **supply chain Operational Groups in Aquitaine** (in this workshop on 22 Sept at 9:00)*

(2) EIP-AGRI networking activities at EU level: Workshops, Seminars and Focus Groups

The Focus Group on Short Supply Chains collected and analysed different short food supply models existing in Europe, including a set of practical cases with potential for innovation in other regions/ countries (*see your workshop package*)

(2015 report – coordinating expert Moya Kneafsey)

https://ec.europa.eu/eip/agriculture/sites/agri-eip/files/eip-agri_fg_innovative_food_supply_chain_management_final_report_2015_en.pdf

Funding for EU projects on food systems and novel supply chains

(3) Horizon 2020 – EU research and innovation projects
various finished/ongoing food system projects in this workshop on 22 Sept at 9:15

- European **multi-actor "research" projects** (2- 10 mio € per project): 370 mio € in 2016-2017
- **Thematic networks: "coordination" actions**
"Compiling knowledge ready for practice"
(2 mio € projects)

SKIN: Short Supply Chain Knowledge and Innovation Network (2017-2019): *project starting soon, listen to the pitch tomorrow*

(1) The perspective of the Cities

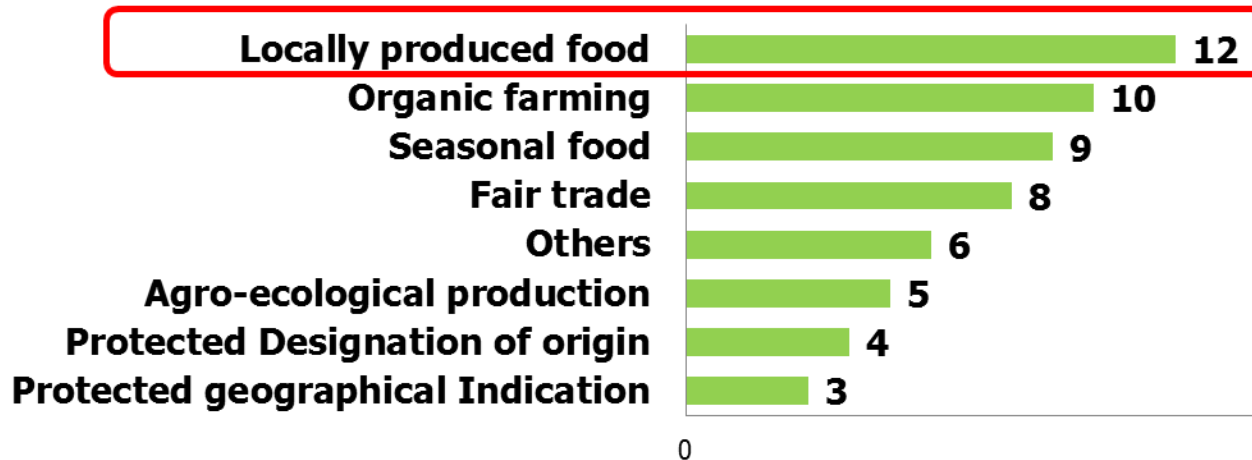
Highlights from EU cities' food policies

Cooperation with the MUFPP

What did we learn from cities already?

(replies from the cities from the MUFPP – *see your workshop package*)

- **17** out of 20 City administrations **support collaborative short food supply chains, Focus of the city food policy** (certification or qualification requested):

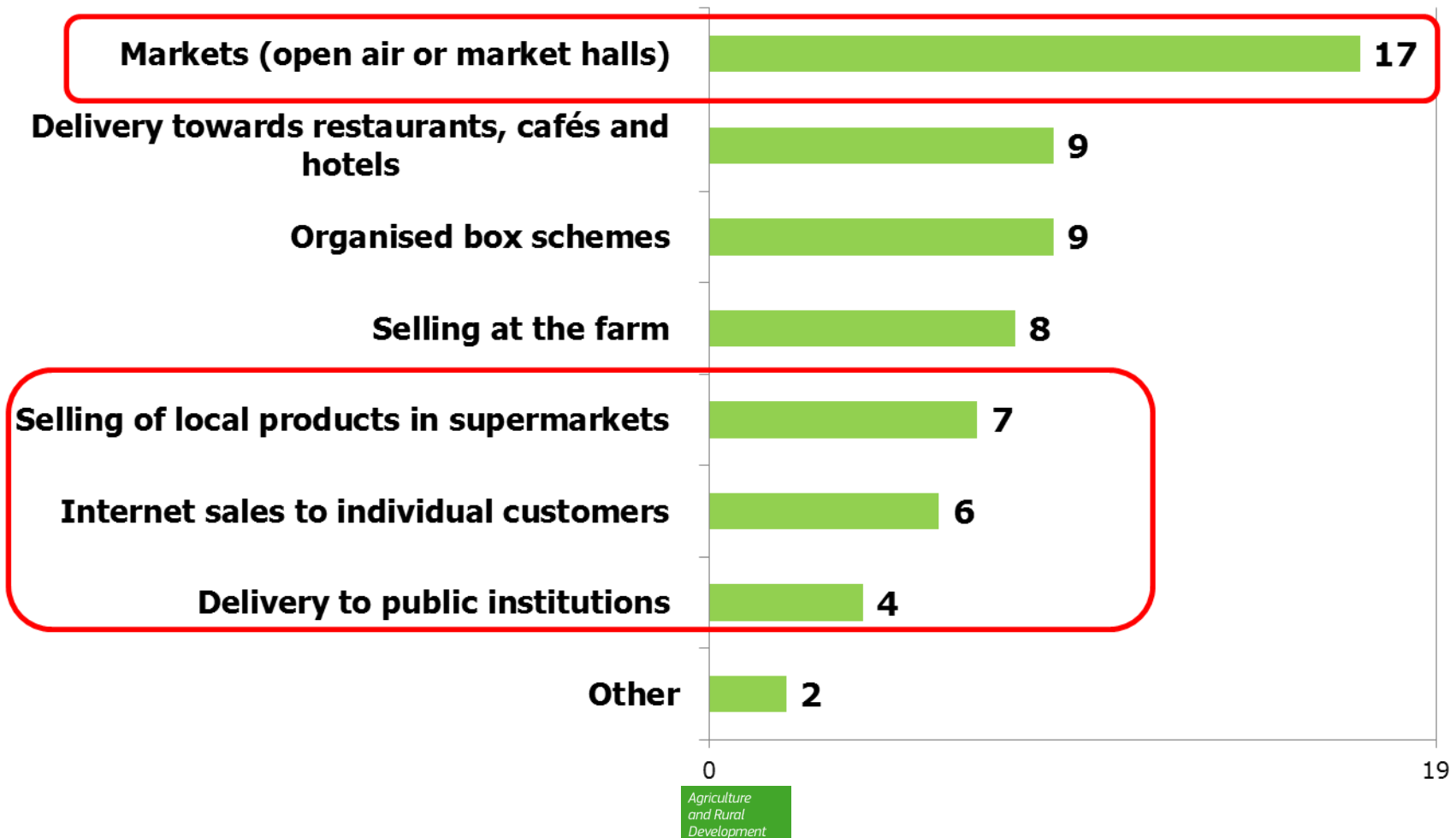


- **Public procurement:**
 - 9 out of 19 cities focus on organic farming
 - BUT **only 5** on seasonal food
 - BUT **only 4** on local food

- **How do cities facilitate** or support the role of **farmers** for sustainable food in their region:



- **Most important market channels of local/regional farmers** to your city in terms volumes sold



(2) The farmers' side

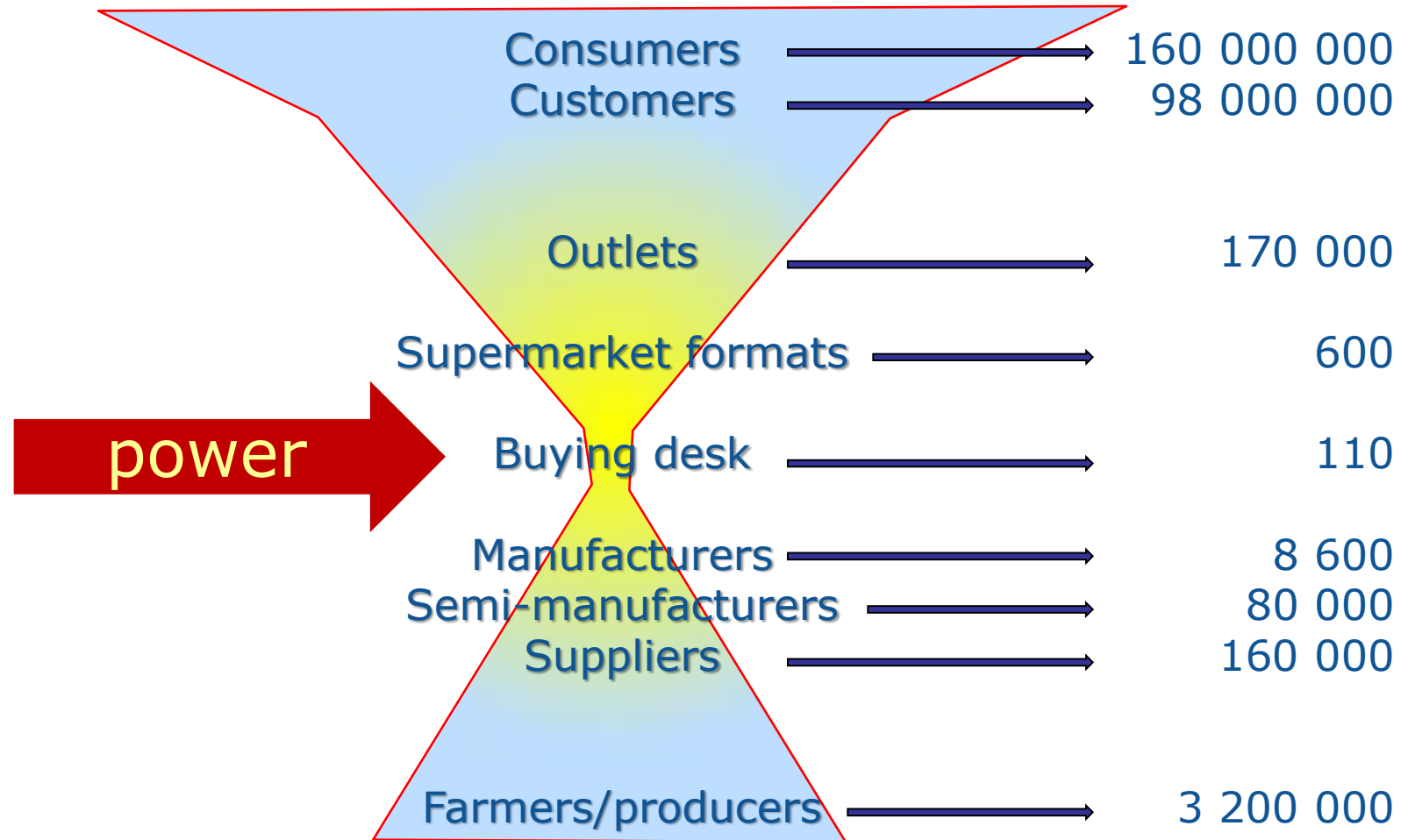
Pay attention to pricing and costs

- *Listen to Patrick Pasgang and Jan-Willem van der Schans in this workshop on 21 Sept*

Price setting is essential: shared responsibility, transparency, **thorough calculations on costs and remaining margins are key**

Making a decent income also will depend on type of food products and type of delivery chains, and the costs related to bringing the products from producer to consumer (logistics, packaging, transforming, food waste along the chain, etc.)

Illustrating the typical Supply Chain funnel



EIP workshop "New value chains from multifunctional forests' "

10-11 November 2016 - Vienna, Austria

EU forests serve a wide range of economic, social and environmental purposes and provide around three million jobs. **Wood** remains the main source of financial revenue and forest biomass represents the biggest source of renewable energy in the EU. However, forests also provide a large range of **other products, such as cork, resins, mushrooms, nuts, game or berries as well as recreational services** which are increasingly being valued on the market. Promoting new value chains for such products can be a powerful economic incentive for **integrated forest management** schemes, increasing forest multi-functionality and contributing to sustainable forest management.

The aim of the workshop is to present existing examples and explore concrete opportunities for developing **innovative value chains of forest products and services** which are currently under-used. This includes food products, non-food products, agroforestry and leisure and recreational uses.

EIP workshop "Sustainability tools for farmers " ***7-8 February 2017 - Zagreb, Croatia***

- What are farmer's expectations regarding sustainability tools and how are they currently using them? Identify bottlenecks and opportunities related to **collection, processing, access and usability of sustainability data on farm and the operational solutions** and innovative actions to tackle these issues
- How to make use of these tools in practice? In particular how to enable farmers to **actually use** relevant data produced by the tools in the "**day-to-day**" management of their farm.
- What are the advantages of cooperation models where multiple farmers **share sustainability data** from their farms?
- What is the **role of advisory services** in the use of sustainability tools and the evolving best practices in the use of farmers' own sustainability data to improve the effectiveness of advisory services
- What is needed to stimulate **future** use of sustainability tools by farmers?

Annual Workprogramme 2017

- 20 October Subgroup Innovation
- Brainstorming on:
 - Digital farming**
 - Supply chain**
 - Farm resilience**
 - Carbon farming and adaptation to climate change**
 - Energy & water efficiency at farm level**

2. Rural Development Programmes:

First Operational Group projects are being set up ... some examples

- Establishing a sustainable and environment friendly wheat value chain (Germany)
- Organic dock control in grasslands (Austria)
- Robust lamb in Pyrénées (France)
- Winter harvest: seasonal, energy extensive and innovative vegetable production (Austria)
- Zero herbicides in Mediterranean perennial crops (France)
- Farina Girona (common wheat varieties for artisan bread making) (Spain)
- FruitNet (control of Monilinia spp. In stone fruits) (Spain)
- Water saving in rice cultivation (Spain)

EIP workshop "Operational Groups: first experiences"

20-21 April 2016 – Legnaro, Italy

- further **improve understanding** of the EIP-AGRI principle of **interactive innovation**
- learn from **initial experiences of OGs**, regarding: a) setting up OG partnerships around concrete projects, tackling farmers' / foresters' needs and b) subsequently implementing these projects
- **identify initiatives that are useful to help set up OG projects**, including positive experiences of addressing the challenges and needs that the first OGs are facing
- learn about the practical role that EIP-AGRI network support units, MAs, advisers, innovation brokers, innovation support services and other networks have in creating a **supporting environment** for OGs
- promote the widespread **dissemination of the first practical experiences** from the OGs.

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

3. Horizon 2020 & Multi-Actor projects

Call 2016 selection multi-actor projects ongoing

Call 2017 is open till Feb 2017

- **Some projects from call 2016-2017 will be cooperating with the SWG AKIS**

Strategy H2020 for 2018-2020: designing the path,
Workprogrammes 2018-2020

Designing the path – Agricultural Research and Innovation Strategy

DG AGRI R&I Conference 26-28 Jan 2016

Prepares for 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>

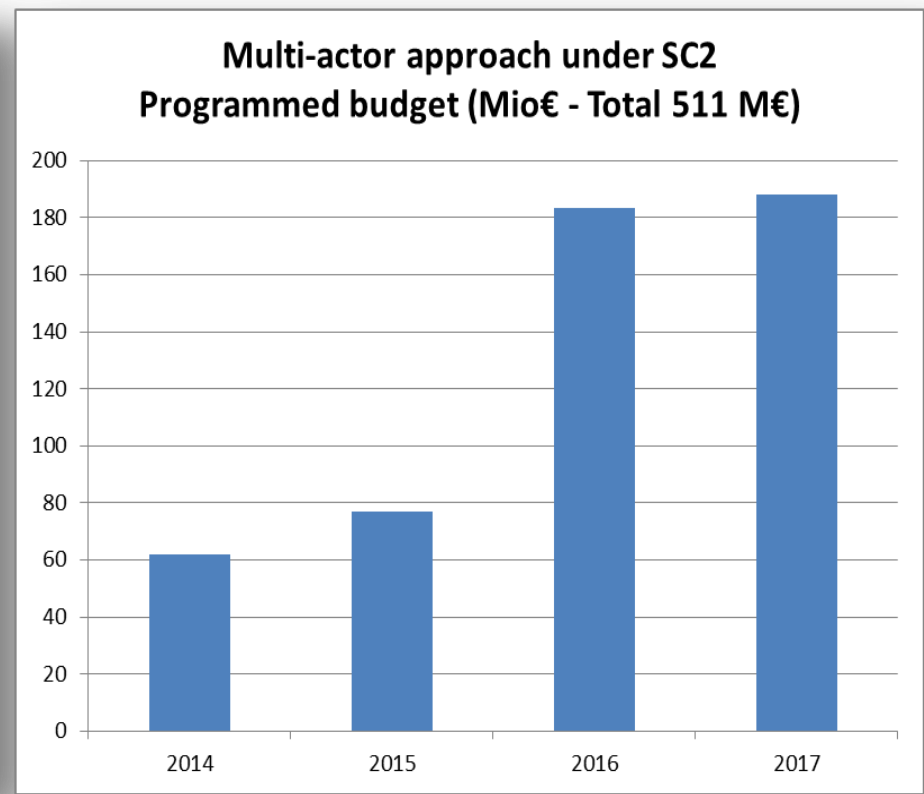
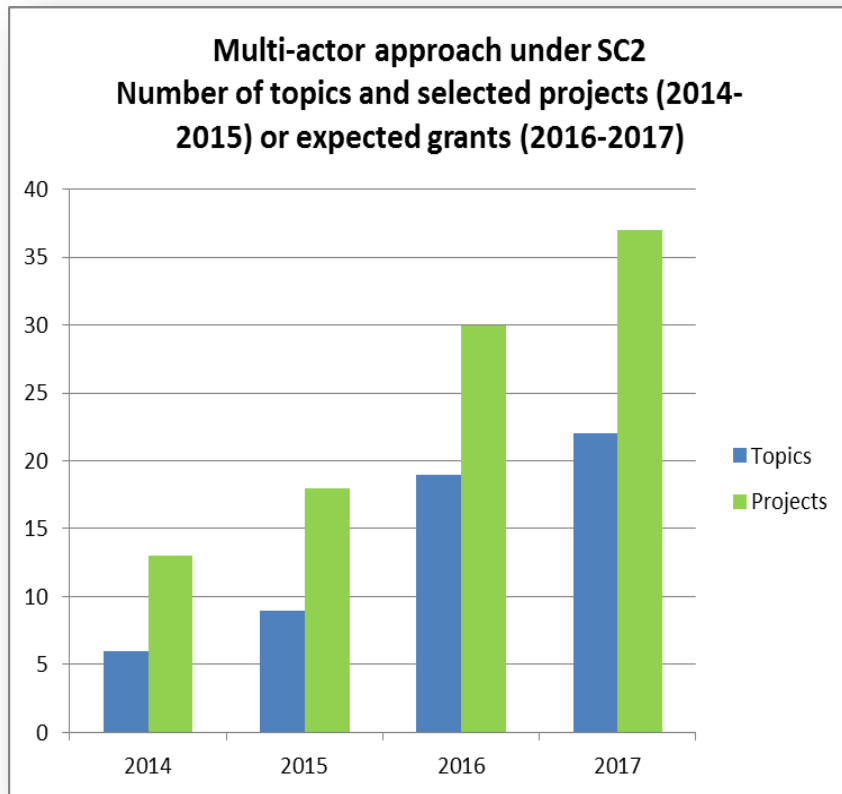
Final strategy text :

reinforces the multi-actor approach and thematic networks

https://ec.europa.eu/programmes/horizon2020/sites/horizon2020/files/agri_strategypaper_web_1.pdf

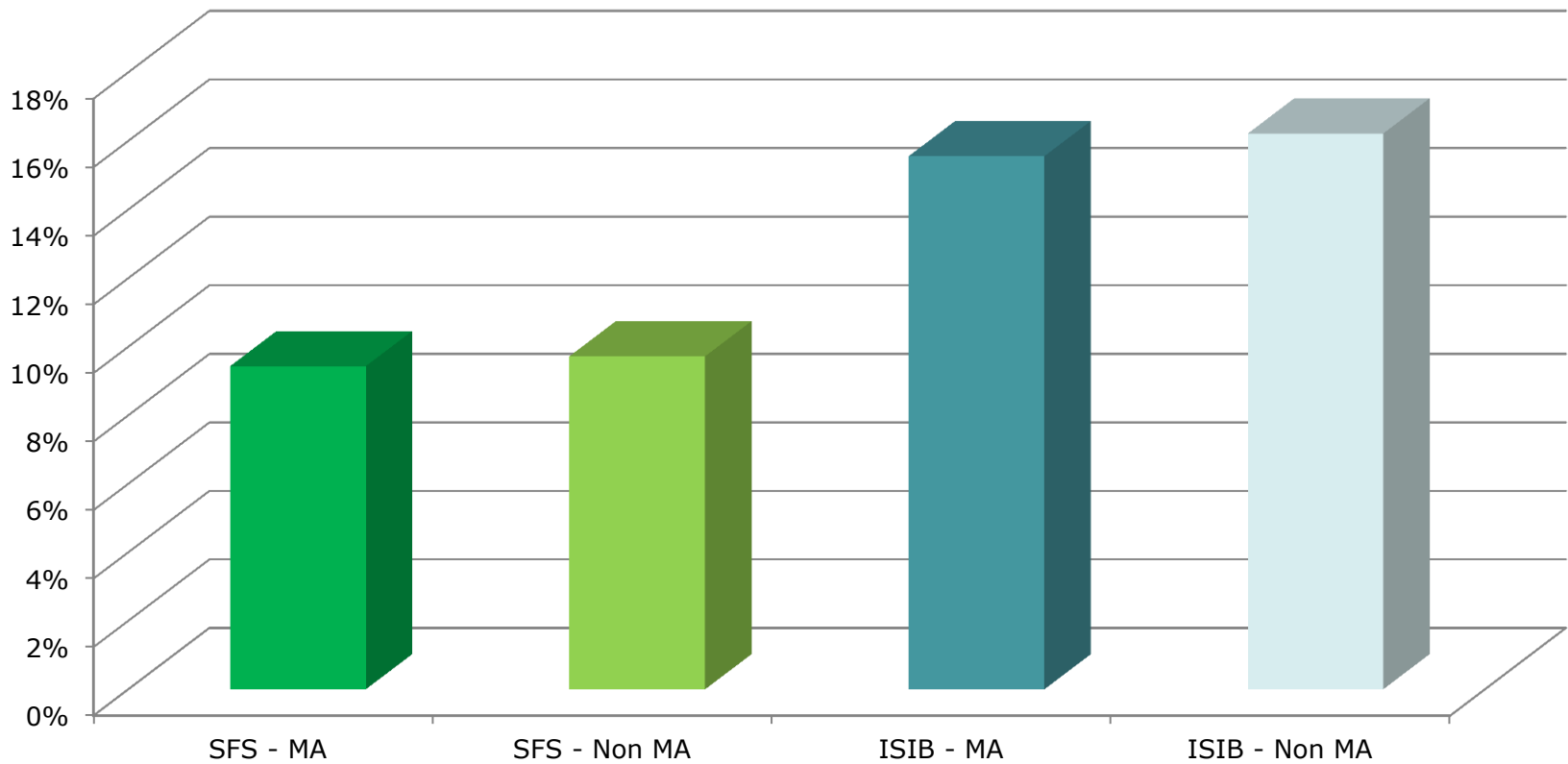
New Workprogramme 2018-2020 currently being shaped

Multi-actor approach in Horizon 2020 topics/projects



SFS & ISIB calls 2015: Evaluation results multi-actor/non-multi-actor

Success rates



Multi-actor topics 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	<u>On-farm demonstrations: deepening farmer-to-farmer learning mechanisms</u>	2 Mio €
RUR-14	<u>Advisors' roles in the functioning of AKIS and advisory policies boosting innovation in sustainable agriculture</u>	5 Mio €

Multi-actor 2017: Sustainable Food Security (SFS)

SFS-4	New partnerships and tools to enhance European capacities for in-situ conservation	2 Mio €
SFS-8	Organic inputs – contentious inputs in organic farming	8 Mio €
SFS-10	Emerging diseases in plants and terrestrial livestock	15 Mio €
SFS-16	Bee health and sustainable pollination	9 Mio €
SFS-17	Innovations in plant protection	10 Mio €
SFS-20	Science-based regionalisation of the Common Fisheries Policy	6 Mio €
SFS-27	Permanent grassland – farming systems and policies	10 Mio €
SFS-28	Functional biodiversity – productivity gains through functional biodiversity: interplay of crop pollinators and pest predators	10 Mio €
SFS-30	Closing loops at farm and regional levels to mitigate GHG emissions and environmental contamination - focus on C, N and P cycling	12 Mio €
SFS-34	Innovative agri-food chains: unlocking the potential for competitiveness and sustainability	6 Mio €
SFS-39	How to tackle the childhood obesity epidemic?	20 Mio €
SFS-48	Resource-efficient urban agriculture for multiple benefits – contribution to the EU-China Urbanisation Partnership	7 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	<u>Networking European farms to boost thematic knowledge exchanges and close the innovation gap</u>	7 Mio €
RUR-10	Thematic Networks compiling knowledge ready for practice	10 Mio €
RUR-13	Building a future science and education system <u>fit to deliver to practice</u>	7 Mio €
RUR-15	The benefits of working with others – fostering social capital in the farming sector	3 Mio €
RUR-16	Optimising <u>interactive innovation project approaches</u> and the delivery of EU policies to speed up innovation in rural areas	5 Mio €

Start building an EU AKIS



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

***To an
„Agriculture of Knowledge“
Join the EIP***



***More information:
www.eip-agri.eu***

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Thank you for your attention!



Call

Sustainable Food Security - Resilient and resource efficient value chains (SFS)

*461 M€ to ensure sufficient, safe and
nutritious food for all while safeguarding
natural resources*

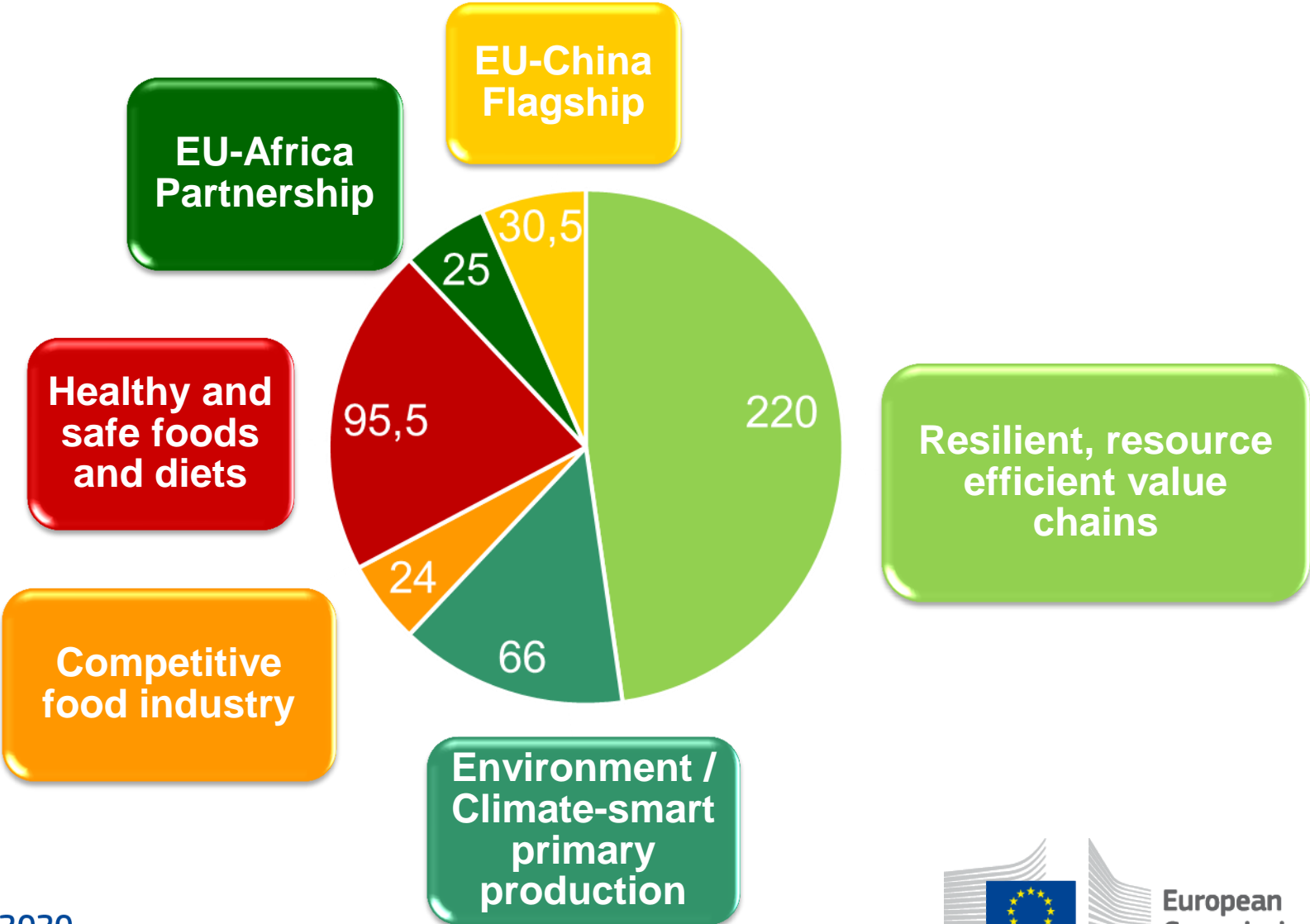
Sustainable Food Security call

€ 461 million budget to:

- ➔ Improve farming and food systems' capacity to sustainably supply sufficient and healthy food to 9 billion people
- ➔ Ensure global sustainable food and nutrition security



Sustainable Food Security : budget distribution (M€)



Rural Renaissance call

€ 127 million to:



Grasp promising opportunities to boost rural growth and jobs

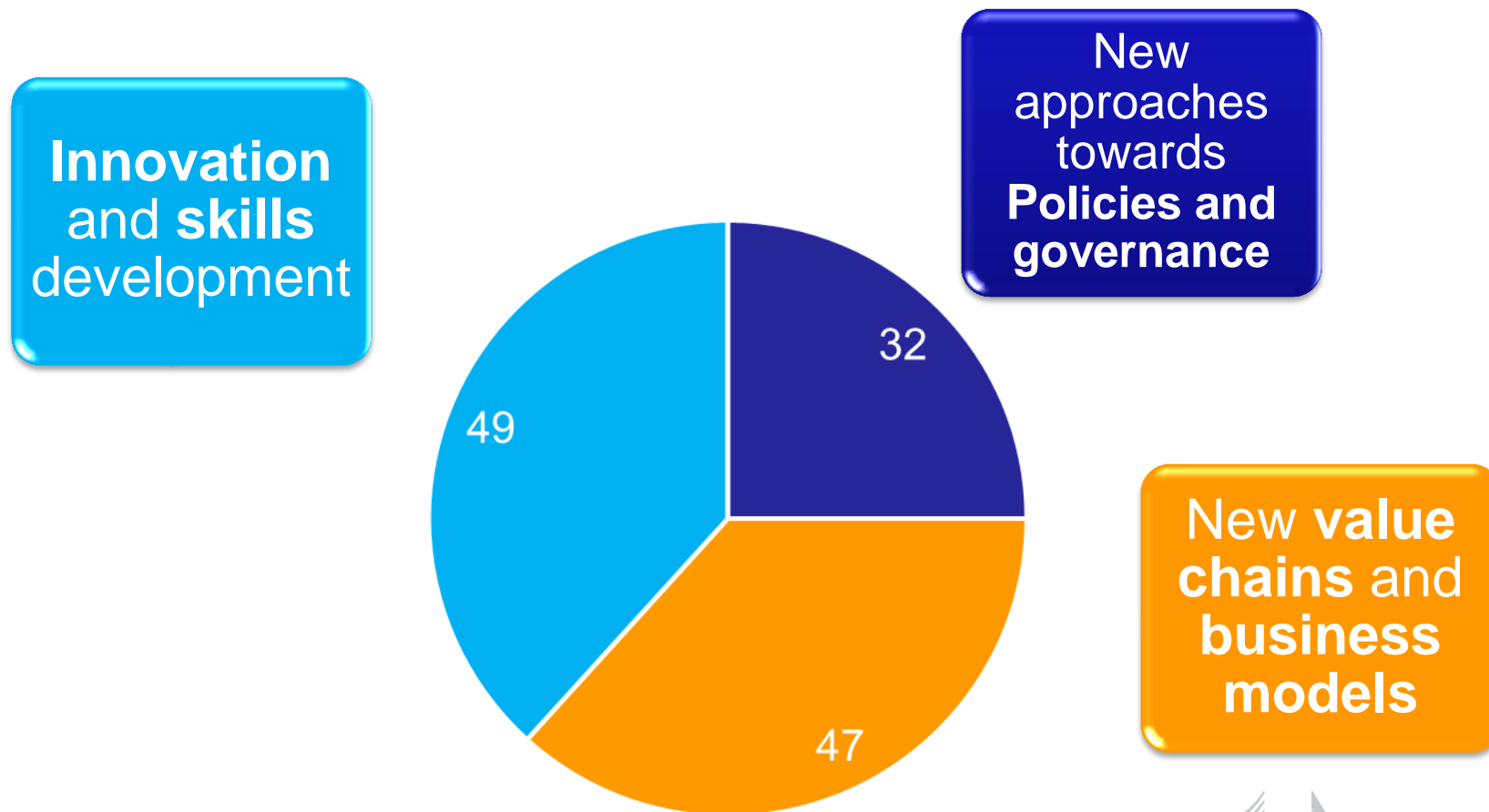


Develop rural and coastal areas through new territorial approaches and business models



Rural renaissance

Budget distribution within the call (M€)



Innovation and skills development



7 topics – 49 M€

- **Thematic networks**
- **Experimental and demonstration farms:**
 - ✓ Mapping & linking
 - ✓ Thematic networks of demonstration farms
- Building a future **science and education system**
- **Advisors' role in agriculture knowledge and innovation systems (AKIS)**
- **Working together in EU countries where cooperation level is low**
- **Optimising interactive innovation projects and policies for innovation**



The multi-actor approach under WP 2016 -2017:

Elements linked to dissemination through the EIP common format
(practice abstracts) are indicated in red

(New elements in WP 2016-17 compared with WP 2014-2015 are indicated in green)

Multi-actor projects aim to produce impact:

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/end-users'/farmers' language, best practices resulting from the projects' work, qualitative audio-visual material, etc

Do not reinvent the wheel: use existing long term available dissemination channels for practitioners, lasting beyond the project period]

- 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: e.g. H2020 consortia cannot start up RD Operational Groups]

Demand-driven 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**

Stakeholder: person expressing a **view/stake** at a certain moment(s) during the project

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
*[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]*

Evaluation criteria

- **Scoring of multi-actor approach:**

Mainly: soundness of the concept, and clarity and pertinence of the objectives; including under **impact** (practice abstracts)

Excellence

- **Clarity and pertinence of the objectives;**
- **Soundness of the concept and credibility of the proposed methodology;**
- Extent that the proposed work is beyond the state of the art, and demonstrates innovation potential (e.g. ground-breaking objectives, novel concepts and approaches, new products, services or business and organisational models)
- Appropriate consideration of interdisciplinary approaches and, where relevant, use of stakeholder knowledge.

Impact

- **Extent to which the outputs of the project would contribute to each of the expected impacts mentioned in the work programme under the relevant topic;**

E.g. "Improving information to growers", "Greater knowledge on...", "Increase in farm productivity", "Transfer to the farming community", "Availability of tools for ...", "Widely accessible alternatives for...", "Provide information", "Enhanced knowledge exchange", "Strengthening of long-lasting implementation", "the adding of value to the European Innovation Partnership "Agricultural Productivity and Sustainability", its network and its Operational Groups...", "support for the implementation of the European Innovation Partnership (EIP) 'Agricultural Productivity and Sustainability'"; Thematic networks: "...in particular through the delivery of a substantial number of "practice abstracts""

Practice abstracts form a normal part of a good dissemination plan to produce impact.

Mostly implicit under "impact" because of the MA definition, in a few cases also explicitly mentioned under "Expected impact"

How was the EIP common format built? What purposes does it serve?

- **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): **easy sharing of info and contacts**
- 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.

CONTENT: What info is to be shared through the EIP common format for practitioners?

- Short and easily understandable **title** (one key sentence, max 150 char.)
- Short **summaries** in easily understandable language (max 1500 char.) = **'practice abstracts'**:
 - 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

Guidance for drafting practice abstracts (1)

Choose the right topics. The items chosen need to be assessed against their potential to bring concrete recommendations and useful results for practice (i.e. information / tools that practitioners can **immediately use**).

Consider the right level. It is much more useful to go at a deeper level (e.g. work packages or below) rather than to try to summarise the project itself to **find practice-relevant information**

Focus on useable results. The main scope is to focus on results, outcomes and recommendations that can 'be used' and move the practitioner to action. **Avoid describing project activities** since these are of no further use for the reader at the time he/she is reading it.

Guidance for drafting practice abstracts (2)

'Recycle' already available information from your project.

Take advantage and use appropriately relevant information that exists already. Sometimes short, concise and ready-to use information is already available for the target audience on your website or in reported deliverables.

Use of language. It is key to **put yourself in the place of the reader** (end-user) when writing. What do they want to read about? **What would practitioners find useful?** Would a farmer, forester etc. disengage when reading this sentence? Etc.

For instance: Sentences like these should be avoided: "Tests have shown that an IPM approach can result in lower yields with high environmental benefits". Even if factually true, this information is not appealing for practitioners and could even put them off. A suggestion is to try to work around negative messages to draw the reader's interest. For instance, if lower yields are involved, try to explain why taking up a certain practice is still important and work around the negative element (e.g. 'the dexipm tool can help farmers to find the solutions that have the lowest impact on yields while having a similar reduction of the use of pesticides')

An example of a practice abstract from Fertinnowa

Application of zeolite to reduce nitrates concentration in growing media and soil

Areas like the Albenga plain in Liguria Region (Italy) are classified as “areas vulnerable to nitrates” and are under specific legislation to limit nitrate contamination of superficial and deep water bodies.

The addition of zeolite to the source of nitrogen can improve the nitrogen use efficiency and reduce the environmental impact caused by nitrates leaching. Thanks to the specific atomic structure of clinoptilolite (a kind of zeolite) nitrifying bacteria are stopped from entering the tiny pores of the clinoptilolite. The ammonium is held internally on the cation-exchange sites and is not likely to be leached out easily as water passes through. As a consequence, nitrification and thus nitrate leaching is reduced. Secondly, zeolites improve nitrogen use efficiency because they act as a medium that slowly releases fertilisers.

Trials in the Albenga area have demonstrated that the addition of zeolite to the soil substrate both in open field (vegetables) and in greenhouse (ornamentals) lead to a reduction of nitrates concentration in the substrate.

For the best result, add clinoptilolite at a rate of 3% weight/weight when preparing the substrate for crop cultivation:

- for potted plants: mixed in the peat based substrate (normally added with slow release fertiliser);
- for open field cultivation: mixed in the first 20-30 cm of soil through tillage.

An example of a practice abstract from Winetwork

Trunk cleaning to fight against Grapevine Trunk Diseases

Grapevine trunk diseases (GTD) are extremely destructive diseases affecting vineyards worldwide. Effective treatments were unknown until very recently.

The “curettage” method is an effective way to clean the trunk of the vine and reduce impact of the GTD. Trunk cleaning is only effective to fight two GTDs, Esca and Botryosphearria dieback. The more superficial the symptoms are, the more efficient is the technique. The operation needs to be done with a small chainsaw.

Trunk cleaning consists in digging in the trunk to remove grapevine diseased parts. It should take place as soon as first symptoms of GTD appear. This usually happens between June and September and becomes visible as the leaves are drying out. The affected parts are often located close to dead wood zones and below big pruning wounds. They can be identified by their sponge-like texture producing toxins (white rot).

The method: First, open the trunk where dead wood has been detected: do not hesitate to open the trunk widely and take off the dead wood. Then, detect diseased parts, recognizable by their spongy form which is secreting toxins (white rot). There infected tissues need to be removed by scraping, using the side of the chainsaw in the grapevine axe and taking care to not cut sap flow. Do not hesitate to well clean out the wood in order to suppress all diseased wood.

If used in June, this method can save a whole harvest and reduce further spread of the disease.

If the symptoms of the disease appear again, it is possible to carry out a second curettage even during the same year.

An example of a Thematic Network call 2014

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 facilitator agents, several regional technical working groups and one European scientific working group (= **PRACTICE ABSTRACTS**). Capturing ideas and sharing between EU countries: 10 regions from 7 countries representing more than 90% of the EU wine production. Many **knowledge 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 & complementary knowledge)

<http://www.winetwork.eu/>

More info on multi-actor projects?

See video-streamed presentation on Multi-actor approach and Thematic Networks in H2020 WP 2016-2017:

(from 0:53:00 till 01:47:00)

<https://scic.ec.europa.eu/streaming/workshop-on-multi-actor-approach-and-thematic-networks-under-horizon-2020>

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/horizon2020/en/news/interactive-innovation-motion-multi-actor-projects-and-thematic-networks-under-horizon-2020>



***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**