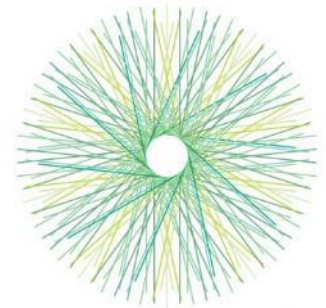


The European Innovation Partnership EIP-AGRI: catalysing innovation for productive and sustainable EU agriculture and forestry – **Work on digitisation**



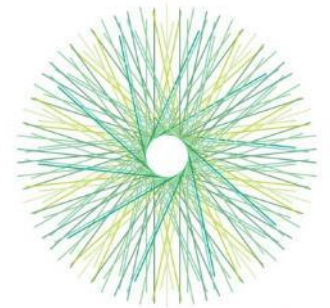
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**CREATE the Next Generation IoT
eXperience for the Future**

**Willemine Brinkman, EIP-AGRI Service Point
Amsterdam, 17 April 2019**

EIP-AGRI in a nutshell



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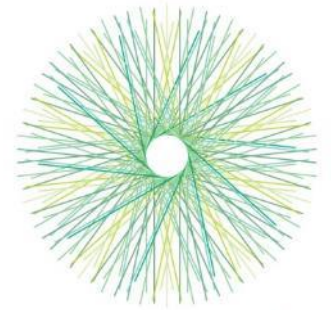
Aim: To foster a competitive and sustainable agriculture and forestry sector that "achieves more from less"

Approach: Closing the innovation gap between research and practice by:

- using the interactive innovation model
- linking actors via the EIP Network



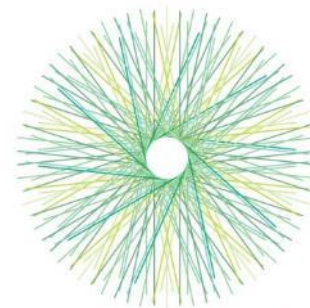
The EIP-AGRI Network: connecting people & sharing knowledge to tackle challenges




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Operational group on Organic farming



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SHARING KNOWLEDGE - CONNECTING PEOPLE - TACKLING CHALLENGES

ABOUT | MY EIP-AGRI | SHARE | MEETING POINT | EVENTS | NEWS | PUBLICATIONS | FOCUS GROUPS

European Commission > EIP-AGRI > Meeting point > Search Interesting Projects > Controlled Traffic Farming

Search Funding Opportunities

Search Needs for research from practice

Search People

Online resources

Search Interesting Projects

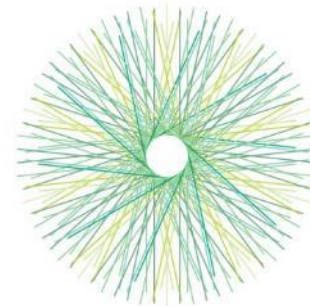
Controlled Traffic Farming

Geographical location	Belgium
Main geographical location (NUTS3)	Arr. Roeselare
Keywords	Farming equipment and machinery Farming practice Soil management / functionality Agricultural production system Plant production and horticulture
Main funding source	Rural development 2014-2020 for Operational Groups (in the sense of Art 56 of Reg.1305/2013)
Project type	Operational group
Starting date	2016
End date	2017
Project status	ongoing

Title (in English): Controlled Traffic Farming

Objective of the project (native language):
Vaste rijpaden voorkomen structuurbederf en compactie van de bodem in het teeltbed tussen de rijpaden. Dit creëert optimale

The goal



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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

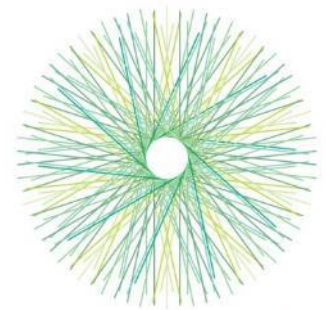
Connecting
Research & Practice

Connecting
Scientists & Farmers

Connecting
Within & Across
European Countries



EU policy framework



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#DigitalSingleMarket

Creating a
#DigitalSingleMarket

DIGITISING EU INDUSTRY



**Delivering on the
Digital Single Market**

Building the European
Data Economy



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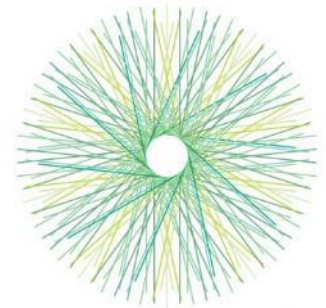
Shaping the digital (r)evolution in agriculture

How?

- **Uptake:** Encouraging use of digital technologies
 - New skills
 - Cost benefit analysis tools
 - Broadband internet
 - Digital Innovation Hubs
 - Interactive innovation projects
- Developing **new technologies**
- **Impact:** Dealing with impact on society

EIP-AGRI brochure

EIP-AGRI Activities: work on digitisation



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Precision Farming Focus Group



Benchmarking Focus Group

June 2016 Seminar "Data driven business models"

2014

2015

2016

Uptake

New technologies

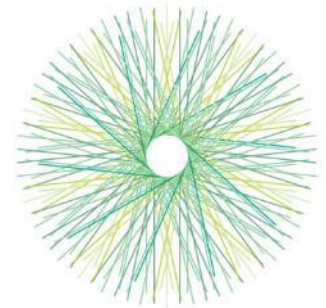
Impacts

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EIP-AGRI Activities: work on digitisation



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2017

Uptake
New
technologies
Impacts

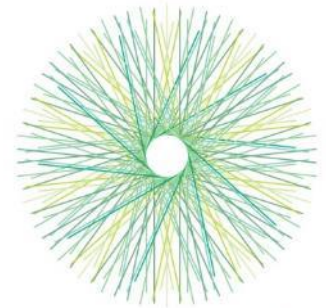
April 2017
Workshop
"Data
Sharing"

June 2017
Seminar "Digital
Innovation Hubs:
mainstreaming
digital
agriculture"

October
AIS -
Lisbon

2018

EIP-AGRI Activities: work on digitisation



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Uptake

New technologies

Impacts

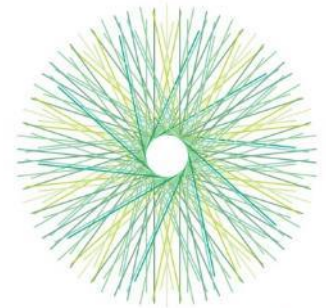
2018

Enabling farmers
for the digital
age: the role of
AKIS

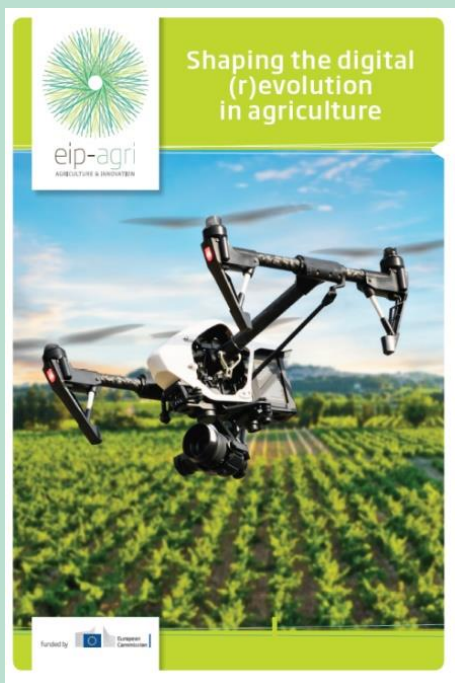
December 2018
Seminar "Multi-
level strategies
for digitising
agriculture and
rural areas"

2019

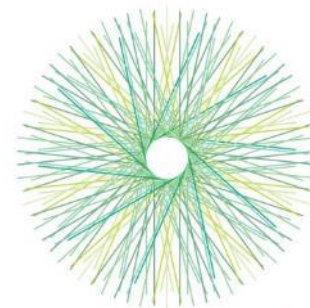
Information online - Publications



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Examples of projects presented at AIS



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ROBOTICS / MECHANIZATION

AGRI Innovation summer 2017

Operational Group:
Planning Tool for Reindeer Management Companies (NomaTrack)
Planeringsverktyg för rennädds företag – teknikutveckling / renskötsel

Practical problem
Reindeer herding practices in Lapland (SE) take place in vast remote areas. Scarce mobile networks and mountainous terrain challenge daily communications and prevent adaptation of conventional GPS tracking. In order to reduce the reindeer herding costs, alternative ICT infrastructures are needed.

Partners
Type: Reindeer herding economic association
Name: Dällavädd
Villages: Gårds Sami village, Tuorpon Sami village, Jänkäskassa Tjietje Sami village, Uddja Sami village
Research institute: Luleå Technical University

Project
Objectives: To develop a digital planning tool for reindeer herders that can be used in areas with or without access to mobile internet. This is to reduce cost and optimize work when gathering reindeer during husbandry activities.

Expected results: Successful combination of an off-the-shelf drone technology and a customized mobile app with a new communication architecture. This is to improve communication in remote grazing areas, to seamlessly integrate new and existing herd tracking solutions for real-time monitoring, and to allow reindeer herders to share relevant information from the grazing areas.

Results so far/first lessons: The first prototype was developed and will be tested this fall (2017). Key challenges so far: altering national drone flying rules, challenging integration of Cloud-based tracking solutions, problems with ice formation on GPS collars, issues with collected GPS traces ownership and access.

Who will benefit: Reindeer herders, cattle herders in remote areas, people living in communication-challenging areas.

Start: 01/03/2017
End: 30/06/2019
Budget: €19,000 €

Contact: Kerstin Kemien
E-mail: kerstin.kemien@telia.com

Contact: Samo Grasic
E-mail: samo@grasic.net



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More information www.eip-agri.eu

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ROBOTICS/MECHANIZATION

AGRI Innovation summer 2017

Collaborative Business R&D Projects:
SheepIT: An IT based grazing control system
SheepIT - Sistema de controlo de pastagem baseado em tecnologias IT

Practical problem
Weeding wild vegetable species growing in vineyards and orchards farmland is a costly process, which needs to be repeated periodically, being typically done by mechanical and chemical methods; Mechanical methods comprehend high costs in terms of labor and their chemical counterparts are considered very aggressive for the cultures; Chemicals remain in the environment and may contaminate water lines, being harmful both to the environment in general and to the final consumer

Partners
Type: Research/Teaching Other Company
Name: Technical Institute of Viseu (ISAV); Institute of Telecommunications (UA) Ramos Pinto S.A.; Globaltronic S.A.

Project
Objectives: Adopt the usage of animals for weed control, which is an old method that has been successfully tested in various regions, reducing the environmental impact and providing land fertilization; Develop an IoT based system, able to control animal posture, limiting their ability to access branches and vine fruits, and to deploy virtual fences to control animal feeding areas.

Expected results: An IoT enabled system that will allow the use of herds of sheep to make the weeding of vineyards safe.

Results so far/first lessons: Production of alpha prototypes of the sheep posture collar; First field trials of the equipment

Who will benefit: Sheep owners who can monetise their herds for vineyard weeding; Vineyard owners that will reduce weeding costs and improve their wine quality

Start: October/2016
End: September/2018
Budget: €66,961 €

Contact: Sérgio Silva
E-mail: sergio.silva@globaltronic.pt



AGRICULTURE INNOVATION 2017
More information www.eip-agri.eu

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Digital Innovation Hubs: mainstreaming digital agriculture

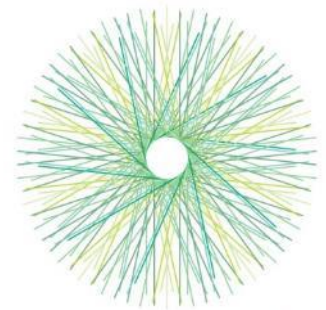
Kilkenny, Ireland— 1 – 2 June 2017

KEY CONCLUSIONS / PRIORITY ACTIONS

1. Identify **local/regional needs** and specialisations
2. Map and build on **existing initiatives**
3. **Farmers at the core of the DIH** ('interactive innovation')
4. Develop a strategic **business model**
5. Consider **social / environmental concerns**
6. Nurture the ecosystem / **foster participation**
7. Foster **collaboration** between hubs across Europe

→ **Everyone** has a role to play!

→ **Support under H2020 for connecting DIHs at the EU level**

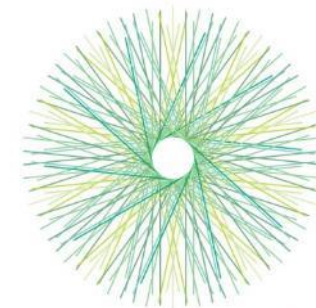


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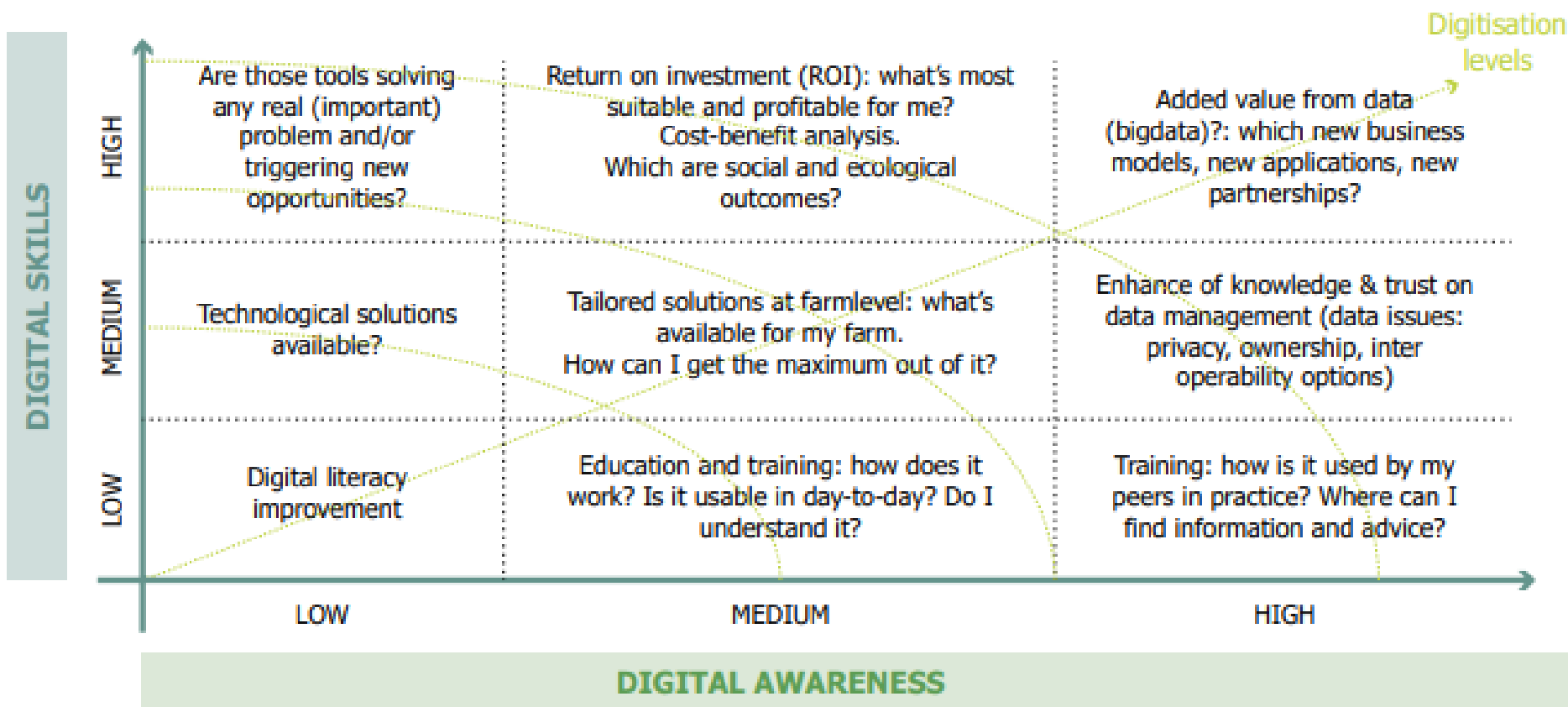


EIP-AGRI Workshop Enabling farmers for the Digital Age: The role of AKIS

Jurmala – Latvia, 26-27 April 2018

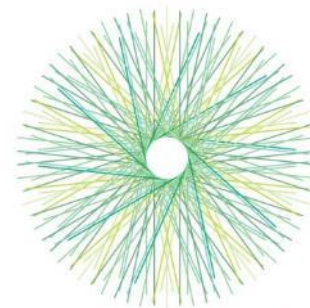


ENABLING FARMERS FOR THE DIGITAL AGE: FARMERS' INFORMATION NEEDS



EIP-AGRI Seminar Multi-level strategies for digitising agriculture and rural areas

Antwerp – Belgium, 12-13 December 2018



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CHALLENGE	RATIONALE-SYNOPSIS
Economic viability	Are funds and financing instruments available? Are returns on investment known and favourable? Are costs of the universal coverage of the "last mile" affordable? Related not just to infrastructure, but also to other aspects like training and skills' development.
Readiness of technology	Maturity of technology and availability – currently, that maturity or availability is only partial-. Connectivity: broadband/5G. Scalability, modularity, interoperability. Resilience of infrastructure to change (technological, to demand, etc.)
Data management	Several topics related to data were mentioned: availability, ownership, privacy, standards and interoperability, quality, storage, collection, analysis, etc.
Ability to adapt in time	Capacity at different levels to adapt to high speed of change. React in time to fast development of technology.
Lack of awareness and resistance to change	Potential disengagement of actors due to diverse reasons: cultural, mind-set, lack of interest, lack of knowledge, lack of trust. Diverging interests and/or opposing stakeholders/parties could also be an obstacle..
Skills level	Diverse levels of digital skills and expertise among actors-users as well as different levels of knowledge needs. Absence of [well] established channels and tools for this type of training, knowledge sharing. How to (and who should) address the training of trainers?
Effective communication	There are difficulties to reach all types of users / actors. There is often little networking and direct communication. Language barriers represent an important challenge too.
Inclusiveness	Difficulties to reach all the actors and lack of success in involving local people. Demand driven vs. supply driven approaches – prioritise the first one. Small agri-food chains should be considered when business models are defined so the digitisation process ensures their sustainability. How is value (benefits) captured, controlled and shared? . Collaboration of competitors/rivals. Consider actors with different skill levels.

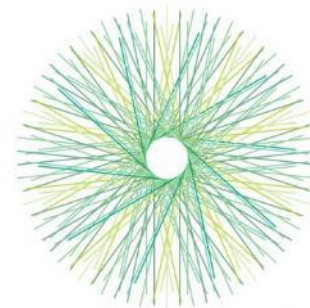
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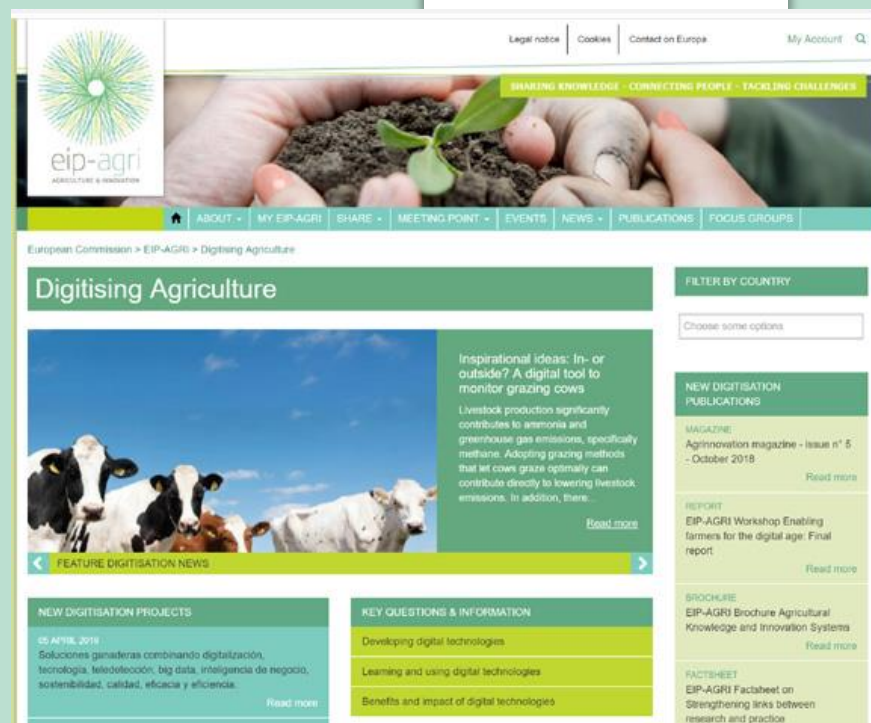
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'Digitisation' tool box

To support the digital transformation, **the EIP-AGRI website features a section on 'digitising agriculture'** which is growing every day and unlocks all the knowledge that is already available in the EIP-AGRI network..



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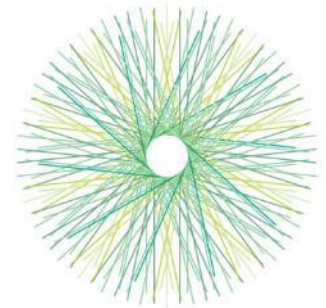


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What can you do?



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- Promote interactive innovation and multi-actor approach
- Share your results through the website and servicepoint@eip-agri.eu
- Register for the [EIP-AGRI newsletter](#) and [website](#) now!
- Share call or apply for the [EIP-AGRI Focus groups](#):
 - next call Spring 2018
- Get in touch with [Operational groups](#) and multi-actor projects
- Participate in [EIP-AGRI events](#)

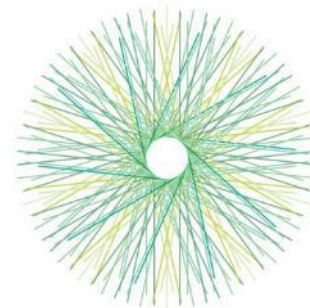
Thank you for your attention!

servicepoint@eip-agri.eu

+32 2 543 73 48

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

www.eip-agri.eu
Register today!



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