

ICT-AGRI-FOOD

ERA-NET Cofund on ICT-enabled agri-food systems

(H2020-SFA-31-2019 A)

KNOWLEDGE INCUBATOR

Kick off meeting

L. Ortolani and A. Albertini – MIPAAF - Italy





House rules

- Rename yourself with **name, surname, institution, room code (ICT, AGRI or FOOD)**
- Put yourself on mute when not taking part in the discussion.
- Feel free to use your camera even when not speaking.
- Contribute and share your experiences, ideas and suggestions.
- Please remember that the event will be recorded - if you do not want to be recognized please rename yourself and switch off your camera.

The team



Marijke Hunninck (ILVO)



Katrien Broekaert (ILVO)



Siham Kourdi (ILVO)



Johannes Pfeifer (BLE)



Livia Ortolani (MIPAAF)



Alice Albertini (MIPAAF)

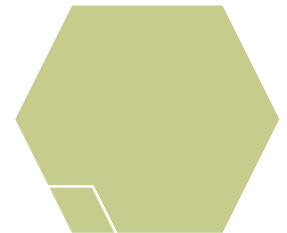
ERA- NET ICT AGRI FOOD



ICT-AGRI-FOOD is a network of national and regional funding organisations **promoting European research on ICT-enabled agri food systems, and offering innovative opportunities for the entire food chain.** ICT-AGRI-FOOD is funded under the European Union's Horizon 2020 research and innovation programme as an ERA-NET Cofund action.

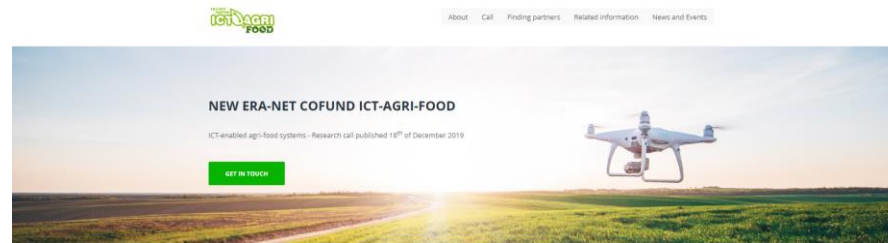
The **34** ICT-AGRI-FOOD consortium **partners** from **22 countries**, some already present from the beginning of ICT-AGRI and some new partners, are a broad and diverse community and it is one of the main pillars of the project and of its success.

This ERA-NET COFUND Action is lead by the German Federal Office for Agriculture and Food (BLE).

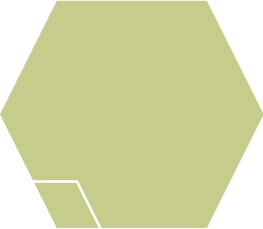


This project has received funding from the European Union's Horizon 2020 research and innovation programme under grand agreement no 862665 ICT-AGRI-FOOD.

OBJECTIVE

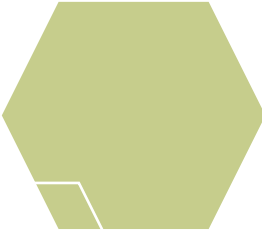


www.ictagrifood.eu



The overall objective of “ICT-AGRI FOOD” is **strengthening the cooperation in research, development and innovation** between EU Member and associated States to **foster, verifiably and perceptibly, the use of smart digital technology to make European food systems more sustainable, resilient and secure.**

NOT ONLY CALLS FOR RESEARCH PROJECTS



European Research Areas Networks (ERA NET) aim to connect research with relevant stakeholders and initiatives.

ICT AGRI FOOD implement a **knowledge incubator** for researchers, SMEs and start-ups funded within ICT AGRI FOOD Calls in order to improve knowledge management and facilitate the interaction of research with relevant stakeholders

THE KNOWLEDGE INCUBATOR



- The ICT-AGRI-FOOD Knowledge Incubator is a **networking space** based on an online tool.
- The **ICT-AGRI-FOOD community** involve all project partners of the projects funded by the current, previous and future ICT AGRI FOOD Calls and any additional stakeholder interested.
- The online tool, in addition to the information on the projects, will be organized as a **database of innovations** developed by the ICT-AGRI-FOOD community.
- We invited to this meeting the partners of the 19 projects funded with the 2019 co-funded call and the coordinators of the projects from the calls 2018 and 2017.

ICT AGRI FOOD KNOWLEDGE INCUBATOR



FUNCTIONS

- **Start ups and SMEs** interested in developing or using ICT tools in the AGRI-FOOD sector will have the opportunity for *networking, building partnerships* for products and project proposals development, *market analysis*, understanding of *innovation needs* of the agri-food sector and the *potential demand* for ICT technologies, match *technology demand and offer*.
- **Farmers, food sector, advisors and civil society working in rural areas** will have the possibility to share their *needs* with the ICT sector through an *interactive innovation model*.
- **Researchers and Research Institutions** will have the opportunity to gain *visibility for their research projects* and outputs, *interact with the industry* from the ICT, the Agricultural and the Food sector, understand the *research needs* and the *main trends* of the mentioned sectors, and learn about *funding opportunities*.
- **Funding bodies and policy makers** will have the opportunity to understand the *key topics* that need to be funded and to encourage the *valorization of the research* developed with their resources.



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ICT AGRI FOOD KNOWLEDGE INCUBATOR



AIM

Contribute to:

BUILDING THE SOCIAL INFRASTRUCTURE TO INTEGRATE ICT
Technologies within the AGRI-FOOD Sector

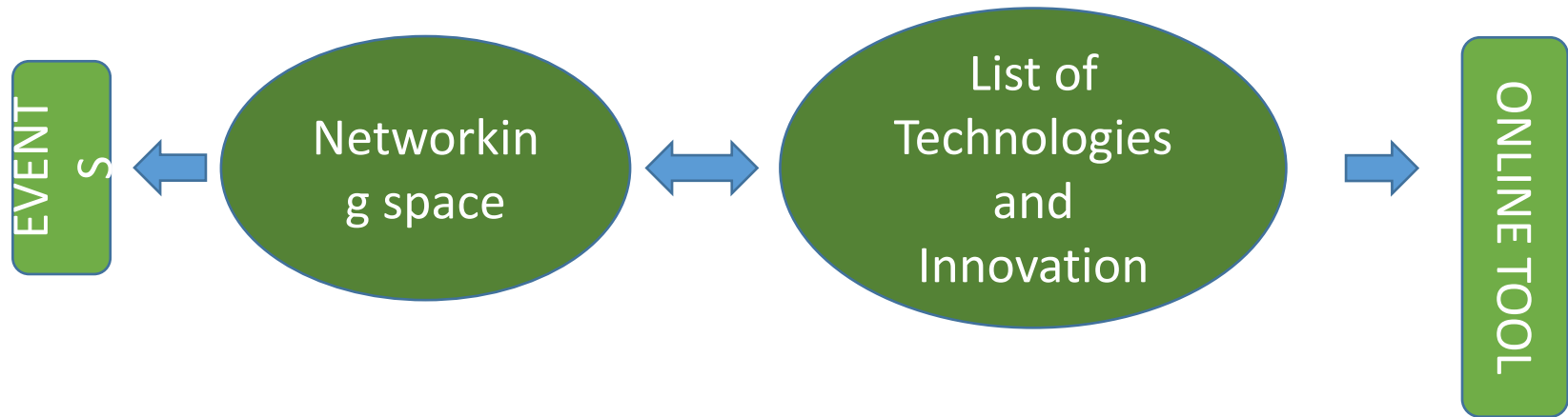


Making the knowledge of **funded research and innovation projects** available to relevant **stakeholders** and other **researchers**



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FROM PROJECTS TO INNOVATION....



technology/innovation names

+ TRL

+ *contact* with researchers/developers

+ *digital innovation stories* to show how it can be used.

...Starting from today

Common goals

- **Build our community** in order to be able to present ourselves to other platforms and stakeholders as a community
- **Share a common understanding** on what is the goal of our research in ICT-AGRI-FOOD
- **Contribute to build our database of innovation**, which is our common good. It will have value once we will have a reasonable number of innovation described.

What can I do?

Introduce each other and share research ideas and hypothesis

Follow the speakers in session 1 and 2 today

Actively participate in the group discussion this afternoon

Upload innovation even from other projects and research groups.

Future Events



- Ecosystem and network development
- Young Researchers Workshop



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More information: www.ictagrifood.eu



Participatory Platform Design

- Presentation of the form to describe the individual innovations
- Creation of 3 groups, focusing on ICT, AGRI and FOOD domains:

MAIN AIM: to select the categories for each domain that will facilitate the interaction with other databases and the possibility to find each innovation.

PROCESS:

1. Open discussion and individual comments to the list of categories proposed by the ERA NET team
2. Each participant will think individually to an innovation he knows and try to select relevant categories in the list.
3. In group, depending on the time available, some concrete cases of innovation will be discussed and, if needed, new categories will be added to the list.

	as RIS3 and TSSP-AF					
D7.2	Report on Kick-off WS of the "Knowledge Incubator"	WP7	23 - MIPAAF	Report	Public	18
D7.3	Implementation Plan related to T7.2	WP7	2 - DASHE	Report	Public	24
D7.4	First Report on ecosystem and network development	WP7	4 - EV ILVO	Report	Public	30
D7.5	Report on the results of the Young Researchers Workshop	WP7	2 - DASHE	Report	Public	30
D7.6	Updated Implementation Plan related to T7.2	WP7	2 - DASHE	Report	Public	48
D7.7	Second Report on ecosystem and network development	WP7	4 - EV ILVO	Report	Public	48

Participatory Platform Design

What are we going to do in the group work?

ICT-AGRI-FOOD Knowledge Incubator (KI):

- **networking space based on an online tool**
- the online tool is organized as a **database of innovations**

ICT-AGRI-FOOD

Knowledge Incubator



Participatory Platform Design

What are we going to do in the group work?

ICT-AGRI-FOOD Knowledge Incubator (KI):

- networking space based on an online tool
- the online tool is organized as a database of innovations

We have created an «**Innovation sheet**» to be filled in by you with **your innovative digital solutions**.

For each “innovation”, you can **describe how digital technologies can contribute to solve a specific problem in the agri-food-system**.

ICT-AGRI-FOOD

Knowledge Incubator



Participatory Platform Design

What are we going to do in the group work?

Each «Innovation sheet» of the innovation database has several entries to be filled in: sometimes there are open questions with free text, sometimes you have to select 1 or more options.

We would like to improve and validate the categories with you.

According to the preferences you gave for ICT or AGRI or FOOD domains at the registration step for this event, you will be splitted in 3 groups and we will discuss together on the «innovation sheets»

ICT-AGRI-FOOD

Knowledge Incubator



Participatory Platform Design

What are we going to do in the group work?

Process (in each group):



1. **Open discussion and individual comments** on the list of categories proposed by our team.
2. Each participant will **think individually** about an innovation she/he knows and **try to select** relevant categories in the list.
3. In group, depending on the time available, some concrete **cases of innovation will be discussed** and, if needed, **new categories will be added to the list.**

Participatory Platform Design

Why are we going to do this validation activity?

Aim of the group work:

to select the categories for each domain, increasing the possibility to find each innovation in the database and the encouraging the interactions with other databases.

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- We are asking your contribution because **we would like this database of innovations suits your funded projects best.**
- **We would like you to be involved in the whole process since its beginnning.**



Participatory Platform Design

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As soon as this database is rich in innovations, we are going to **increase its visibility and impact** of ICT-AGRI-FOOD community sharing experiences and data with other EU projects, catalogues and platforms (always respecting all Privacy Policies).

Participatory Platform Design

What are the digital innovations about?

- You are asked to fill in **at least 4 innovative digital solutions** per coordinator/representative.
- **Preferably linked to the funded projects** (e.g., ICT-AGRI-FOOD 2019 call and previous ICT-AGRI calls, ESA calls etc.).
- You can upload descriptive data but also **multimedia files** (e.g., photos, videos, presentations)
- On the platform, you can **leave comments** under each innovation description and **contact privately the developer of the innovation**.
- We encourage the **networking** between the participants of the ICT-AGRI-FOOD Knowledge Incubator!

INNOVATION

Each change in term of product, process, and organization referred to the agricultural, food and forestry system.

- Title
- Innovation description
- Problem Addressed
- Solution offered
- Team description, contacts and social media
- Refence project and funding framework (if any)
- Technology Readiness Level (TRL)



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➤ Innovation focus

- ICT domain keywords
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➤ Innovation type

Developing new processes

Developing new products

Organizational innovation



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➤ Innovation focus

- ICT domain keywords
- AGRI domain keywords
- FOOD domain keywords

➤ Innovation type

➤ Sector/Product

Aquaculture

Apiculture

Cereal crops

Olive growing

Animal husbandry

Etc.



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- Innovation focus
 - ICT domain keywords
 - AGRI domain keywords
 - FOOD domain keywords
- Innovation type
- Sector/Product
- Does the innovation come from Living Labs?
- Alignment with UN Sustainable Development Goals
- Space for uploading files (e.g., photo, audio, video, ppt, pdf)



ICT domain

- *Satellite data (navigation, communication and Earth observation)*
- *Drones and other automated guided vehicles*
- *Robotics/Automated farming*
- *Proximal sensors : a) local sensors, b) optical sensors, c) mechanical sensors, d) electrochemical sensors, e) dielectric sensors, f) airflow sensors, g) movement and temperature sensors, h) field weather stations*
- *Internet of Things – wireless sensors network*
- *Artificial intelligence (machine learning, deep learning)*
- *Farm management information systems (FMIS, including decision support systems)*
- *Blockchain technologies*
- *Applications (Apps)*
- *Barcode, RFID and other tags*
- *Digital maps*
- *Integrated platforms*
- *Cyber security*
- *Farmers' attitude toward ICT*
- *Big data technologies*
- *Data ownership*
- *Data governance*
- *Data sovereignty*

Starting categories

AGRI domain

- *Increase system productivity/competitiveness*
- *Pest, disease and weed management*
- *Water management*
- *Soil management (quality, fertility and functionality)*
- *Protect and promote biodiversity*
- *Increase energy efficiency*
- *Increase animal welfare and health*
- *Health and safety at work*
- *Prediction models (crops, weather, etc.)*
- *Agroecology*
- *Climate change mitigation (including reducing GHG emissions) and adaptation*
- *Valorisation of ecosystem services*
- *Agricultural Knowledge Innovation Systems (AKIS)*
- *Bioeconomy and circularity*
- *EU Policies, rural development and governance*

Starting categories

FOOD domain

- *Post harvesting crop management*
- *Food integrity/quality assessment*
- *Health and diet*
- *Food shocks and pandemics*
- *Traceability*
- *Packaging*
- *Supply chain management (e.g. cold chain, monitoring food quality, transportation, logistics) and transparency*
- *Reduction of food waste and losses*
- *Label and certification (certification procedures)*
- *Prevention of food and beverage fraud*
- *Communication between consumers, food retailers and food producers(e.g. nutrition label)*
- *Target Advertisement*
- *E-commerce*
- *Bioeconomy and circularity*

Starting categories

Thank you for your attention!

Livia ORTOLANI livia.ortolani.ext@politicheagricole.it

Alice ALBERTINI alice.albertini.ext@politicheagricole.it

ICT-AGRI-FOOD

Knowledge Incubator

