

# H-FARM<sup>®</sup>

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Boosting innovative Digitech Value chains for Agrofood, forestry and environment





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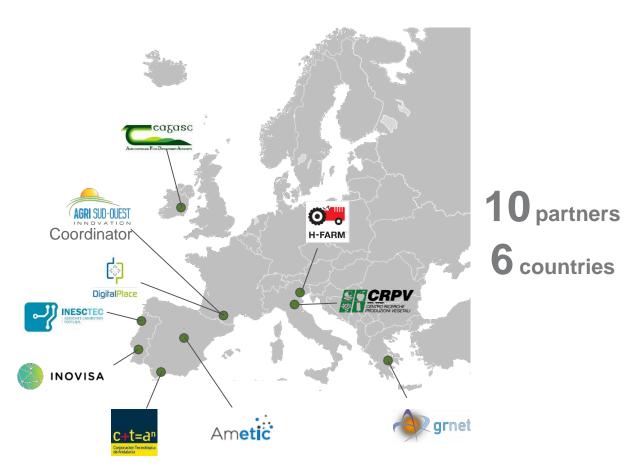
INOVISA







Key features: Cross-border





# DIVA in anutshell





An EU program to support innovation by SMEs

and foster the emergence of new value chains

with a cross-sectoral approach digital x agri-food sector

and other related sectors forestry or environment.

A cascade funding scheme with vouchers,

to support the **needs of SME** corresponding to **different TRL levels** 



# 1. Foster the emergence of innovation

### Workshops and seminars at national level

- Cross-sectoral approach between actors from digital and agri-food sectors
- Cross-sectoral approach with **emerging industries** (creative industry, logistics, new packaging, etc.)





# Digitech Value Chain

#### Value chain:

Production	Processing	Packaging	Distribution and Selling	Retail	Consumers
-Agro inputs: seeds, fertilizers - Tillage operations - Harvesting/ threshing	- Drying, milling, pressing, or cooling - Food processing	- Packaging and Storing - Warehouse	- Infrastructure and transport - Training - Selling, Market strategy	Retail: supermarkets, hypermarkets, corner shops, Markets, Restaurants	Final customer, consumer or user
Farmersand Cooperatives	Processing companies,agrofood industry	Storage and handling companies	Outbound Logistics	Retailers	Consumers

Source: FAO (2013); Best (2014); Sims, Flammini, Puri and Bracco (2015)

#### Technologies:



Data analytics & Big Data

Robotics Sensors Internet of Things

Decision Support **Systems** 



AI & Machine Learning

Marketplaces & Platforms



2. Offer a framework of innovation

### A framework of inspiration

- Mapping of digital trends and opportunities for the agri-food sector
- List of challenges proposed by stakeholders

### A network of demonstration facilities

- Farm or industrial facilities to test and demonstrate solutions in real environment
- Conditions of access formalized



# Trend Map





# 3. Support and fund innovation

### **Open innovation call**

- 3 instruments: maturation, demonstration, internationalisation

### Support selected projects

- Roadmap assessment
- Regular monitoring and assessment after 1 year

### Dec. 2<sup>nd</sup> 2019 Launch of DIVA open call #2

Deadline for submission: early February 2020





# DIVA for whom?

## SMEs

- Looking for a support for their innovative solution
- Vouchers direct beneficiaries

### Stakeholders

- Willing to express a challenge

# Mid-cap or Large compagnies

- Willing to work as partner of an SME (but not directly eligible)
- Ready to offer a demonstration facility to host a demonstration project

### Academics

- Offering their services in a project led an SME

### Demo sites manager

- Offering their services in a project led an SME







# Voucher scheme

# 3,1 M € of direct support to SMEs

	Voucheramount	Nb. SME	Nb. vouchers
Maturation	<b>10 K€</b>	Min 1	100
Demonstration	25 K€/60 K€	Min 2	35
Internationalisation	30 k€	Min 3	10
Expertise by partners	450 k€		150

### Max. 60 K €/SME



# Points of attention



### **SME EU Definition**

- Staff headcount : <250
- Turnover : <€ 50 M
- Balance sheet total : <€43 M€
- Shareholders : if > 25%



### Consortium

For collaborative projects; complementarity and crosssectoral with synergetic approach



### Localisation

Lead Partner must be a SME in a DIVA country.



- 10 pages max in English

- Excellence: give the needs, the market perspectives
- **Impact**: prove the innovativeness and relevance of the solution compared to competitors, explain leverage effect
- Implementation: explain what you will do, and budget adequacy, risk management









Example of maturation projects

>=1 SMF

### Concepts or ideas, with objective to make a Proof of Concept

- Technological maturation: Technological tests
- Business maturation: external expertise or own resources for business plan development

### 1. Agro-bits (Anserlog S.A.) - Technological maturation A single and reliable source of agrofood traceability based on blockchain technology (10 K€ voucher)

Activities:

Software Prototype Development: Development of storage engine, validation engine, mining engine, integration of the engines in a single system and development of user interface

### 2. TrueOrigin (Agroplanning S.L) - Business maturation

Co-creation of a sustainable and intelligent business model to cover food digital traceability and transparency at origin (10 K€ voucher)

### Activities:

- Market survey and study of competitive business models
- Analysis of customer and user requirements -
- Validation of Business model
- Demonstration and dissemination

Example of a Demonstration project

# Small and large scale

>=2 SMEs

SMEs from 2 different countries or sectors.

Farms cannot be a partner!



Demonstration in real life-like conditions

provided by demonstration facilities acting as test-beds – demonstration farms, laboratories, living labs-like facilities etc

- Small scale: addresses a specific part of the value chain (TRL5 to TRL6). The experimentation can be held in a single country.
- Large scale: demonstrates the whole value chain (TRL6 to TRL7). The experimentation should be ideally held in 2 countries at least.

## **1. AgroInnoSense (GRIDNET SA+ 3D SA- Greece) -** Small Scale Innovative telecom technologies for accurate spatial weatherforecasting

### Activities:

- Deployment in an operational environment in central Macedonia
- Validation of the technical and economic viability of an improved service,

### 2. C-Clair (Raison'Alpes + Technivue - France) – Large scale

Precision flower thinning service in orchards through blooming intensity mapping

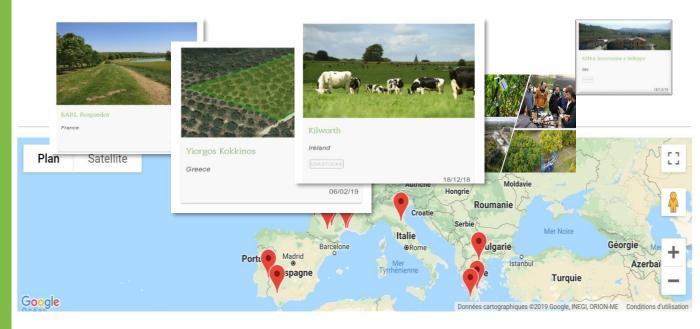
### Activities :

- Development of an integrated solution for blooming intensity mapping using embedded cameras
- Work with sprayers manufacturers to go towards precision spraying
- Live demonstration of the final service in 2 different apple orchards in France

# Demo Sites

#### Anetwork of demonstration facilities

- Farm or industrial facilities to test and demonstrate solutions in real environment





# Example of an Internationalisation project

>=3 SMEs

# SMEs from 2 different countries or sectors

Innovative solutions demonstrated in their countries



Innovative services or products already demonstrated with an international deployment objective

### ATA USAlmond (Agri MP + Apis Technology + Rigger - Portugal)

Set of solutions to improve water irrigation efficiency and needs, energy use as well as fertilization applications, a system to measure the pollination effectiveness by honey bees that growers rely on in order to grow their productions and a digital marketplace to help Californian growers, in this particular case, to better export to the European market (30 K€ voucher)

#### Activities:

- Select and contact the almond growers to be visited in USA
- Close at least 10 deals with almond growers during two business missions for an integrated system
- Attend relevant exhibitions in the agrofood area in order to promote the consortium solutions and meet potential clients
- The consortium detailed rather well the need to reach the US market. It's a project with a real purpose and the solutions had already been tested in the Portuguese market.

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