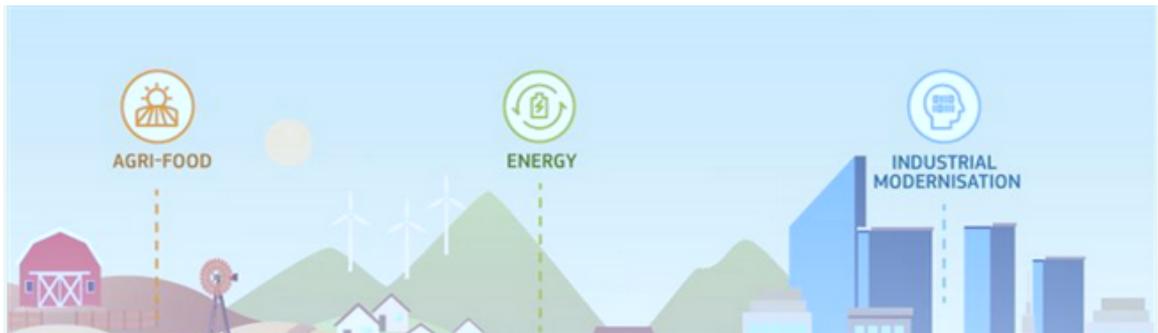


Thematic Smart Specialisation Platforms Monitoring Progress Report

Fields marked with * are mandatory.



Thematic Smart Specialisation Partnership Monitoring Progress Report

This report is presented to the relevant Working/Steering Committee.

The report is updated every six months.

Confidentiality:

The management report (section I) and progress report (section II) will be made available to the public via your Partnership's web page.

The part on self-assessment is confidential.

Based on the monitoring results, the European Commission will decide on the following term's support.

* Reporting period

January - June 2020

* Please select the name of your partnership

High Tech Farming

*** Start date of your partnership**

09/2016

Partnership's webpage

<http://s3platform.jrc.ec.europa.eu/high-tech-farming>

I. Management report

*** Please provide the executive summary and the objectives of your partnership**

S3 HIGH TECH FARMING Partnership is currently aggregating 36 Regional and National Administrations with a strong priority related with the innovation and adoption of new technologies in the agricultural sectors. The focus area relates with four Value Chains (VC): arables; horticulture; protected cultivations and livestock. They are segmented in the following technology areas: EYES and TOUCH (Meteo sensors, Soil sensors, Canopy sensors, Product sensors; On-board/proximal sensors), MIND (Data acquisition, Data analysis, Layers/images, DSS), INTELLIGENT ARMS (Machineries, Programming/Automation, Robotic), technology oriented SERVICES (Installing, Maintenance, Repairing), and educational oriented SERVICES (Training, Demo farms and sites). The Partnership was selected as one of the Pilot Partnerships under the DG REGIO support action launched in October 2017. Activities are currently developing towards two main directions:

1. Interregional Pilot Projects

The Partnership is developing a series of pilot projects based on shared priorities. Two Pilots have already been established (FreshFruit and Podur), other Pilots are under definition.

2. A joint undertaking to support interregional shared services among regional innovation ecosystems

The Partnership is aiming at consolidating the Interregional collaboration through a specific governance model that can better connect and support the different Regional Innovation Ecosystems and joint funding operations.

*** Please provide the list of leading regions**

Tuscany Region (Partnership coordinator)
Central Macedonia (Freshfruit Pilot coordinator)
Food Valley Regio (Podur Pilot coordinator)

*** Please provide the list of participating regions.**

*If possible, please follow this format: "Name of the region in English (Country abbreviation), NUTS code".
e.g.: Lapland (FI), F11D7*

Tuscany (IT)
Galicia (ES)
Extremadura (ES)
Gelderland (NL)
Central Macedonia (GR)
Marche (IT)
West Macedonia (GR)
Weser-Ems (DE)
South Holland (NL)
Limburg (NL)
North East Romania (RO)
Emilia-Romagna (IT)
East Sweden (SE)
Northern Ireland (UK)
Estonia (EE)
North Holland (NL)
Food Valley Regio (NL)
Pays de la Loire (FR)
South Ostrobothnia (FI)
Veneto (IT)
Noord Brabant (NL)
Basilicata (IT)
Flanders (BE)
Centro (PT)
Umbria (IT)
Luxemburg (Lux)
Bretagne (FR)
Norway (NO)
Friuli Venezia Giulia (IT)
Eastern Slovenia (SI)
Provincia Autonoma di Trento (IT)
Provincia Autonoma di Bolzano (IT)
Montenegro (
Slavonia (HR)
Vestland County Municipality (Norway)
Oulu (FI)

Please provide the list of interested regions or other entities (other than national /regional authorities)

Università di Firenze (IT)
CEA Tech (FR)
INL (PT)
Industrial Institute of Agricultural Engineering - Poznan
INDRA (ES)
Amadori (IT)
ABACO Group (IT)
Dronebee (IT)
Green Projects (GR)
Copeeks (FR)
Leonardo Company (IT)
INOV (PT)
CNR IFAC (IT)
CNR IBE (IT)
American Farm School (GR)
CG Wireless (FR)
CENTRIA University of Applied Science (FI)
FuTOUR (IT)
AEDIT srl (IT)

Please provide an overview of the **working areas** of your partnership

	Working area	Region in charge	Involved regions	Other actors
1	Pilot Project FRESHFRUIT	Central Macedonia (American Farm School)	Tuscany, Bretagne, Extremadura, Centro	RTOs, Companies, Farms
2	Pilot Project PODUR	East Netherlands (Regio Food Valley)	Östergötland, Bretagne, South Ostrobothnia, Extremadura, Emilia-Romagna	RTOs, Companies, Farms
3	Pilot Project on early detection of pests and diseases	Extremadura	Tuscany, Bretagne, Flanders, PA Bolzano /SudTyrol	RTOs, Companies, Farms
4	NEW - Prevention of large carnivores attacks on livestock	Tuscany	Tuscany, Extremadura, Central Macedonia, Castilla y Leon, Slovenia, Flanders, Romania	RTOs, Companies, Farms, NGOs
5	NEW - Automated monitoring of field machineries	Provincia di Bolzano / Sud Tyrol	Under definition	RTOs
6	NEW - Protection systems to face climate changes in ornamental cultivations	Tuscany (Coldiretti)	Under definition	RTOs, Farms
7	NEW - Precision animal husbandry in the organic sector	Friuli Venezia Giulia	Extremadura	RTOs, Companies, Farms
8				
9				

Please provide information regarding past meetings, workshops and dissemination activities (six months prior to filling out the survey)

	Event	Date	Place	Any other information
1	Partnership Meeting	30/06 - 01/07	Virtual event	The event aimed at discussing the Partnership governance model and establishing new working areas (Interregional Pilots)
2	World Café - Tuscany Region Community of Practice on Precision Farming - Progetto OPERA	27/05	Virtual event	Regional event aimed at promoting new project ideas for the S3 HTF Partnership within the Tuscan Community
3	Pilot case meeting: Early detection of pests and diseases	17/02	Virtual meeting	Coordination meeting organised by CICYTEX (Extremadura)
4	DigiPLACE project workshop	21/01	Brussels, Belgium	Presentation of the S3 HTF Partnership model and discussion with project partners (Construction Sector and ECTP).
5	TAF Seminar	4-5/06	Virtual event	Participation of experts from PODUR pilot project
6				
7				
8				
9				
10				

Please provide information regarding planned future meetings, workshops and dissemination activities

	Event	Date	Place	Any other information
1	Partnership meeting	20/21 October	Virtual event	Under planning - Topic: Governance
2				
3				
4				
5				
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II. Progress report

Innovative results

Please describe innovative results and achievements that could be attributed to the partnership (specific examples of results vs. objectives)

The Partnership has allowed regional actors to identify new cooperation opportunities in the target area of HTF. Several combinations of technologies provided by actors in partner Regions are currently tested and developed in interregional pilot projects (FRESHFRUIT & PODUR). FRESHFRUIT has enabled an intense collaboration to scale up new solutions (photonics and ICT) to be integrated in Farm Management Information Systems. A specific Business Model was submitted on 31 January 2020 by the partnership as a deliverable of the DG REGIO support. PODUR has enabled Regions to co-invest in the development of solutions to address the specific problem of dust production in poultry farms. The Partnership is continuing to promote pro-active collaboration among Regional Innovation Ecosystems and some pilot projects have resulted in proposals submitted under diverse funding initiatives:

- DIVA project support scheme;
- ICT-AGRI-FOOD ERANET call 2020;
- LIFE Programme call 2020;
- H2020 IoF call 2020;
- Tuscany ERDF Programme, call for innovative projects 2020;
- Greek National Programme for DIHs;
- ADD MORE IF NECESSARY

Tangible short- and medium-term socio-economic impacts achieved or expected (specific examples)

In the short-medium terms perspective the Partnership is expecting those Pilot projects to foster new valuechains and leverage the creation of new commercial opportunities, particularly through the development of a joint undertaking to provide new interregional services to Companies and Farmers. Each pilot case has a specific socio-economic value. The exact quantification is possible only after the completion of the pilots. Expected impacts are the following: creation of new businesses; reduction of costs in farming operations; reduction of environmental impacts; reduction of time-to-market of new solutions; improving farming capabilities and uptake of new technologies by farmers. Concerning the possibility of establishing a form of interregional joint undertaking, currently the partnership is studying the possibility of establishing an association of European value. This step would allow a strong socio-economic impact as, at the moment, there are no such form of initiatives devoted to integrate regional innovation ecosystems on this specific topic. The initiative could fill in this gap and generate important benefits (eg. bigger interregional projects, interregional alignment in expenditure, interconnections of regional initiatives, a broaden ecosystem for regional actors, etc.).

Inter-regional and inter-partnership collaborative results

Additional results obtained from working with other partnerships under the thematic S3 Platforms (specific examples)

The partnership is benefiting from regular exchanges with ERIAFF, a broad Network of European Regions active in promoting Innovation in agriculture, food and forestry (www.eriaff.com).

The Partnership has also established collaborations with European Projects and Initiatives:

ERANET ICT-AGRI-FOOD

H2020 NEFERTITI Project

H2020 SMART-AGRI-HUBS Project

EIT FOOD KIC

H2020 AGROBOFOOD Project

H2020 IOF Project

The Partnership has been affiliated to the S3 Industrial Modernization Platform.

Evaluation of the involvement of relevant business sector (clusters, SMEs, business associations, chambers of commerce, Digital Innovation Hubs (DIHs), etcetera) in the Partnership activities (specific examples)

The Partnership is relying on the participation of many actors from the business sector. The engagement of the businesses has to be considered satisfactory as it allows the generation of the the current pilot projects. Eg. 1. American Farm School in Central Macedonia is directly responsible of a pilot project on the development of new solutions for controlling and managing the quality of table grape, embedding Italian, Portuguese and French technologies. 2. ABACO Group (international software house) has established a cooperation with Alberese Farm in Tuscany to support the development of the Interregional Interface proposed in the DG REGIO Pilot Action. 3. The Poultry Cluster in Barneveld is mobilizing companies to test solutions in different european sites thanks to the cooperation within the S3 Pilot. The testing is about technical solutions to reduce fine dust in poultry houses and sensing technology to measure the amount of dust. Anses Brittany is interested in the relation between dust reduction and reduction of endo toxins. Copeeks SAS Lannion (France, Brittany) has signed an agreement with Poultry Expertise Centre (Netherlands, Foodvalley) to do a pre-test on the applicability of their sensor in poultry houses. 4. Big companies such as INDRA and Leonardo are participating proactively to technical meetings.

Evaluation of whether the level of inter-regional cooperation is sufficient to potentially provide practical and relevant socio-economic impacts (specific examples)

The pilot business cases have a strong potential to leverage impacts at socio-economic level. The cooperation at interregional level within the pilots is extremely relevant as in each pilot at least 3 regional actors are actively promoting the development of joint business oriented actions.

The number of interregional pilots is growing along 2020, indicating that the interest from partners is still strong.

At level of each single pilot, there are some estimates related to potential impacts, which are expected at both economic and socio-environmental level.

New activities

Involvement of regions from EU13 Member States in the Partnership, in particular with respect to scoping, mapping and/or matchmaking. In addition, justification should be provided if no EU13 regions are involved

Slovenia, Romania, Estonia, Poland and Montenegro

Involvement of regions/countries from outside of EU28 Countries. (Number of participants from non-EU countries (specify their contribution)

Norway, Republic of Northern Macedonia

Advancement and promotion of the Partnership through publications and other communication/outreach activities (number of outreach activities that resulted from the partnership)

The partnership has promoted the activities with different means but it has not yet implemented a specific coordination for this kind of actions.
In general terms, each Pilot Project has adopted specific promotional actions.
The FRESHFRUIT pilot business case has created a Facebook page.
FRESHFRUIT will be also included in the partner section of the web site of Macedonian Vineyards.
Due to the pandemic, the Partnership could not be very active with external dissemination and networking events.

Activities and projects with partnerships working under other S3 Thematic Platforms (AgriFood, Energy and Industrial Modernisation)

None

Your Partnership and the UN 2030 Sustainable Development Goals (SDGs)

The EU has a strong position when it comes to sustainable development and is also fully committed to be a frontrunner in implementing the UN's 2030 Agenda, together with its member countries and regions. Many interregional partnerships under the thematic S3 Platforms contribute strongly to the attainment of these 17 goals.

Please indicate to which Sustainable Development Goals and to what extent your thematic Partnership contributes?

	Strongly agree	Agree	Neutral	Disagree	Strongly disagree	Not applicable
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Goal 1. End poverty in all its forms everywhere	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Goal 2. End hunger, achieve food security and improved nutrition & promote sustainable agriculture	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Goal 3. Ensure healthy lives & promote well-being for all at all ages	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Goal 4. Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Goal 5. Achieve gender equality & empower all women and girls	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Goal 6. Ensure availability and sustainable management of water and sanitation for all	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Goal 7. Ensure access to affordable, reliable, sustainable and modern energy for all	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Goal 8. Promote sustained, inclusive and sustainable economic growth, full and productive employment & decent work for all	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Goal 9. Build resilient infrastructure, promote inclusive and sustainable industrialisation & foster innovation	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Goal 10. Reduce inequality within and among countries	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Goal 11. Make cities & human settlements inclusive, safe, resilient and sustainable	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Goal 12. Ensure sustainable consumption & production patterns	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Goal 13. Take urgent action to combat climate change and its impacts	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Goal 14. Conserve and sustainably use the oceans, seas & marine resources for sustainable development	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>
Goal 15. Protect, restore and promote sustainable use of terrestrial ecosystems, sustainably manage forests, combat desertification, halt and reverse land degradation and halt biodiversity loss	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Goal 16. Promote peaceful & inclusive societies for sustainable development, provide access to justice for all and build effective, accountable and inclusive institutions at all levels	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>
Goal 17. Strengthen the means of implementation and revitalise the Global Partnership for Sustainable Development	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

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