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D6.1 A list of relevant ESIF projects

June 2019



NEFERTITI

Networking European Farms to Enhance Cross Fertilisation and Innovation Uptake through Demonstration

(D6.1 A list of relevant ESIF projects)



Document Summary

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Description of the deliverable

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Networking European Farms to Enhance Cross Fertilisation and Innovation Uptake through Demonstration

(D6.1 A list of relevant ESIF projects)



Description

Deliverable 6.1 is a list of relevant ESIF projects. So, projects that are financed by the European Structural and Investment Funds. These funds support local and regional projects that contribute to job creation and a sustainable European economy. Once the list is set up, a connection will be made between the project and the NEFERTITI demonstration activities. Other projects than projects funded by ESIF (National programs – Horizon 2020 – LIFE - Regional funds – etc...) are also mentioned in the list in order to improve the connectiveness of NEFERTITI hubs and networks with the relevant thematic ecosystems at all territorial scales.

Goal of Work Package 6

The goal of Work Package 6 is to engage a policy dialogue and to seek for the network sustainability. So, ensuring a sustainability of NEFERTITI after the project life time through an efficient synergy of different funds (EU, national, regional, private) allowed by a close cooperation among all actors (and specifically policy makers) and the uptake of NEFERTITI's results by these existing initiatives. A connection will be both made with the ERIAFF network and the Thematic Partnerships of the S3 Agri-Food Platform. These connections of the different platforms will create synergies and empower the dissemination activities of NEFERTITI towards a wide range of actors, ESIF projects and policy makers.

Goal of the connection with the ESIF projects

The primary goal to connect NEFERTITI with these ESIF projects is to connect NEFERTITI with the local/regional/national (depending on the country) AKIS: to provide support on demo activities towards these projects and to show to policy makers that NEFERTITI activities are embedded in the local innovation ecosystem and that Demonstration provide added-value to the territory.

When connecting different ESIF projects with the NEFERTITI activities, there will be a cooperation established between the project and the NEFERTITI platform. In several ways they will both help each other. The NEFERTITI platform will give the projects the opportunity to show the project results and best practices to the farmers through demonstrations. This will help the projects to disseminate knowledge and lessons learned. On the other hand, the project will provide on the NEFERTITI platform relevant information that can be used in the organization of the demonstration activities. Also, the project results will be in the data base of NEFERTITI which is accessible for all farmers and innovation actors.

The connection will also help in the sustainability of the NEFERTITI network. It will help to increase the use of demo farms in other projects, as well as to disseminate knowledge in general and foster cross-fertilization among actors and initiatives. For WP6 specifically, it will help to show to policy makers the advantages of demo farms and the use of demo farms by other projects and actors.

Type of relevant projects

There are different kinds of projects that are relevant. The most important criteria is that the theme of the project has to be the same as one or more of the themes of NEFERTITI. Besides that, it is also more impactful if farmers are a partner in the project and if the project is about applied science and farming best practices, so the results can be directly transferred to the farmers. It is not mandatory that a project already uses a demo farm. However, it makes it easier to connect to the NEFERTITI network.

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Actions taken

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Actions taken

To collect the relevant ESIF projects, we have used different channels:

1. First, we have searched for relevant projects in the partner countries of the WP Leader 6 and WP Co-Leader 6, as an experience to find out how we can find the projects and what the results are. So, we started with the Netherlands and Italy. The first research of relevant ESIF projects has been made possible because the WP6 Leader and Co-leader are also ESIF Managing Authorities in their respective countries (Region Zuid-Holland and Region Tuscany) and have good knowledge on the programs they manage and easy access to the relevant data of their ESIF programs. These programmes all have a website where the projects could be found.
2. Since we need to search for relevant projects in all 17 NEFERTITI countries, and beyond in the whole EU, we have asked the hub coaches of the NEFERTITI network to search for any project thematically relevant for their Thematic Network. It was also important to raise awareness of the Hub Coaches with regards to the added-value of this connection with other projects and look for cooperation between projects.
3. We also contacted the EIP AGRI Service point to collect a list of relevant projects funded under the Rural Development Programme and specifically “RDPs Operational Groups” funded under measure 16.1 (and eventually 16.2). Their system provided a list of relevant Operational Groups.

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Results

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Results

List of relevant projects

The relevant projects found are organized by thematic network of the NEFERTITI project. Some projects are relevant for more than one network (but the project is only once written down below one of the relevant networks, so not multiple times). The type of program that finances the project is visualized with a colour. EU programmes such as Horizon and Life are **blue**. ESIF projects are **red**. Operational groups are **green**. Regional programs are **orange**. And national programs are **purple**.

Network 1 – Grassland & carbon sequestration

Smart Grass Production – Operational Group EIP Agri

Maximum grass production of top quality with minimal environmental impact. Low-emission precision fertilization consisting of organic and inorganic plant nutrition. In doing so, the entire plot is used for uniform crop from side to side. In addition to slurry use of residual flows such as nitrogen from air scrubbers and mineral concentrates. The use of the most modern types of grass creates the maximum amount of roughage with the correct mineral composition that is needed for a cycle without leaching and emission losses. And that at the lowest possible cost.

- Involved country: the Netherlands

- Lead partner: Stichting Stimuland Overijssel (wpasman@stimuland.nl)

<https://ec.europa.eu/eip/agriculture/en/find-connect/projects/smart-grass-production-0>

- also relevant for Network 2

PPS Ruwvoedermanagement en Bodembeheer – National rural program

A public private partnership working on a more sustainable roughage production, taking into account sustainable soil management.

- Involved country: the Netherlands

- Lead partner: Wageningen University and Research (wijnand.sukkel@wur.nl)

<https://www.wur.nl/nl/Onderzoek-Resultaten/Projecten/PPS-Ruwvoerproductie-en-bodemmanagement-1.htm>

- also relevant for Network 3

Grondig boeren met mais – ERDP

A demonstration project to test sustainable maize cropping systems with farmers.

- Involved country: the Netherlands

- Lead partner: Wageningen University and Research (john.verhoeven@wur.nl)

<https://www.grondigboerenmetmais.nl/>

- also relevant for Network 3

Agro MEATS nature – Regional program

The Agro MEATS Nature project aims to bring agriculture and nature closer together and to work together on the basis of a positive story and with a win-win for both parties. Farmers must be able to remain active in areas considered a nature reserve and an economic added value must also be created for extensive meat production.

- Involved country: Belgium

- Lead partner: ILVO (info@innovatiesteunpunt.be)

<https://www.innovatiesteunpunt.be/nl/projecten/agro-meats-nature>

Life carbon dairy – National program

Dairy production generates greenhouse gas (GHG) emissions but can regulate climate through carbon storage in soils. The main objective of the LIFE Carbon dairy project is to promote a milk production approach that is capable of reducing GHG emissions by 20% over 10 years.

- Involved country: France

- Lead partner: Institut de l'Élevage (catherine.brocas@idele.fr)

<http://www.carbon-dairy.fr/>

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Beef carbon – LIFE

The LIFE BEEF CARBON project aims to better measure GHG emissions and carbon storage, identify, demonstrate and disseminate innovative good practices on farm to significantly reduce greenhouse gas (GHG) emissions and the beef carbon footprint by 15% from now to 2025. Are included demonstrative farm observatory (2 000 beef farms) and 170 innovative farms to test/apply/promote innovative practices.

- Involved country: France

- Lead partner: Institut de l'Elevage (josselin.andurand@idele.fr)

<http://idele.fr/index.php?id=2487>

4/1000 INITIATIVE

The international initiative "4 per 1000", consists of federating all voluntary stakeholders of the public and private sectors under the framework of the Lima-Paris Action Plan (LPAP). The aim is to demonstrate that agricultural soils can play a crucial role where food security and climate are concerned. This initiative invites to implement some practical actions on soil carbon storage (agroforestry, agroecology, conservation agriculture, landscape management).

- national groups and exchanges (183 members) (secretariat@4p1000.org)

<https://www.4p1000.org/>

Farming Rathcroghan Project- Sustainable Farming in the Rathcroghan Archaeological Landscape

Manage the landscape in order to sustain a viable and vibrant livelihood for its farming community. Promote, preserve and conserve the archaeological, cultural and ecological heritage of the area. Improve water quality and biodiversity. Promote best practice in relation to carbon sequestration initiatives. Devise a system of dynamic pedestrian route-ways to provide public access to the landscape. Increase awareness and recognition amongst the general public of the significance of Rathcroghan as a farmed archaeological landscape and of the central role of its farming community in its care and conservation.

- Coordination: Ireland (info@rathcroghan.ie)

<https://ec.europa.eu/eip/agriculture/en/find-connect/projects/farming-rathcroghan-project-sustainable-farming>

Alternative forage systems for marginal land

The project aims to assess the optimum grass ley mixtures suited to the high rainfall conditions, poor soil quality and low input systems on marginal land within the South Wales Valleys, compared to conventional ryegrass/clover leys. The project will compare different seed mixtures on three separate farms over a three-year period. By comparing outputs from the project farms, this will provide information on the relative productivity of two very different species mixtures.

- Coordination: United Kingdom (Will.John@adas.co.uk)

<https://ec.europa.eu/eip/agriculture/en/find-connect/projects/alternative-forage-systems-marginal-land>

Nutrient-efficient land concepts for grassland sites

The aim of the project is the development of digitally based land management concepts for typical grassland sites in Schleswig-Holstein. For the first time, area-based soil, crop and yield data are collected, processed and used for the development of the digital land management concept. So for example, the direct connection between the currently existing soil properties, the plant stock and selected yield and quality parameters is established on practical land.

- Coordination: Germany (mmueller@lksh.de)

http://www.eip-agrar-sh.de/en/eip-innovationprojects/project-details-call-2/?tx_wqipinnovationsprojekte_pi1%5Binnovationsprojekt%5D=58&tx_wqipinnovationsprojekte_pi1%5Baction%5D=show&tx_wqipinnovationsprojekte_pi1%5Bcontroller%5D=Innovationsprojekt&cHash=a52a344df5d24764af93758247c59a75

Pasture for pollinators

A group of six dairy farmers who are members of the Calon Wen Milk Co-operative are aiming to boost pollinator numbers on their farms through a 3-year EIP Wales project. The project explores how forage resources on dairy farms can be managed to conserve and enhance populations of bumblebees and other pollinators. The aim is to increase the number and diversity of food plants, the period in which they are in flower, and the productivity and financial performance of farms. The role of grassland has received little attention, and in the Welsh context, where livestock and therefore grass-based systems are heavily dominant, this represents a significant omission.

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- Coordination: United Kingdom (tony@sustainablefarming.co.uk)
<https://pasturesforpollinators.com/>

Network 2: Data driven decisions for dairy farmers

Development of a practical tool for farmers & consulting specialists to support farm-specific udder health strategies – RDP operational group

Farmers, veterinarians, consultants, and scientists work together in the OG on the development of an innovative, computer-aided tool for farmers, intended to assist farmers and their advisory specialists in dairy farms with making decisions regarding their individual udder health management. This tool will be applicable to both organic and conventional farms. In the case of udder health disorders, it leads to the derivation of farm specific recommendations for action and schedules of measures.

- Involved country: Germany
- Lead partner: Ökoring Versuchs- und Beratungsring Ökologischer Landbau im Norden (info@oekoring-sh.de)
http://www.eip-agrar-sh.de/en/eip-innovationprojects/project-details-call-2/?tx_wgeipinnovationsprojekte_pi1%5Binnovationsprojekt%5D=63&tx_wgeipinnovationsprojekte_pi1%5Baction%5D=show&tx_wgeipinnovationsprojekte_pi1%5Bcontroller%5D=Innovationsprojekt&cHash=ca9a6b568dfb057a87a702305aae4e03
- also relevant for Network 3

Kuvaa Nautaa project: Thermal imaging in cattle health care – Regional program

Thermal imaging camera can be used to detect various common health issues of cattle for example mastitis. Thermal imaging can reveal infection in its early stages even before more visible symptoms are developed. Early detection makes early treatment possible, which means healthier cows and less money spent. However, the use of this technology is limited by the lack of practice-oriented information. The objective of Kuvaa Nautaa project is to develop a comprehensive information package on the use of thermography in cattle health care. These instructions are designed for farmers as well as for veterinarians, hoof trimmers and agricultural experts.

- Involved country: Finland
- Lead partner: National Resources Institute Finland (savonia@savonia.fi)
<https://kuna.savonia.fi/in-english>

Internet of Food & Farm – Horizon 2020

IoF2020 is designed to generate maximum impact right from the outset and in the long-run, bringing closer together and integrating the supply and demand sides of IoT technologies in the agri-food sector: from the supply side, the project contributes to securing Europe's leading position in the global IoT industry by fostering a symbiotic ecosystem of technology providers and players from the agri-food sector, as well as promotes innovative/disruptive business models. From the demand side, the project helps accelerate the virtuous cycle of adoption and maturation of IoT technologies in the agri-food sector to guarantee safe and adequate food for upcoming generations of European citizens.

- Involved country: 22 EU countries
- Lead partner: Wageningen University and Research (george.beers@wur.nl)
<https://www.iof2020.eu/>
- also relevant for Network 5,7,8,9

SmartAgriHubs – Horizon 2020

SmartAgriHubs is a €20 M EU project under the Horizon 2020 instrument, and brings together a consortium of well over 164 partners in the European agri-food sector. The project aims to realize the digitization of European agriculture by fostering an agricultural innovation ecosystem dedicated to excellence, sustainability and success.

- Involved country: 33 (EU) countries
- Lead partner: Wageningen University and Research (george.beers@wur.nl)
<https://smartagrihubs.eu/>
- also relevant for Network 5,7,8,9

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FairShare – Horizon 2020

The overarching aim of FAIRshare is to ensure that farm advisors and their organizations effectively use digital tools and services for supporting a more productive and sustainable agriculture.

- Involved country: 32 (EU) countries
- Lead partner: TEAGASC

<https://cordis.europa.eu/project/rcn/218342/factsheet/en>

- also relevant for Network 5,7,8,9

DISARM – Horizon 2020

The DISARM thematic network (Disseminating Innovative Solutions for Antibiotic Resistance Management) is focused on disseminating best practices from innovative farms and research on how to reduce antibiotic resistance in livestock farming. Antibiotic resistance management is not only important to farming, it can also lead to reduced effectiveness of antibiotics in treating humans. Tackling antibiotic resistance is a major strategic challenge for European livestock farmers, an industry worth over 145 billion euros. Evidence shows that rates of antibiotic use and resistance vary greatly from farm to farm and, that with the adoption of appropriate innovative on farm management practices that both the use of antibiotics and the development of resistance can be reduced. Disseminating these effective management practices is at the heart of the DISARM project, which will work with farmers, vets, advisors, industry and researchers to identify and disseminate widely the most cost effective and beneficial strategies.

- Involved country: 9 EU countries
- Lead partner: ILVO (frederik.leen@ilvo.vlaanderen.be)

<http://disarmproject.eu/>

- also relevant for Network 3

GenTORE – Horizon 2020

GenTORE (Genomic management tools to optimize resilience and efficiency.) will develop innovative genome-enabled selection and management tools to empower farmers to optimize cattle resistance and efficiency in different and changing environments.

- Involved country: 11 EU countries
- Lead partner: INRA (nicolas.friggens@agroparistech.fr)

<https://www.gentore.eu/>

- also relevant for Network 3

On-Farm measurement of Milk Urea – development of a sensor – National Operational Group

The purpose with this developing project is to develop a sensor to monitor milk urea N (MUN) concentrations of individual cows to enable diet adjustments.

- Involved country: Sweden
- Lead partner: SLU (peter.uden@slu.se)

<https://www.slu.se/en/departments/animal-nutrition-management/news/on-farm-measurement-of-milk-urea---development-of-a-sensor/>

- also relevant for Network 3

MESRASA: improvement of collection systems and animal health warning – National Operational Group

With the information dead animal collection system, establish a health alert system in real time in cattle farms, using algorithms already developed. In addition, the basis for a real-time syndromic surveillance system will be established.

- Involved country: Spain
- Lead partner: Coordinadora de Organizaciones de Agricultores y Ganaderos

<https://4d4f.eu/content/mesrasa-improvement-dead-animal-collection-and-health-alert-systems>

- also relevant for Network 3

Baltic Slurry Acidification – Interreg Baltic Sea region

Reducing nitrogen loss from livestock production by promoting the use of slurry acidification techniques in the Baltic Sea Region.

- Involved country: 9 EU countries
- Lead partner: Research Institutes of Sweden (erik.sindhoj@ri.se)

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<http://balticslurry.eu/>

- also relevant for Network 3

Manure Standards – Interreg Baltic Sea region

Advanced manure standards for sustainable nutrient management and reduced emissions.

- Involved country: 9 EU countries

- Lead partner: National Resources Institute Finland (sari.luostarinen@luke.fi)

<https://projects.interreg-baltic.eu/projects/manure-standards-92.html>

- also relevant for Network

Dairy 4 Future – Interreg Atlantic area

From Scotland to the Azores, the Dairy-4-Future project aims to increase the competitiveness, sustainability and resilience of dairy farms through the development of innovative and efficient dairy systems and increased cooperation between research and development stakeholder groups.

- Involved countries: UK, Ireland, France, Spain, Portugal

- Lead partner: Institut de l'Elevage (Andre.Legall@idele.fr)

<https://dairy4future.eu/>

- also relevant for Network 3

Dairy Lean Group – RDP Operational Group

The five farms involved in trialling the management system will be supported throughout by an agricultural consultant trained in lean management methods for dairy farming. This will involve monthly on-site visits to coach, support progress and share best practice to inform the refinement of the DNAV tool. The consultant will co-ordinate project activities on farm, evidence gathering and reporting to the Operational Group. Part of the consultant's role will be to monitor how well the functionality of DNAV system, which uses both mobile phone and tablet technology to put data capture into the hands of the people at the point they are doing the work on the ground, will work in practice. The system is designed to be a two-way communication tool, as it talks back to the farm team, flagging issues when farm performance is off plan, and shares real time information with the farms advisory teams - financial, business, nutritional, vets and, and shares real time information with the farms advisory teams - financial, business, nutritional, vets and agronomists. The farm consultant will identify any skills gaps identified to ensure a successful project outcome. 3. The support of a project.

- Involved country: UK

- Lead partner: Reaseheath College (annettem@reaseheath.ac.uk)

<https://ec.europa.eu/eip/agriculture/en/find-connect/projects/dairy-lean-group>

INNOPROLATTE – FEASR

The project proposal aims to obtain a final product (mainly raw milk and secondarily dairy products) characterized by excellent quality and ethical content, appreciated by a wide range of consumers; the tool to achieve this result will be the improvement of the welfare of dairy cattle in Basilicata, through the application of procedures that overcome the constraints prescribed by mandatory legislation. The project proposal is articulated: (a) In an initial phase of monitoring data on animal health and milk quality in all 39 stables. In addition to the data mentioned above, a pool of pilot stables will be used to carry out an in-depth survey of the indicators on animal welfare; (b) Identification and subdivision of stables into clusters for intervention; definition of intervention methods and timing; (c) Application of the corrective measures suggested by the protocol in the pilot stables; (d) Monitoring of the results obtained by means of animal welfare indicators, health status and production quality in the pilot stables; (e) Classification of the pilot stables that will have reached an optimal score, in terms of animal welfare; this classification will allow a future enhancement of the ""Animal Friendly"" dairy products.

- Involved country: Italy

- Lead partner: Agricola Lillo Societa' Semplice (info@innoprolatte.it)

<http://www.innoprolatte.it/>

- also relevant for Network 3

**Regions4Food – Thematic partnership Interreg**

This is a project which is being executed by 7 partners and its main objective is to improve the deployment of the regional policy instruments focused on maximizing the innovative potential of all actors within the agri-food value chain by using ICT.

- Involved country: the Netherlands, Italy, Finland, Hungary, France and Spain
- Lead partner: Andalusia

<https://www.interregeurope.eu/regions4food/>

- also relevant for Network 3,5,8 and 9

Digitization - Tractor Data Modem Integration for manufacture-independent real-time data transmission, analysis and evaluation

Digitization offers agriculture a variety of options for recording, documenting and optimizing work steps. Many technical solutions have so far only been isolated solutions. Thus, e.g. the overall recording and exchange of data from newer and older machines of different manufacturers with digital platforms is still difficult. The OG wants to develop a router for agricultural machinery, which collects production-relevant technical data via interfaces and transmits them via mobile communications to the project-specific database.

- Coordination: Germany (Lehmann.Matthaei@fh-kiel-GmbH.de)

http://www.eip-agrar-sh.de/en/eip-innovationprojects/project-details-call-2/?tx_wgeipinnovationsprojekte_pi1%5Binnovationsprojekt%5D=51&tx_wgeipinnovationsprojekte_pi1%5Baction%5D=show&tx_wgeipinnovationsprojekte_pi1%5Bcontroller%5D=Innovationsprojekt&cHash=7322fe9e029903ceb3138669a1ca877e

Night Milk - Assessing the reliability and economic benefit

Melatonin is the hormone contained in milk that helps control sleep and wake cycles and is produced naturally by the cow in response to darkness. Two dairy farmers in the Bridgend area are involved in an EIP project which could potentially find the best milking system to increase Melatonin in their herds' milk. Both farms are 3 times a day dairy system that are milking their entire herd at 8-hour intervals. At present the milk from the three milking is pooled together, but in this 13-month project the milk produced during daylight and darkness will be sampled separately. The project will determine whether there is enough Melatonin in the night milk to brand it for its sleep-inducing properties.

- Coordination: United Kingdom (russell.thomas@thomas-bentley.com)

<https://ec.europa.eu/eip/agriculture/en/find-connect/projects/night-milk-assessing-reliability-and-economic>

Network 3: Robust organic livestock systems**Working group extended suckling period – RDP Operational Group**

The Operational Group aims at demonstrating the positive effects and practicality of an extension of the piglet suckling period to at least 49 days, and at making available guidance documents. The concept of an extended suckling period demonstrates a possible solution for reducing the problems around the weaning of piglets and improving the piglets' health and welfare.

- Involved country: Austria
- Lead partner: FIBL (anja.eichinger@fibl.org)

<https://ec.europa.eu/eip/agriculture/en/find-connect/projects/arge-verl%C3%A4ngerte-s%C3%A4ugezeit>

Dairy demo farm – Regional RDP Measure 16.2 pilot project

The aim of the regional pilot project is to set up a demo farm on organic dairy production in INTIA's experimental farm in Roncesvalles (Navarra). The demo farm will use rotational grazing and renewable energy, producing only under organic conditions. The farm is connected to a regional stakeholder producing cheese and yogurt for the local short value chain.

- Involved country: Spain
- Lead partner: INTIA

Testing easily digestible red & white clover pellets in feed for laying hens – RDP Operational Group

Protein is an essential element in the feed of laying hens. Currently, the farmers of the Operational Group feed their laying hens with pellets containing sesame seed meal as source of protein. The group seeks to test and evaluate red and white clover as alternative sources of protein in organic egg production.

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- Involved country: Austria
- Lead partner: Peter Probst (farmer) (naundorf@gmx.de)
<https://tporganics.eu/testing-easily-digestible-red-white-clover-pellets-in-feed-for-laying-hens/>

Organic beef cattle production based on pasture in dehesa ecosystem: Production & commercialization improvement – RDP Operational Group

The OG will address fattening beef calves on pastures; improving beef calf homogeneity; applying precision grazing and canopy sensing to improve the efficiency of pasture use while preserving biodiversity; and making farmers' contribution on biodiversity preservation visible to consumers and society, using the achieved biodiversity results as a marketing tool.

- Involved country: Spain
- Lead partner: ADEHECO (marketing@adeheco.com)
<https://tporganics.eu/organic-beef-cattle-production-based-on-pasture-in-dehesa-ecosystem-production-commercialisation-improvement/>

Konzeption einer Ökologischen Hühnerzucht - mit besonderer Beachtung einer möglichen Zweinutzung – National (BÖLN)

In the project, the first steps towards an independent organic chicken breeding in Germany are taken.

- Involved country: Germany
- Lead partner: Bioland Beratung GmbH (elias.schmelzer@bioland.de)
<https://www.bioland.de/infos-fuer-erzeuger/praxisforschung/oekohuhn.html>

Demonstrationsbetriebe Ökologischer Landbau - National (BÖLN)

Organic farms who demonstrate their practice to consumers, farmers etc.

- Involved country: Germany
- Lead partner: Ökolandbau
<https://www.oekolandbau.de/bio-im-alltag/bio-erleben/unterwegs/demonstrationsbetriebe/demobetriebe-im-portraet/>
- also relevant for Network 6,7,9

RELACS – Horizon 2020

Replacement of Contentious Inputs in Organic Farming Systems' (RELACS) will foster the development and facilitate the adoption of cost-efficient and environmentally safe tools and technologies, to phase out the dependency on and use of inputs considered contentious in organic farming systems.

- Involved country: 12 EU countries
- Lead partner: FIBL (lucius.tamm@fibl.org)
<https://relacs-project.eu/>
- also relevant for Network 4,6,7,9

BioRegio Bayern – Regional Program

The production of organic products from Bavaria is to be doubled by 2020. The state government has set this as a political goal. In future, the demand for organic food is to be met more strongly from domestic, regional production.

- Involved country: Germany
- Lead partner: Bayerisches Staatsministerium für Ernährung, Landwirtschaft und Forsten (cordula.rutz@lvoe.de)
<https://www.stmelf.bayern.de/landwirtschaft/oekolandbau/027495/index.php>
- also relevant for Network 4 and 10

SALSA – Small farms, small food businesses and sustainable food and nutrition security – Horizon 2020

SALSA aims to provide a better understanding of the current and potential contribution of small farms and food businesses to sustainable food and nutrition security.

- Involved country: 12 (EU) countries
- Lead partner: Instituto de Ciências Agrárias e Ambientais Mediterrânicas (ICAAM), Universidade de Évora, Portugal (mtpc@uevora.pt)
<http://www.salsa.uevora.pt/en/>

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- also relevant for Network 6 and 10

EMENSASPI – Interreg POCTEFA

EMENSASPI will generate exchanges on the sustainability of Pyrenean livestock systems. More specifically the project will work on: 1) revision of the different diagnosis tools existing on both sides of the Pyrenees; 2) development and validation of a new tool with shared criteria; 3) analysis and improvement of the sustainability of the livestock systems in the Pyrenees. The tool and resulting practices and sustainable models will be disseminated through the participation of advisory services on both sides of the Pyrenees.

- Involved country: France and Spain

- Lead partner: INTIA (www.atgipuzkoa.eus)

<https://www.keep.eu/project/21732/environmental-technical-economic-and-social-sustainability-of-pyrenean-agricultural-systems-through-cross-border-cooperation>

PIRINNOVI – Interreg POCTEFA

The objective of PIRINNOVI is to make the sheep production in the Pyrenees more sustainable, attractive and cost-effective for the new generations, through the use of innovative technologies and valorising local breeds, in order to maintain livestock production in the Pyrenees.

- Involved country: France and Spain

- Lead partner: IDELE

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

OPEN 2 PRESERVE – Interreg SUDOE

OPEN2PRESERVE aims to consolidate traditional practices of prescribed burnings associated with grazing of sheeps and equids. Therefore, we are taking the opportunity to reduce the risk of fires in the SUDOE territories, and to develop a sustainable management to value the activities and contributes to sustainable local development.

- Involved country: France, Portugal, Spain

- Lead partner: Public University of Navarra (info@open2preserve.com)

<https://open2preserve.eu/>

OK Net Ecofeed – Horizon 2020

The overall aim of OK-Net EcoFeed is to help farmers, breeders and the organic feed processing industry in achieving the goal of 100% use of organic and regional feed for monogastric, in particular pigs, broilers, laying hens and parents of broilers and laying hens.

- Involved country: 10 EU countries

- Lead partner: IFOAM (kata.gocs@ifoam-eu.org)

<https://www.ifoam-eu.org/en/research-projects/ok-net-ecofeed>

EFOP-3.6.2-16-2017-00012 – National program

Safe food from farm to table

- Involved country: Hungary

Lead partner: University of Veterinary Medicine Budapest

<https://www.uni-neumann.hu/efop-3-6-2-16-2017-00012>

DEMETER – Horizon 2020

Implementation of IoT and other advanced technologies in many different areas: (i) aerial farming, (ii) fruit production, (iii) vegetable production, (iv) animal/meat production and (v) intersectoral. The Slovenian partner ITC Murska Sobota will act as pilot orchestrator in implementing IoT technologies in the chicken farms, fruit orchards and vineyards in Slovenia.

- Involved country: Slovenia and other countries

- Lead partner: Waterford Institute of Technology, ITC Murska Sobota (Pilot orchestrator for Slovenia) (info@demeter-eu-project.eu)

<http://www.demeter-eu-project.eu/>

- Also relevant for Network 5 and 9

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The Transition to Organic Farming on Agricultural and Livestock Farms

Overall objective is to increase the area and production of organic farming in Basque Country through the flow of information and advice.

Specific objectives are proposed: Creation of a working group capable of extracting relevant information for the transition from farms with conventional agricultural management (CA) to organic farming (OF), using the data obtained monitoring the farms involved. Draft a Base Operational Manual for transition to OF taking into account economic, technical and normative constraints in 8 different productive orientations. Creation of a permanent network of specialized advisory services in OF in Basque Country keeping Operational Manual up to date

- Coordination: Spain (aortizb@neiker.eus)

<https://tporganics.eu/gofope15-operational-group-for-the-transition-to-organic-farming-on-agricultural-livestock-farms/>

Network 4: Optimal soil quality in arable crops

CEREALI RESILIENTI 2.0 – Tuscany Region FEASR OP 2014-2021

The aim of the project is to spread the SOLIBAM TENERO FLORIDDIA population to facilitate the adaptation to climate change of organic cereal and a low input in Tuscany. To analyse climate change it is, first of all, necessary to increase cultivated diversity. In this way is possible to develop the integrated seed production system of SOLIBAM TENERO FLORIDDIA. So, farmers have the opportunity to maintain and develop crops that guarantee greater yields. This allows to improve the quality of food and to reduce nitrogen, which favours the increase of secondary metabolites (nutraceutical substances). In the end, soil fertility is increased by eco-sustainable cultivation practices that reduce energy inputs that increase CO₂.

- Involved country: Italy

- Lead partner: RETE SEMI RURALI

- also relevant for Network 6

GOCARD – Tuscany Region FEASR OP 2014-2022

Aim of the project is to verify the productivity and profitability of the thistle crop, considering economic and environmental sustainability. For this purpose, experiments and continuous monitoring are carried out. This is needed to identify the optimal technical route of the thistle cultivation. The project aims to promote the development of an innovative supply chain based on the criteria of the bioeconomy, to support and supplement the income of farmers.

- Involved country: Italy

- Lead partner: IMPRESA VERDE TOSCANA

- also relevant for Network 7

Controlled Traffic Farming – RDP for Operational Group

Benefits of CTF have been proven in research and practice in recent years: controlled traffic lanes prevent soil structure damage and soil compaction in the seedbed between the tracks. This results in optimal growing conditions for soil life and roots and better water storage capacity of soils. CTF also benefits mechanical weed control as fields are earlier accessible and there are no tracks in the seedbed. While these benefits are favorable for organic farming practices, lock-ins make the implementation on farm level not so easy and especially the feasibility for medium sized farms is questioned. This project will support farmers to implement CTF on their specific farm.

- Involved country: Belgium

- Lead partner: Inagro (info.bio@inagro.be)

<https://ec.europa.eu/eip/agriculture/en/find-connect/projects/controlled-traffic-farming>

TASKS FOR ENVIRONMENTAL MONITORING IN SZIGETKÖZ – National program

Measurement of soil moisture content to determine the role of groundwater, evaluation of measured data, participation in joint monitoring as defined in the Hungarian-Slovak Intergovernmental Convention.

- Involved country: Hungary

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Modellhaftes Demonstrationsnetzwerk zur Ausweitung und Verbesserung des Anbaus und der Verwertung von Leguminosen mit Schwerpunkt Erbsen und Bohnen in Deutschland – National BÖLN

Optimizing the production of peas and faba beans.

- Involved country: Germany
- Lead partner: Landesbetrieb Landwirtschaft Hessen

<http://orgprints.org/35250/>

- also relevant for Network 5 and 6

Kompetenz- und Praxisforschungsnetzwerk zur Weiterentwicklung des Nährstoffmanagements im ökologischen Landbau – National BÖLN

Network to optimize nutrient management in organic farming.

- Involved country: Germany
- Lead partner: Bioland Beratung GmbH

<http://orgprints.org/35126/>

- also relevant for Network 5,6,7

NUTRIMAN – Horizon 2020

NUTRIMAN is a Nitrogen and Phosphorus Thematic network compiling knowledge of “ready-for-practice” recovered bio-based fertilizer technologies, products, applications and practices for the interest and benefit of agricultural practitioners. The project focuses on connecting market competitive and commercially “ready for practice” innovative results drawn from high research maturity applied scientific programmes and common industrial practices.

- Involved country: Belgium, Netherlands, France, Spain
- Lead partner: Terra Humana (biochar@3ragrocarbon.com)

<https://nutriman.net/project>

- also relevant for Network 7

Aan de slag met smartfarming – National Leader program

An increasing number of precision farming technologies have become available in recent years. Although it has already been demonstrated that techniques such as soil scans, crop sensing and yield measurements can be used to gain operational efficiency and environmental impact, these techniques are not, or only with difficulty, picked up by the sector. On the one hand, this is the result of a high cost price and the poor integration of the various techniques. On the other hand, a recurring problem is the lack of advice and practical business guidance that causes farmers to drown in data flow. Within this project, we want to lower the threshold and introduce farmers from the Westhoek to precision farming through soil scans, crop sensing and yield measurements. By integrating the information and guiding farmers in the interpretation, the possibilities for each company can be weighed. The focus of the project is primarily on cereals, because most practical technologies are available for this. Monitoring the cereals reveals information that is also useful for other crops within the rotation on this plot.

- Involved country: Belgium
- Lead partner: Inagro

<http://www.agreon.be/nl/agenda/e/90/aan-de-slag-met-smartfarming-demonstratie-namiddag-poperinge>

- also relevant for Network 5

Voorkomen en remediëren van bodemverdichting – National VLAIO

"The objective of this project is to draw more attention to the prevention of soil compaction and also to evaluate the effectiveness of specific remediation measures for compaction in the deeper soil layer. The objective of this project is to draw more attention to the prevention of soil compaction and also to evaluate the effectiveness of specific remediation measures for compaction in the deeper soil layer.

Expected results: (1) an inventory of good practices with regard to cultivation techniques and mechanization for prevention and remediation of soil compaction; (2) Testing and evaluating the most promising techniques / measures for the prevention and remediation of soil compaction by focusing strongly on participation of the target group (farmers / contractors / machine constructors and distributors, etc.); (3) The budget of an economic balance sheet when applying preventive and remedial measures to raise farmers' awareness; (4) A guide to good practice, the expansion and wider distribution of the Terranimo tool and the development of the ""Soil compaction in the picture"" tool".

- Involved country: Belgium

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- Lead partner: ILVO (tommy.dhose@ilvo.vlaanderen.be)

[https://pure.ilvo.be/portal/nl/projects/voorkomen-en-remedieren-van-bodemverdichting\(0252fa00-da6e-4334-8a77-b00b3d8fd7ef\).html](https://pure.ilvo.be/portal/nl/projects/voorkomen-en-remedieren-van-bodemverdichting(0252fa00-da6e-4334-8a77-b00b3d8fd7ef).html)

Gomeros – National VLAIO

The project aims to find solutions for bottlenecks throughout the cultivation system, with special attention to mechanization. Concrete objectives are: • Identifying good practices with regard to cultivation techniques and mechanization in Flanders, Wallonia and abroad; • Testing and evaluating possible solutions / innovations for bottlenecks experienced when applying the preconditions for erosion for vegetables and maize through the repeated completion of a participatory innovation cycle; • Estimating the economic feasibility of the optimized cultivation systems; • The preparation of a guide to good practice and a decision tool; • Disseminating the knowledge acquired in this project to the specific target group companies and the wider agricultural population. The project aims is to actively involve thirty farmers through focus groups. This guarantees that the changes are lasting and that the wider group of target group companies is reached to the maximum.

- Involved country: Belgium

- Lead partner: ILVO (gomeros@ilvo.vlaanderen.be)

<http://www.gomeros.be/>

Beter Bodem Beheer – National program

A public private partnership to increase knowledge on sustainable soil management.

- Involved country: the Netherlands

- Leadpartner: Wageningen University and Research (janjo.dehaan@wur.nl)

<https://www.beterbodembeheer.nl/nl/beterbodembeheer.htm>

- also relevant for Network 6,7,9

Proeftuin agroecologie en technologie – National program

Experimental demonstration farm on agro ecological and technological solutions for resilient agriculture.

- Involved country: the Netherlands

- Lead partner: Wageningen University and Research (wijnand.sukkel@wur.nl)

<https://www.wur.nl/nl/Onderzoek-Resultaten/Onderzoeksinstituten/plant-research/Open-teelten/Landbouw-van-de-toekomst/proeftuin-agroecologie.htm>

- also relevant for Network 6,7,9

Effect of cultivar on plant monitoring of crop N status (NCULTIVAR) – National program

Proximal optical sensors such as canopy reflectance, chlorophyll meters and flavonol sensors can assist in crop N management. Sufficiency values are used to assess whether a crop has a deficient or sufficient N supply. Differences between cultivars for a given species, in morphology and colour, may influence sensor sufficiency values. The NCULTIVAR project will assess how cultivar differences, of various vegetable species, affect measurement and sufficiency values of a range of proximal optical sensors.

- Involved country: Spain

- Lead partner: UAL

- also relevant for Network 7

Leve(n) de Bodem - Interreg - Flanders-Netherlands

Agriculture in Flanders and the southern Netherlands is an important economic pillar with great added value. However, agricultural practice in the border region is experiencing a decline in soil quality, with adverse consequences for crop yields. Partly as a result of stricter fertilization standards and the use of increasingly heavier machines, the soil loses its buffering effect. This results in even more emissions of environmentally critical substances, while the production of agricultural crops is endangered. To break through this negative spiral, a transition in thinking and acting from agricultural entrepreneurs is necessary. The Leve (n) de Bodem project wants to achieve greater soil awareness among agricultural entrepreneurs. The project also wants to lead to the effective implementation of soil measures in agricultural management. The sector is made aware and advised through a mass, group and individual approach and through cooperation with suppliers, knowledge institutions and education. In this way, this project leads to a better safeguarding of the production capacity of the soil, with positive effects on water quality, water retention and CO₂ balance. Thanks to the project, innovations that lead to an improvement in soil quality are being accelerated and effectively applied.

- Involved country: Belgium, the Netherlands

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- Lead partner: Inagro (franky.coopman@inagro.be)
<https://levendebodem.eu/>

LIVESEED – Horizon 2020

LIVESEED will improve guidelines for cultivar testing and strategies for ensuring seed health. It will develop innovative breeding approaches suited to organic farming.

- Involved country: 18 EU countries
- Lead partner: IFOAM (bram.moeskops@ifoam-eu.org)
<https://www.liveseed.eu/>

AgriNatur AT-HU – Interreg AT-HU

The nature region Vienna-Győr is characterized by the water bodies of Danube, Lake Neusiedl and their surrounding floodplain forests, protected as Natura 2000 areas and National Parks. They are bordered by agricultural areas, settlements, agglomerations and linked traffic areas. Natural (waters, woods, reeds) and cultivated areas form a patchwork habitat. It is recognized that mowing and extensive grazing are measures to maintain habitats and species protected by Habitats (Fauna and Flora)- or Birds Directive. In the course of the project the ecological relevance of further anthropogenic use for species protection should be set. E.g. some orchids colonize pioneer sites on dams, resulting from flood protection or railway constructions. Solid data about ground beetles show the species conservation value of organic cultivation. The importance of their interconnectedness with FFH-Habitats lies in the project focus. Through combination of common conservation measures with crop farming actions innovative landscaping activities will be developed to improve the protection of Habitats- or Birds Directive species. Using the example of the Viennese Danube Floodplains the results shall serve to increase natural areas in conformity with the national park whilst improving biodiversity and resilience. The optimization of both is also the focal point of the Hungarian example. Public gardens, being implemented in Mosonmagyaróvár and Vienna, will reveal the complex information in an attractive way.

- Involved country: Austria, Hungary
- Lead partner: Municipal Department 49 - Forestry Office and Urban Agriculture
<https://www.interreg-athu.eu/en/agrinaturathu/>

HW20, Climate adaptive soil moisture management

Improvement of soil quality which has a positive effect on biotic and abiotic soil processes; better utilization of the soil for the cultivation of arable crops by reducing the risk of water surpluses and shortages; better closing of cycles through better utilization of nutrients and fresh water; improvement of the soil in favour of ecosystem functions such as the temporary buffering of water with a peak load of the drainage system; reduction of susceptibility to saline seepage; increasing biodiversity on and around arable land by avoiding extremely wet and dry conditions.

- Coordination: the Netherlands (l.ampt@outlook.com)
<https://ec.europa.eu/eip/agriculture/en/find-connect/projects/hw20-klimaatadaptief-bodemvochtbeheer>
- also relevant for Network 5

Network 5: Arable crop sensing & variable rate applications

Intelligent fruit cultivation – Interreg Vlaanderen Nederland

Three topics will be investigated: soil, crop development and harvest. Sensors will be used to measure different parts of the orchard in different time slots. Using both sensors on tractors and drones. The results will be applied at research centre. An online tool will be developed to generate geographical maps of the farmers' own land, where he can find information about the crop development, (fruit)production, nutrients, diseases, soil structure and soil moisture content.

- Involved country: Belgium and the Netherlands
- Lead partner: Proefcentrum Fruitteelt
<https://vito.be/en/remote-sensing/intelligent-fruit-cultivation>
- also relevant for Network 9

Innovation Cluster Accelerating Remote Sensing – Interreg Two Seas

To develop a cross border innovation cluster and create the necessary conditions for innovation in the field of remote sensing and advanced data communication & processing, based on needs of priority sectors nature,

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agriculture and water & infrastructure. A durable innovation cluster will lead to following benefits: cross border cooperation in these sectors to come to aggregation of demands, acceleration of creation of innovative remote sensing products & services, substantial use of remote sensing and improved business operation in these sectors, clarification of different national legislations and a joint lobby for better regulations to create business opportunities.

- Involved country: Belgium, the Netherlands, UK, France
- Lead partner: Municipality Woensdrecht (s.willemsen@woensdrecht.nl)
<https://www.interreg2seas.eu/en/icares>

Weather-resistant Broccoli – Operational Group

Improving the quality of broccoli grown under extreme weather conditions and thus increasing the sales of growers and thus strengthening the position of the primary producer in the trade chain. Also, in addition to improving the sales potential, better quality, a harvest and supply security of brocciolli, while the use of plant protection products is reduced. Furthermore, production risks such as the weather and diseases are pushed back. Testing innovative cultivation techniques such as linking measurement data to prediction models. This model is based on existing models such as Dacom and Gewis, Decision Support systems that link plant conditions to weather conditions. With these techniques intensive and accurate monitoring of broccoli cultivation can take place, which offers opportunities for advice on the more focused use of (green) crop protection.

- Involved country: the Netherlands
- Lead partner: Greenport Noord-Holland Noord
<https://ec.europa.eu/eip/agriculture/en/find-connect/projects/weerbestendige-broccoli>

TRACK – COSME

TRACK: Increase the competitiveness of the agri-food industry Tracking opportunities to develop and strengthen the use of big data in agri-food to increase the competitiveness of TRACK is a joint program from 5 European partners. Goal is tracking opportunities to develop and strengthen data collection and big data in agri-food chain to increase competitiveness of SMEs.

- Involved country: France, the Netherlands, Spain, Romania, Italy
- Lead partner: cluster Vegepolys (info@trackgrowingdata.eu)
<https://trackgrowingdata.eu/>
- also relevant for Network 8 and 9

IRRISMOD – FEASR

One of the main criticalities found in the management of fruit and vegetable crops is irrigation where fruit and vegetable companies and water resource managers are often unprepared due to the lack of adequate and timely information, with particular reference to irrigation needs, whose evaluation requires the monitoring of crop development and weather trends. The expected results of the IRRISMOD project are: (a) develop an integrated decision support system (SSD) for the rational management of irrigation on a company and consortium scale, and (b) to realize at the Experimental Farm of Pantanello a pole where to concentrate pilot projects, demonstration fields and where to realize an information point using days of study and seminars at the farms, Web and Social media, newspapers, specialized magazines, conferences/workshops. The technologies on which the project is based, use information and know-how already available in the literature but with an innovative approach that, by integrating the different modules (satellite, weather and budget module with sensors on the ground) allows you to create a decision support system for irrigation management extremely innovative.

- Involved country: Italy
- Lead partner: ALSIA
- also relevant for Network 8

LUCAN CEREALS – FEASR

The project aims to create an operational group to encourage the introduction of innovations, the evaluation and exchange of practices aimed at optimizing crop management and the control of its impacts through innovative practices such as conservation, precision, management under organic farming. The existing production process will be improved, achieving greater productivity, greater environmental sustainability, with a consequent increase in the intrinsic quality of the product.

- Involved country: Italy

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- Lead partner: ALSIA
- also relevant for Network 6

Precision fertilization on grassland: Minimum fertilization, minimal leaching, improved soil, maximum yield

Through an innovative form of precision agriculture (a soil scanner and a drone) and precision fertilization (GPS) an optimal processing plan is made. This is based on the needs of the crop, the improvement of the soil and groundwater quality. As a result, fewer nutrients are flushed out in the ground and surface water and the buffer zone / sponge effect of the soil is strengthened.

- Coordination: the Netherlands (t.ploeger@dlvadvis.nl)

<https://ec.europa.eu/eip/agriculture/en/find-connect/projects/precisiebemesting-op-grasland-minimale-bemesting>

Innovating for Soil and Water

The innovation, testing and demonstration of new systems that can carry out precision fertilization of manure and fertilizer in one pass. By using a different spraying system, efforts are also being made to reduce the use of crop protection agents.

- Coordination: the Netherlands

<https://ec.europa.eu/eip/agriculture/en/find-connect/projects/innoveren-voor-bodem-en-water>

Sensors Sustainability

An innovative, reliable and inexpensive measurement set for the self and continuous monitoring of the soil and water system and the interaction with the crop. The diagnosis is tailor-made so that the threshold for taking measures that steer and contribute to sustainability is reduced.

- Coordination: the Netherlands (b.timmermans@louisbolk.nl)

<https://ec.europa.eu/eip/agriculture/en/find-connect/projects/voelhoorn-duurzaamheid>

Precision technological development in seed potatoes

The seed potato grower can better control the production risks. The grower is able to determine the crop result per linear meter of potato back and to set the cultivation conditions. This ensures a higher yield, better soil management and prevents inefficient use of (artificial) manure and pesticides.

- Coordination: the Netherlands (J.L.Konijn@uva.nl)

<https://ec.europa.eu/eip/agriculture/en/find-connect/projects/precisie-technologische-ontwikkeling>

Automatic weeding ready for practice

The development and refinement of a precision weed machine to a device that is suitable for all kinds of applications in practice. This includes realizing crop recognition, making it multi-use for different crops and making it suitable for application on sandy soil.

- Coordination: the Netherlands (Richard.Vialle@beltech.nl)

<https://ec.europa.eu/eip/agriculture/en/find-connect/projects/automatisch-wieden-praktijkrijp>

Lasting Fields in Practice

This project involves the development and testing of five prototypes of tools for a few operations in a crop. The acquired knowledge and experience are used as a "step-up" to a larger and complete range of tools for mechanical operations such as tillage, sowing, planting, crop care and harvesting. The basis is a tool carrier to which, depending on the operation to be performed, the necessary modules (machine tools) are coupled. The possibilities of: strong but especially lightweight constructions are investigated; alternative drive systems (electric, by biogas or CO² neutral energy) and the storage of energy (battery / battery systems).

- Coordination: the Netherlands

<https://ec.europa.eu/eip/agriculture/en/find-connect/projects/lasting-fields-de-praktijk>

Agricultural business development with intelligent data analytics

The project aims to find solutions to agriculture, rapidly increasing data management and through better business situation in agriculture. The aim of the project is to build an intelligent data analysis service, by means of which the farmer can see, for example, satellite images and harvest mapper time series. The aim is also

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that a farmer would be able to see in service, e.g. variations in soils and nutrient levels (e.g. kalium and phosphorus). The service is being developed in close collaboration with the farmers.

- Coordination: Finland (petri.linna@tut.fi)

<https://ec.europa.eu/eip/agriculture/en/find-connect/projects/maatalouden-liiketoiminnan-kehitt%C3%A4minen-%C3%A4lykk%C3%A4%C3%A4ll%C3%A4>

Vineyard 2.0

The project is focused on three new-technologies related thematic: parcel monitoring and mapping, semi-autonomous or assisted driving, robotics. Depending on the maturity of the technology, the project will assess them through: testing commercial propositions, demonstration and evaluation by the farmers of the Operational Group.

- Coordination: France (christophe.gaviglio@vignevin.com)

<https://ec.europa.eu/eip/agriculture/en/find-connect/projects/vignoble-20>

Network 6: Increasing productivity & quality in organic arable crops

Quality assurance in bread wheat production

The operational group aims at adapting farming systems to climate change through optimizing horticultural measures and glue quality at the example of variety mixtures, eco-line varieties and organic wheat populations, developing procedures to improve and stabilize baking quality and yield of variety mixtures and wheat populations in Hesse.

- Involved country: Germany

- Lead partner: Hessisches Ministerium für Umwelt, Klimaschutz, Landwirtschaft und Verbraucherschutz (ludger.linnemann@agr.uni-giessen.de)

<https://ec.europa.eu/eip/agriculture/en/find-connect/projects/qualit%C3%A4tssicherung-im-brotweizenanbau>

OK-Net Arable – Horizon 2020

The complexity of organic farming requires farmers to have a very high level of knowledge and skills. But exchange on organic farming techniques remains limited. OK-Net Arable promotes exchange of knowledge among farmers, farm advisers and scientists with the aim to increase productivity and quality in organic arable cropping all over Europe.

- Involved country: Belgium, France, Germany, Denmark, Italy, Austria, Switzerland, UK, Hungary, Bulgaria and Estonia

- Lead partner: IFOAM (bram.moeskops@ifoam-eu.org)

<http://www.ok-net-arable.eu/>

Common activity for valorisation of organic arable farmers – Regional RDP Measure 16.2 pilot project

The aim of the regional pilot project is to vertebrate the organic cereal value chain in Navarra, through common activities carried out by farmers: shared grain cleaning equipment, set up of the common commercialization structure and identification of selling points. Demo activities on the use of the grain separation equipment are foreseen.

- Involved country: Spain

- Lead partner: INTIA

ECOBREED – Horizon 2020

ECOBREED will improve the availability of seed and varieties suitable for organic and low- input production. Activities will focus on four crop species, selected for their potential contribution to increase competitiveness of the organic sector.

- Involved country: 15 (EU) countries

- Lead partner: Agricultural Institute of Slovenia (KIS) (vladimir.meglic@kis.si)

<https://ecobreed.eu/project/>

ReMIX: Redesigning European cropping systems based on species mixtures – Horizon 2020

Species mixtures can enhance and improve the control of pests, diseases and weeds, while increasing crop productivity and resilience to biotic and abiotic stresses and producing ecosystem services. Species mixtures - also known as intercrops, crop associations or 'plant teams'- can enhance and improve the control of pests,

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diseases and weeds, while increasing crop productivity and resilience to biotic and abiotic stresses, including those triggered by climate change. In addition, species mixtures can lead to reduced use of fossil energy and chemical inputs and enhance production of ecosystem services.

- Involved country: 11 (EU) countries
 - Lead partner: INRA (eric.justes@cirad.fr)
- <https://www.remix-intercrops.eu/>

SABANA – Horizon 2020

SABANA aims at developing a large-scale integrated microalgae-based biorefinery for the production of Biostimulants, biopesticides and feed additives, in addition to biofertilizers and aquafeed, using only marine water and nutrients from wastewaters (sewage, centrate and pig manure). The objective is to achieve a zero-waste process at a demonstration scales up to 5 ha sustainable both environmentally and economically. A Demonstration Centre of this biorefinery will be operated to demonstrate the technology, assess the operating characteristics of the system, evaluate environment impacts and collaborate with potential customers for use.

- Involved country: Spain, Germany, Hungary, Italy, Czech Republic
 - Lead partner: UAL (info@eu-sabana.eu)
- <http://www.eu-sabana.eu/>

- also relevant for Network 7 and 9

Evergreen – Kansen voor West

In this project, 26 Agri-businesses work together with 6 knowledge institutes on the topics sustainable soil management, development of good cultivation methods above the ground, and secure the knowledge that is generated from the project. Due to the increasing demand for food, it becomes more important to treat the soil and its nutrients carefully. The impoverishment of the landscape and the decreasing quality of water and soil raise the need for a continuous and stable effort of sustainable soil management, decrease the diseases and increase the food security, to reinforce the biodiversity and decrease the use of water and energy. In this project, the small- and medium firms work together with the knowledge institutes.

- Involved country: the Netherlands
 - Lead partner: Greenport Noord-Holland Noord (j.noot@greenportnhn.nl)
- <https://www.greenportnhn.nl/efro-evergreen>

- also relevant for Network 4

Sustainable potato storage – Kansen voor West

The project aims to develop a storage for potatoes to store them for a year without adding chemicals. There will be applied research, the development of logistics and storage and a commercial part. There will be tests and demonstrations done, to have a proven concept at the end of the project.

- Involved country: the Netherlands
- Lead partner: Omnivent Techniek

Network 7: Improved nutrient use efficiency in horticulture

Fertilizer efficiency - Focus on horticulture in open field – EIP Agri focus group

Tasks of the focus group:

Determining how crop quality and yield is influenced by legal requirements (stemming from the Nitrates Directive and the Water Framework Directive) and by which elements in particular (application standards, closed periods, organic matter calculation).

Identifying and comparing systems to reduce fertilizer use without affecting yield and quality while taking into account cost-effectiveness and other factors like temperature, humidity, soil etc.

Highlighting innovative systems that can help to solve the conflict between crop quality and quantity demands and the legislative requirements, e.g. innovative fertilization techniques, crop residue management, irrigation management, crop rotation, organic matter and by-products management, N and P dynamics in relation with soil quality, the use of slow release fertilizers and catch crops, nutrient spreading or placement, tillage, others. Listing fail factors that limit the use of the identified techniques/systems by farmers and summarizing how to address these factors.

- Involved country: 11 EU countries
- Lead partner: Van de Castele, Bart

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<https://ec.europa.eu/eip/agriculture/en/focus-groups/fertiliser-efficiency-focus-horticulture-open>

- also relevant for Network 9

Circular Horticulture – EIP Agri focus Group

Tasks of the focus group:

Assess existing practices in protected horticulture and their potential to better re-use or recycle water, materials and by-products, identify good practices and success stories from different parts of Europe, taking into account different climatic conditions, agro systems and specifically focusing on farmers' and advisers' experiences.

Compare different management practices taking into account the feasibility and cost-effectiveness at individual farm level or through collective approaches, and identify success factors (such as knowledge requirements, crucial partnerships) and technical/economic barriers, or other fail factors.

Identify how these practices may be transferred to other conditions (location, type of production) and how.

Identify tools to help farmers and advisers assess the opportunities for re-use and re-cycling of resource inputs at farm and regional levels.

Identify innovative business models for horticultural enterprises.

Identify further research needs from practice, possible gaps in technical knowledge, and further research needs. Suggest innovative solutions and provide ideas for EIP-AGRI Operational Groups and other innovative projects.

- Involved country: 10 EU countries

- Lead partner: Nikolaos Katsoulas

<https://ec.europa.eu/eip/agriculture/en/focus-groups/circular-horticulture>

- also relevant for Network 9

Development of the VegSyst-DSS web-based decision support system for vegetable crops to manage irrigation and fertilization and to calculate the C and N footprints (VS-DSS) – National program

The VegSyst DSS (Decision Support System) for N and irrigation recommendations for greenhouse vegetable crops will be adapted (a) to be a web-based system, and (b) to provide N and irrigation recommendations for outdoor-grown tomato, pepper, lettuce and broccoli crops. Currently, the VegSyst-DSS operates in Windows on a computer. The development of a web-based version will enable it to be used on any device connected to Internet.

- Involved country: Spain

- Lead partner: UAL

https://www.researchgate.net/publication/259592620_Decision_Support_Systems_to_Manage_Irrigation_in_Agriculture

- also relevant for Network 8

Nitraatmetingen Vollegrondgroente – National program

A project working on awareness of farmers on the effects of their management on nitrate leaching.

- Involved country: the Netherlands

- Lead partner: Wageningen University and Research

An innovative approach to enhance resource efficiency and safeguarding by using biostimulants and innovative sensors in horticulture – Interreg Two Seas

The 2 Seas area is known for its intensive horticulture which demands significant amounts of water and nutrients. Several EU directives aim to protect water quality by preventing N and P leaching, aim to enhance soil quality or anticipate on water shortage. Besides these legislative environmental pressures, also economic reasons force growers to reduce water and nutrient consumption. Biostimulants (BS) enhance nutrient and water use efficiency of plants. Today, every Member State has its own regulation on commercializing BS. By 2020, the EU will implement a common European legal framework for the commercialization of BS, but it remains unclear how they will implement the registration procedure and how technical information will be determined. Further, the majority of the growers does not know how to choose the most effective BS or how to use monitoring tools (Survey PCS). Thus, we need a consistent approach in assessing the performance of BS and we need to increase the use of BS and monitoring tools.

- Involved country: Belgium, the Netherlands, UK, France

- Lead partner: Proefcentrum voor Sierteelt (bruno.gobin@pcsierteelt.be)

<https://www.interreg2seas.eu/nl/bio4safe>

- also relevant for Network 8

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Fieldlab FreshTeg – Kansen voor West

The fieldlab offers firms and organizations a place to develop innovation for the international horticulture. Social challenges are the main objectives for the activities, such as food supply and food security.

- Involved country: the Netherlands
- Lead partner: Greenport Horti Campus (info@worldhorticenter.nl)

<https://www.worldhorticenter.nl/nl/create/freshteg>

- also relevant for Network 8 and 9

Leek from the ground

A cultivation system for leek from the ground is developed on the basis of "dry fog" in which minerals are included. This is a completely closed system where there are no more emissions to soil, air or water.

- Coordination: the Netherlands (acuperus@arvalis.nl)

<https://ec.europa.eu/eip/agriculture/en/find-connect/projects/prei-uit-de-grond>

Gladiolus for the future

Objective: an increase in Limburg gladioli cultivation; Achieving significant environmental benefits by reducing the use of plant protection products and nutrients; and because growers are less focused on cost reduction, they can again focus on the development of new markets and concepts that create added value.

- Coordination: the Netherlands (rvangijlswijk@hobaho.nl)

<https://ec.europa.eu/eip/agriculture/en/find-connect/projects/gladiolen-voor-de-toekomst>

Network 8: Water use efficiency in horticulture

Implementation and adaptation to the climatic and soil conditions of Poland of an innovative fruit production technology with a closed irrigation and biofortification system with iodine and selenium on the example of cranberry

The operation aims to develop an innovative technology of large-fruited cranberry cultivation on a commodity scale using very poor soils, V and VI class. The combination of innovative construction and agrotechnical solutions will optimize costs and allow the use of very poor land. The measure aims to adapt the crop to Polish conditions, and above all water shortages and large changes in the level of groundwater.

- Involved country: Poland
- Lead partner: Original Food (mkotlicka@originalfood.pl)

<https://ec.europa.eu/eip/agriculture/en/find-connect/projects/zaimplementowanie-innowacyjnej-technologie>

Sustainable management water resources GOP21-AL-16-0012

The project aims to develop tools that help a sustainable management of irrigation water in the cultivation of fruit and vegetables under plastic in the Poniente region of Almeria.

- Involved country: Spain

PRECISION AGRICULTURE AS A COMPETITIVE ADVANTAGE FOR THE ANDALUSIAN FRUIT AND VEGETABLE SECTOR GOP21-AL-16-0014

The main objective of this project is to provide the fruit and vegetable sector with usable, efficient, simple and economic tools and means, designed directly for the first agent in the value chain, with which they can autonomously acquire immediate information on the crop and thus be able to influence decision-making related to irrigation, preventing an arbitrary handling of it, resulting in a water saving of at least 25%.

- Involved country: Spain

AQUA 4.0 EFFICIENT AND SUSTAINABLE WATER MANAGEMENT IN FRUITS AND VEGETABLES THROUGH INNOVATIVE TOOLS G04010013 – Operational Group

To improve and optimize the management and efficiency of water use in intensive and extensive farming systems in the Southeast of Spain.

- Involved country: Spain



GROW! – Interreg Vlaanderen Nederland

In this project the knowledge institutes, education and universities work together with actors of the horticulture sector (under glass) to build high-tech greenhouses and to optimize them. The goal is to make the horticulture sector more efficient and innovative. Because with the right sensors, disease can be quickly be noticed and can be removed. Abiotic stress can be measured and can be averted. This can be done through climate, light and ion-selective sensors and the development of measures of pH and nutrients in water that are specifically good for the glass greenhouses. It can be measured which nutrients are taken by the plant. Sensors will be used to optimize the temperature, humidity and carbon dioxide.

- Involved country: the Netherlands and Belgium

- Lead partner: IMEC Nederland

<https://www.grensregio.eu/projecten/grow>

- also relevant for Network 9

Development and apply of plasma activated water in the horticulture sector

By using a specialized plasma reactor, an indirect air dielectric barrier discharge in close proximity to water can create an acidified, nitrogen-oxide containing solution called plasma-activated water (PAW). Plasma water is tested for properties as a biocidal product, plant protection treatment and as a fertilizer in horticultural applications. Mild plasma water with a short production time (15 min) can effectively control bacteria and meet the biocidal product legislation. Strong plasma water with a longer production time (45 min) is necessary for controlling molds as Fusarium, Botrytis and powdery mildew. The tomato mosaic virus can be reduced with strong plasma up to 80%. The crop treatments showed no damage on young gerbera plants, lettuce and tomato plants. Application of plasma water through the irrigation system to promote plant growth is not promising, because nitrogen supply is in general not limited. Application as seed disinfection is possible with low concentrations of plasma water.

- Coordination: the Netherlands (a.j.m.pemen@tue.nl)

<https://ec.europa.eu/eip/agriculture/en/find-connect/projects/plasma-activated-water>

Optimization of Fertirrigation in Apricot and Paraguayan Precocious Low Mesh Agrotexile in the Ricote Valley

The main objective of the project is to implement, demonstrate and disseminate Controlled Deficit-Controlled Irrigation (RDC) strategies based on measurements of soil water status and crop and use of plastic mulch as tools to increase the efficiency of irrigation water use in early apricot and peach crops in the Ricote Valley and in plantations protected by agrotexile materials.

- Coordination: Spain (riegodeficitariobajogo@gmail.com)

<https://ec.europa.eu/eip/agriculture/en/find-connect/projects/optimizaci%C3%B3n-de-fertirrigaci%C3%B3n-en-albaricoque-y>

Tests fields for the elimination and valorisation of brines and leachates of agricultural origin in the field of CARTAGENA

The increasing demand for water for agricultural processes in arid and semiarid areas has found in the desalination a solution that allows access to flows from seawater or saline wells. Desalination produces a rejection that must be eliminated or diluted in the most sustainable way possible to avoid negative conditions on the environment. Desalination rejects concentrate salts, nitrates, sulphates, etc. that can cause serious problems in the aquatic media where they are dumped. The objective of the project is to take advantage of these rejections and get a residue "0".

- Coordination: Spain

Evapo-control: system for avoiding evaporation losses in agriculture irrigation reservoirs

The objective of the project is to contribute to the improvement of the water management efficiency in Agriculture. In order to achieve this objective a covering system for irrigation reservoirs, consisting of floating modules, will be used. This system reduces evaporation losses in the reservoir while improving the quality of the irrigation water by avoiding the algae formation in the reservoir.

- Coordination: Spain (jm.gimeno@arana-wm.com)

<https://ec.europa.eu/eip/agriculture/en/find-connect/projects/evapo-control-sistema-anti-p%C3%A9rdidas-por>



OMeGA - Optimisation of reservoirs' management

This project intends to develop an innovative operational tool capable of assisting the management of the hydro-agricultural schemes, depending on the multiple water uses.

- Coordination: Portugal (carina.almeida@tecnico.ulisboa.pt)

<https://ec.europa.eu/eip/agriculture/en/find-connect/projects/omega-otimiza%C3%A7%C3%A3o-da-gest%C3%A3o-de-albufeiras>

Operational Group for water management in "Vale do Lis"

The project aims at developing a new process for water management that is based on techniques and actions of research, field experimentation and demonstration to the beneficiaries, these experimental actions will be developed in such a way that the results are extrapolable to the whole water management in the hydro-agricultural scheme of the 'Vale do Lis'. The innovation in methods and means of use and management of the natural resources water and soil should be in the future applied in other national irrigation areas.

- Coordination: Portugal (cpereira@esac.pt)

<https://ec.europa.eu/eip/agriculture/en/find-connect/projects/grupo-operacional-para-gest%C3%A3o-da-%C3%A1gua-no-vale-do>

AGIR: Evaluation of the efficiency of the water and energy in hydro-agricultural schemes

Develop a system to evaluate the efficiency of water and energy use in hydro-agricultural schemes.

- Coordination: Portugal (geral@fenareg.pt)

<https://ec.europa.eu/eip/agriculture/en/find-connect/projects/agir-avalia%C3%A7%C3%A3o-da-efici%C3%A2ncia-da-%C3%A1gua-e-energia-em>

Olive Growing and Olive Oil

The general objective of the Operational Group is to improve irrigation practices at olive farms in Trás-os-Montes region for efficient water management, both by adopting different strategies of deficit irrigation and by improving the performance of irrigation systems to maximize irrigation efficiency and optimize water productivity, with a view to the eco-sustainability of olive growing in the region, as one of the ways to prevent desertification of the northern interior part of the country. Poor irrigation practices and their optimization, as well as the scheduling of plant-based irrigation, are key aspects for improving the efficiency of the use of this resource by the plant.

- Coordination: Portugal

VITISHIDRI – Strategies for the management of vine water stress, in the region of 'douro superior'

The aim is to evaluate and demonstrate the effect of the implementation of practices in the management of the vineyard, comparing pruning systems (Guyot and cord) and managing the leaf area through green and irrigation interventions with the adoption of deficit irrigation strategies, aiming at improving the efficient use of water and optimizing the yield and quality of the grapes.

- Coordination: Portugal (joaocbg@live.com)

<https://ec.europa.eu/eip/agriculture/en/find-connect/projects/vitishidri-estrat%C3%A9gias-para-gest%C3%A3o-do-stress>

Implementation of process, technological and marketing innovation related to the cultivation of roses in the horticultural farm in Boguchwala

The aim of this project is to demonstrate the effectiveness, efficiency, productivity of plants and high quality of cut rose in summer greenhouse cultivation, in the conditions of high insolation, using innovative technology of cut roses production-the high-pressure fogging system. It is an innovative system that allows to better control of the microclimate in the greenhouse, i.e. the optimal temperature and relative humidity of the air, thanks to which it will be possible to maintain the most favorable conditions for growing roses in the greenhouse facility.

- Coordination: Poland (aneta_haba@vp.pl)

<https://ec.europa.eu/eip/agriculture/en/find-connect/projects/wzrost-konkurencyjno%C5%9Bci-na-rynku-poprzez-wdro%C5%BCenie>

MAR(ket) ready Reuse Drainage Water

Farmers are self-sufficient for their water needs, this leads to fewer production risks and is climate-adaptive (climate changes ensure less available freshwater). Because the majority of the drainage water is reused,

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there is less leaching of nutrients and crop protection agents. This ensures better quality of surface water (lowering emissions of WFD) and maintaining and strengthening biodiversity.

- Coordination: the Netherlands

<https://ec.europa.eu/eip/agriculture/en/news/water-agriculture-digital-tools-efficient>

Network 9: Reducing pesticides use in the production of grapes, fruits & vegetables

ULTRAREP – Tuscany Region FEASR OP

Aim of the project is testing innovative ultrasonic defense systems for the removal of wild ungulates. These ungulates are one of the main causes of damage to crops. For introducing the ultrasonic system in the areas affected by the problem, it is necessary to carry out a demonstration project characterized by high potential for replicability. For this purpose, it is necessary to experiment with different models, analyse them, monitor the data and finally find the best methods for that goal analyse them, monitor the data and finally find the best methods for that target.

- Involved country: Italy

- Lead partner: BARONE RICASOLI SPA AGRICOLA

PERFECT LIFE: PEsticide Reduction using Friendly and Environmentally Controlled Technologies – LIFE

The project aims to demonstrate the reduction of the environmental contamination of pesticides and their metabolites in the air in order to decrease of the pesticide risk for fauna, flora and humans.

- Involved country: Spain, Italy, France and more

- Lead partner: Fundación Centro de Estudios Ambientales del Mediterráneo (CEAM) (info@ceam.es)

<http://perfectlifeproject.eu/>

INNOSETA: Accelerating Innovative practices for Spraying Equipment, Technologies and Applications in European agriculture through the mobilization of Agricultural Knowledge and Innovation Systems – Horizon 2020

The main objective of INNOSETA is to set up an Innovative self-sustainable Thematic Network on Spraying Equipment, Training and Advising (SETA) to contribute in closing the gap between the available novel high-end crop protection solutions either commercial or from applicable research results with the everyday European agricultural practices by promoting effective exchange of novel ideas and information between research, industry, extension and the farming community so that existing research and commercial solutions can be widely communicated, while capturing grassroots level needs and innovative ideas from the farming community.

- Involved country: France, Italy, Belgium, Spain

- Lead partner: Universitat Politècnica de Catalunya (Agricultural Machinery Unit)

<https://cordis.europa.eu/project/rcn/214749/factsheet/en>

GINOP – National program

The goal of research and development is to create a new type of herbal supplement. When used regularly, the active ingredients of the main component, the grape seed oil, provide increased protection against cerebral disaster and infarction. The products could be marketed as drop caps or ointments in a cost-effective form as soft capsules in pharmacy packaging.

- Involved country: Hungary

- Leadpartner: Kisalföldi Mezőgazdasági Zrt.

<https://nkfih.gov.hu/funding>

EUCLID: Europe China Lever for IPM Demonstration – Horizon 2020

EUCLID is a four-year Research and Innovation Action funded by the European Commission under Horizon 2020.

The overall objective is to secure food production for the increasing worldwide population while developing sustainable production methodologies to fight pests with an Integrated Pest Management approach (IPM), to be used in European and Chinese agriculture.

- Involved country: France, Italy, Belgium, Spain, UK, China

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- Lead partner: INRA (nicolas.desneux@sophia.inra.fr)
<http://www.euclidipm.org/>

An innovative approach to enhance resource efficiency and safeguarding by using biostimulants and innovative sensors in horticulture – Interreg Two Seas

The 2 Seas area is known for its intensive horticulture which demands significant amounts of water and nutrients. Several EU directives aim to protect water quality by preventing N and P leaching, aim to enhance soil quality or anticipate on water shortage. Besides these legislative environmental pressures, also economic reasons force growers to reduce water and nutrient consumption. Biostimulants (BS) enhance nutrient and water use efficiency of plants. Today, every Member State has its own regulation on commercializing BS. By 2020, the EU will implement a common European legal framework for the commercialization of BS, but it remains unclear how they will implement the registration procedure and how technical information will be determined. Further, the majority of the growers does not know how to choose the most effective BS or how to use monitoring tools (Survey PCS). Thus, we need a consistent approach in assessing the performance of BS and we need to increase the use of BS and monitoring tools.

- Involved country: Belgium, the Netherlands, UK, France
- Lead partner: Proefcentrum voor Sierteelt (bruno.gobin@pcsierteelt.be)
<https://www.interreg2seas.eu/nl/bio4safe>

NoAW : No Agro-Waste : Innovative approaches to turn agricultural waste into ecological and economic assets – Horizon 2020

Driven by a “near zero-waste” society requirement, the goal of NoAW project is to generate innovative efficient approaches to convert growing agricultural waste issues into eco-efficient bio-based products opportunities with direct benefits for both environment, economy and EU consumer. To achieve this goal, the NoAW concept relies on developing holistic life cycle thinking able to support environmentally responsible R&D innovations on agro-waste conversion at different TRLs, in the light of regional and seasonal specificities, not forgetting risks emerging from circular management of agro-wastes.

- Involved country: 14 (EU) countries
- Lead partner: INRA (nathalie.gontard@inra.fr)
<https://noaw2020.eu/>

EUROCHAMP – Horizon 2020

Atmospheric simulation chambers are the most advanced tools for elucidating processes that occur in the atmosphere. They lay the foundations for air quality and climate models and also aid interpretation of field measurements.

EUROCHAMP-2020 aims at further integrating the most advanced European atmospheric simulation chambers into a world-class infrastructure for research and innovation. A coordinated set of networking activities deliver improved chamber operability across the infrastructure, as well as standard protocols for data generation and analysis. Outreach and training activities foster a strong culture of cooperation with all stakeholders and users.

- Involved country: 8 EU countries
- Lead partner: Laboratoire Inter-Universitaire des Systèmes Atmosphériques (France) (eurochamp2020@lisa.u-pec.fr)
<https://www.eurochamp.org/>

OPTIMA: Optimized Pest Integrated Management to precisely detect and control plant diseases in perennial crops and open-field vegetables – Horizon 2020

The Project “Optimized Pest Integrated Management to precisely detect and control plant diseases in perennial crops and open-field vegetables” (OPTIMA) will develop an environmentally friendly IPM framework for vineyards, apple orchards and carrots by providing a holistic integrated approach which includes all critical aspects related to integrated disease management, such as novel bio-PPPs use, disease prediction models, spectral early disease detection systems and precision spraying techniques. It will contribute significantly to the reduction of the European agriculture reliance on chemical PPPs resulting in reduced use of agrochemicals, lower residues and reduced impacts on human health.

- Involved country: 8 EU countries
- Lead partner: AUA : Agricultural University of Athens (Greece)
<https://cordis.europa.eu/project/rcn/214745/factsheet/en>

**AGROinLOG: Integrated biomass logistics centres for the agro-industry – Horizon 2020**

The main goal of AGROinLOG is the demonstration of Integrated Biomass Logistic Centres (IBLC) for food and non-food products, evaluating their technical, environmental and economic feasibility. The project is based on three agro-industries in the fodder (Spain), olive oil production (Greece) and cereal processing (Sweden) sectors that are willing to deploy new business lines in their facilities to open new markets in bio-commodities (energy, transport and manufacturing purposes) and intermediate bio-products (transport and biochemicals).

- Involved country: 8 EU countries

- Lead partner: CIRCE: Centro de Investigacion de Recursos y Cnsumos Energiticos (Spain)

<https://cordis.europa.eu/project/rcn/205975/factsheet/en>

WETWINE – Interreg Sudoe

WETWINE aims to help to solve effluent treatment in wine industries, through an innovative pilot, combining anaerobic digestion (methanisation) with planted filters for effluent treatment. The objective is to promote the valorisation and use of the territories' resources and recycle effluents as a fertilizer in order to reduce the impact of the wine production on the natural environment.

- Involved country: France, Spain, Portugal

- Lead partner: INGACAL (agacal@xunta.gal)

<http://wetwine.eu/en/wetwine-project/financing-and-life-of-the-project/>

VITIFUTUR: Research and application hand in hand for sustainable viticulture – Interreg V Rhin Supérieur

Global climate change poses new challenges to the viticulture worldwide and the Upper Rhine Region is no exception. For example, global warming promotes the spread of new diseases that were previously unknown in our region. At the same time, the public are increasingly demanding for more ecological and sustainable agricultural practices. To bridge this gap, novel solutions and innovations are required that make our grapevine more resistant against diseases and prepare the trinational Upper Rhine region for the future. Vitifutur is a two-pronged approach.

- Involved country: France, Germany, Switzerland

- Lead partner: Staatliches Weinbauinstitut Freiburg

<http://www.interreg-rhin-sup.eu/projet/vitifutur-reseau-transnational-de-recherche-et-de-formation-en-viticulture/>

UV - ROBOT - Innovative UV-robotics to improve existing IPM strategies and to benefit farmers, consumers and the environment – Interreg North West Europe

An important disease in many crops is mildew. Current horticultural practices rely on intensive pesticide use to counter it. However, the use of chemical crop protection results in spray residues on the harvested product and mildew infections cannot always be prevented. Scientific research showed that UV-C light has the potential to become a sustainable alternative for chemical mildew control. The application of UV-C still need to be optimized and automation is required to allow introduction in horticulture.

- Involved country: Belgium, France, UK

- Lead partner: Proefcentrum Hoogstraaten (marieke.vervoort@proefcentrum.be)

<http://www.nweurope.eu/projects/project-search/uv-robot-innovative-uv-robotics-to-improve-existing-ipm-strategies/>

Aponics – OP Zuid

NovioPonics develops a sustainable crop protection for the horticulture sector. They use a hydrogel that is added to the pesticides which makes sure that the pesticides is optimally spread on the leaf until 90%. It prevents that the pesticide is dripping on the ground. The use of water can be reduced by 50%. And the effectiveness of the pesticide will be strongly improved, which results in a 50% reduction of pesticide use.

- Involved country: the Netherlands

- Lead partner: NovioPonics

<https://www.stimulus.nl/opzuid/project/aponics-environmentally-friendly-horticulture-crop-protection/>

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HortInf

The project aims at the application and development of techniques for the management of weeds and parasitic flora in horticultural crops, which contribute to increased productivity and sustainability of crops, biodiversity and minimization of environmental risks.

- Coordination: Portugal (carmo@cothn.pt)

<https://ec.europa.eu/eip/agriculture/en/find-connect/projects/hortinf>

TomatNov - Product and Process Innovation in Greenhouse Tomato

The aim of this project is to improve the efficiency of the use of resources, in particular water and fertilizers, and at the same time to improve the productivity and quality of fresh tomatoes, particularly in soilless cultivation systems, contributing to the national positioning in the European context as a territory of excellence for the production of season fresh tomatoes, without residues, of consistent sensorial quality.

- Coordination: Portugal (dalmeida@isa.ulisboa.pt)

<https://ec.europa.eu/eip/agriculture/en/find-connect/projects/tomatinov-inova%C3%A7%C3%A3o-de-produto-e-de-processo-no>

- also relevant for network 8

MoreSoil

Development and application of innovative processes based on known techniques, alternatives to the exclusive use of plant protection products, integrating them to protect horto-industrial crops against the occurrence of soil diseases and pests.

- Coordination: Portugal (carmo@cothn.pt)

<https://ec.europa.eu/eip/agriculture/en/find-connect/projects/maissolo>

Network 10: Farm attractiveness

[NEWBIE \(New Entrant netWork: Business models for Innovation, entrepreneurship and resilience in European agriculture\) – Horizon 2020](#)

The main goal of the NEWBIE network is to increase innovation, entrepreneurship, and resilience in the European farming sector by enabling new entrants to successfully establish sustainable farm businesses in Europe.

- Involved country: 9 EU countries

- Lead partner: Wageningen University and Research (andries.visser@wur.nl)

<http://www.newbie-academy.eu/>

[RURALIZATION – Horizon 2020](#)

An EU project promoting rural development through the involvement of new generations and new models for land use and economic activities.

- Involved country: 12 EU countries

- Lead partner: Technical University Delft

[SMART-UP – Interreg AT-HU](#)

Although innovation potential is high and economic performance exceeds the EU average in the program region, innovation performance results lag behind the EU average values. The overall objective of the project is to strengthen young enterprises (<5 years) with mentoring and coaching services and to help them to increase innovation performance on long term, to establish a cross-border business (start-up) community in order to support long-term innovation and business cooperation across the border. As a result, active business cooperation is established among the young and start-up enterprises, R&D action plans tailored to specific SME needs will intensify the use of research infrastructure and know-how. Utilizing project services, young SMEs can improve market and financial results and identified R&D possibilities ensure a strong base for long-term successful existence and operation. Start-ups receive targeted mentoring services, innovation management knowledge of young entrepreneurs increase, and as a main result, survival chances of young enterprises increase considerably. The final beneficiaries of the project are young enterprises on both side of the border. In the frame of the project individual (mentoring, coaching, and consultancy) and joint group (workshop, company visits with Austrian and Hungarian participants) events will be organized. Innovation

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performance of young SMEs will be assessed by the same method in both regions, therefore results can be compared and evaluated (such survey does not exist).

- Involved country: Austria, Hungary
- Lead partner: Chamber of Commerce and Industry for Győr-Ménfőcsanak-Sopron County

<https://www.interreg-athu.eu/en/smartup/>

Working group on renewing generations in livestock farm with national actors – National Program

Confédération Nationale de l'Elevage is a national association that federates technical organisations, cooperatives and professional unions dealing with ruminant livestock farming (dairy and meat) in France. All actors agreed in 2014 that was a priority and organised a working group on this issue and since develop national common projects as (1) the website www.devenir-eleveur.com which is a tool to welcome the network and to share and build together new ideas and to have a common and positive message and bring together tools and « good tips » to job candidates since 2017 and (2) a With Book on this challenge which gather 24 propositions based on studies and survey to improve renewing.

- Involved country: France
- Lead partner: Institut de l'Elevage

Working group on attractivity of jobs in livestock farm with local actors – National program

Since 2010, French local actors built a network on labour in farming. Since 2014, a group exchange on attractivity. The aim is to mutualize, capitalize and spread good initiatives in different sectors and at different level to improve the attractivity of the job as farm owners and boss, and as employee. The first step was to define what means attractivity and concluded that 3 factors to work on are: image of jobs, access conditions to jobs and practices conditions.

- Involved country: France
- Lead partner: Institut de l'Elevage

EFOP-3.6.1-16-2016-00024 – National Program

In line with the objectives of the National Intelligent Specialization Strategy, the main objectives of the construction are: Increasing the number of professionals active in animal care, food chain security, epidemic and animal protection, food hygiene by increasing research and research capacity. in animal husbandry research, thereby contributing to addressing societal / health / economic problems in the area. The institutions involved in the implementation of the project will continue to play a pioneering role in their domestic research and further training, and in this way through their research in the veterinary and veterinary sciences and food sciences. The University of Veterinary Medicine and the Széchenyi István University, Faculty of Agriculture and Food Sciences, should remain internationally recognized leading higher education institutions in Europe, further strengthening their current position.

- Involved country: Hungary
- Lead partner: University of Veterinary Medicine Budapest

EFOP-3.6.1-16-2017-00017 – National program

Development of teachers, researchers and advertisers, development of knowledge and technology transfer.

- Involved country: Hungary
- Lead partner: Széchenyi University, Győr

EFOP-3.6.3-VEKOP-16-2017-00008 – National program

The main objective of the project is to establish a university cooperation with the doctoral schools of the Hungarian agricultural higher education, which basically qualifies the supply system of scientific training in a qualitative way and extends the possibilities and conditions of scientific workshops significantly.

- Involved country: Hungary
- Lead partner: University of Debrecen

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Networking European Farms to Enhance Cross Fertilisation and Innovation Uptake
through Demonstration

(D6.1 A list of relevant ESIF projects)



4

Conclusion

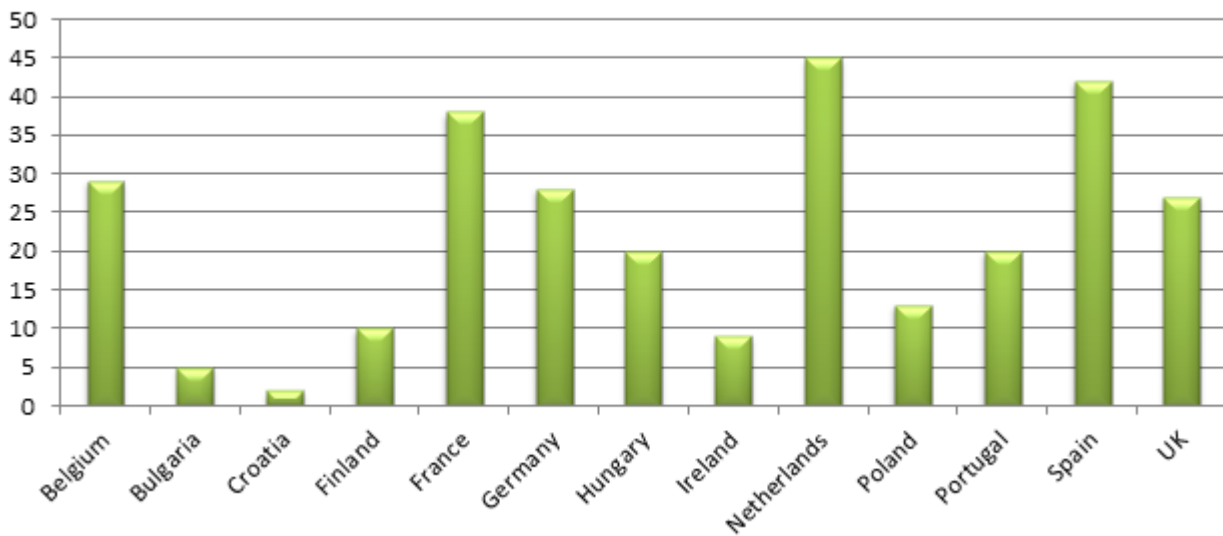
NEFERTITI



Conclusion

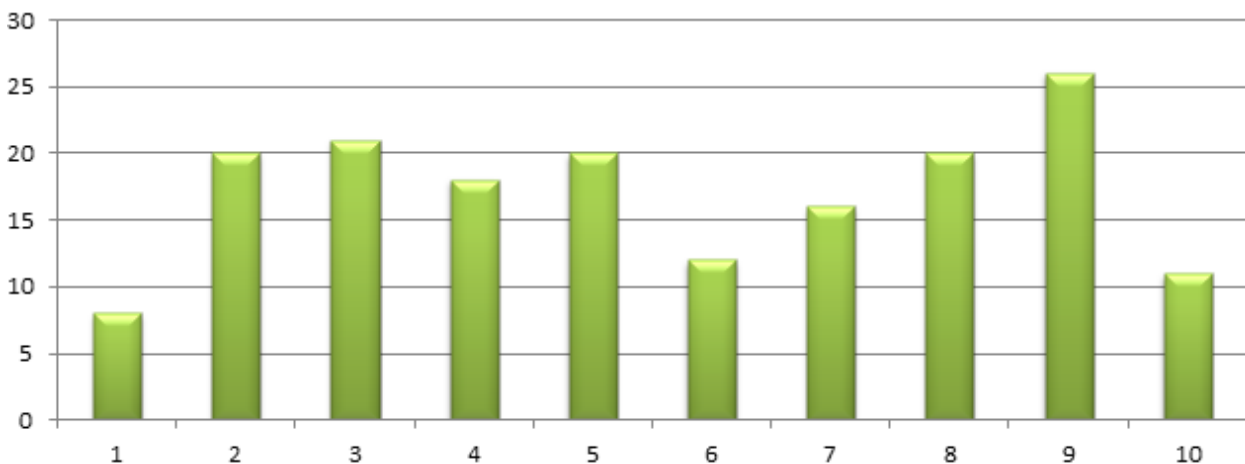
There are 150 projects in the list. This is not the exhaustive list of every relevant project in the EU, but this is a satisfactory number of projects to investigate whether an operational and efficient connection can be made in a very near future. Not only ESIF projects are mentioned in the list, but also national, regional and European financed projects. The main objective of the task is that the projects with whom to connect with, are thematically relevant, rather than by which authority it is funded.

Amount of projects per hub-country



Above a graph where the number of projects is visualized for every country that has a hub in the NEFERTITI project. Projects in the list are especially active in the countries: Belgium, France, Germany, the Netherlands, Spain and the UK (more than 25 projects). This makes sense, since these are also the countries where there will be hubs in several thematic networks.

Total amount of projects per thematic network



Above a graph where the number of projects is visualized for every thematic network in the NEFERTITI project. The number of projects differs between the networks. For the thematic networks that have few projects, WP6 will search together with the hub-coaches for more relevant projects along the project life.

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Follow-up

Now that a set of projects is collected, the hub coaches can i) show to Policy makers that they are well aware and connected to the local/regional /national Research and Innovation ecosystem and ii) start implementing some of the project (result)(s) into demonstration activities. They will contact the lead partner of the project and discuss what are the possibilities for efficient cooperation in order to reach a win-win situation by showcasing technical results from the identified projects into Nefertiti Demonstration Networks. The Work Package 6 will monitor these connections and make sure that the hub coaches will keep looking for new relevant projects to connect with. It is important to notice that it is a work in progress and permanent process. Relevant projects will be connected on regular basis during the whole project life-time. It might be the case that projects mentioned in the list now, may not be the most relevant in the end after connection and exchanges with the lead partners. This will be a continuous cooperation between hub coaches, project-leaders and the Nefertiti project management.



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