



European
Commission

AGRI RESEARCH FACTSHEET ENHANCING HUMAN CAPITAL AND BOOSTING INNOVATION SYSTEMS

Why do R&I on human capital and innovation systems matter?

The need to speed-up innovation has been repeatedly emphasized in recent years and is now a core element of the European Commission's communication on the future of food and farming. Agricultural activity has never taken place in a static context. Yet, in the last decades, this context has become more complex with more stringent environmental requirements, more open economic conditions and associated opportunities and risks. Beyond the primary sector, innovation in rural ar-

reas can play an important role in stimulating green and socially inclusive economic growth, mitigating geographic isolation and avoiding economic and social marginalisation. Human and social capital, including skills that enable actors to perform or initiate activities and links, incentives, shared values and norms that underpin the capacity of actors to trust each other and cooperate are essential to successful rural innovation.

Human capital and innovation systems under Horizon 2020 Societal challenge 2



55

Projects or expected grants



152 M€

EU contribution 2014-2020



703

Participations in selected projects

Key themes

- Agricultural knowledge and innovation systems (AKIS) – Education and training
- Advice – On-farm Demonstration – Networks – Knowledge exchange

Human capital and innovation systems under EIP-AGRI activities

Focus group example: Benchmarking farm performance

bit.ly/2G8wRAL

Workshop and seminar examples:

Enabling farmers for the digital age: the role of AKIS

bit.ly/2pKddzl

EIP-AGRI Networking and Communication

bit.ly/2GpnqvY

Promoting creativity and learning through AKIS (...)

bit.ly/2pCDjFW

Programming Innovation in RD - Linking Innovation and Science

bit.ly/2l71ItX

H2020 SC 2 collaborative projects – Thematic networks bridging research & practice (All projects are multi-actor)

Networks on horizontal themes

AGRI-SPIN - Innovation processes

agrispin.eu

EC contribution: 1,9 M€ - Mar. 2015 to Aug. 2017

SMART-AKIS - Smart farming technologies

www.smart-akis.com

EC contribution: 2 M€ - Mar. 2016 to Aug. 2018

AGRIFORVALOR - Adding value to agriculture and forest-based sectors

www.agriforvalor.eu

EC contribution: 2 M€ - Mar. 2016 to Aug. 2018

HNV-link - High-Nature value farming

www.hnmlink.eu

EC contribution: 2,2 M€ - Apr. 2016 to Mar. 2019

SKIN - Short supply chains

www.shortfoodchain.eu

EC contribution: 2 M€ - Nov. 2016 to Oct. 2019

Inno4Grass - Grasslands

www.inno4grass.eu

EC contribution: 2 M€ - Jan. 2017 to Dec. 2019

AFINET - Agroforestry

www.agroforestry.eu/afinet

EC contribution: 2 M€ - Jan. 2017 to Dec. 2019

ENABLING - Bio-based local innovation

enabling-project.com

EC contribution: 2 M€ - Dec. 2017 to Nov. 2020

NEWBIE - New entrants into farming

www.newbie-academy.eu

EC contribution: 2 M€ - Jan. 2018 to Dec. 2021

NUTRIMAN - Nitrogen & Phosphorus

nutriman.net

EC contribution: 2 M€ - Oct. 2018 to March 2021

SuWaNu Europe - Nutrient Management

bit.ly/2XWbhEk

EC contribution: 2 M€ - Jan. 2019 to June 2021

BEST4SOIL - Soils

bit.ly/2ww4G7A

EC contribution: 2 M€ - Oct. 2018 to Sept. 2022

Crop networks

OK-Net-Arable - Organic arable crops

www.ok-net-arable.eu

EC contribution: 1,9 M€ - Mar. 2015 to Feb. 2018

WINETWORK - Vine diseases

www.winetwork.eu

EC contribution: 2 M€ - Apr. 2015 to Sep. 2017

FERTINNOWA - Water in fertigated crops

www.fertinnowa.com

EC contribution: 3 M€ - Jan. 2016 to Nov. 2018

EU-FRUIT - Fruit production

<http://eufrin.org/index.php?id=55>

EC contribution: 1,7M€ - Mar. 2016 to Feb. 2019

CERERE - Organic and low-input cereals

cerere2020.eu

EC contribution: 2 M€ - Nov. 2016 to Oct. 2019

INCREDIBLE - Mediterranean cork, resins and edibles

www.incredibleforest.net

EC contribution: 2 M€ - Nov. 2017 to Oct. 2020

PANACEA - Non-food crops penetration

www.panacea-h2020.eu

EC contribution: 2 M€ - Nov. 2017 to Oct. 2020

INNOSETA - Innovative Spraying Equipment

innoseta.eu

EC contribution: 2 M€ - May 2018 -to April 2021

Legumes Translated - Legumes

legumestranslated.eu

EC contribution: 2 M€ - Nov. 2018 to Oct. 2021

Livestock networks

<p>HENNOVATION – <i>Laying hens & welfare</i> www.hennovation.eu EC contribution: 2.1 M€ - Jan. 2015 to Aug. 2017</p>	<p>EuroDairy – <i>Sustainable dairy production</i> eurodairy.eu EC contribution: 2 M€ - Feb. 2016 to Jan. 2019</p>
<p>4D4F – <i>Precision-dairy farming</i> 4d4f.eu EC contribution: 2 M€ - Mar. 2016 to Aug. 2018</p>	<p>EU PiG – <i>Pig production</i> www.eupig.eu EC contribution: 2 M€ - Nov. 2016 to Oct. 2020</p>
<p>SheepNet – <i>Sheep productivity</i> www.sheepnet.network EC contribution: 2 M€ - Nov. 2016 to Oct. 2019</p>	<p>OK-Net EcoFeed – <i>Monogastric animal feed</i> ok-net-ecofeed.eu/ EC contribution: 2 M€ - Jan. 2018 to Dec. 2020</p>
<p>DISARM – Antimicrobial resistance management bit.ly/2Z36hxM EU contribution : 2 M€ - Jan. 2019 to Dec. 2021</p>	

SC2 Collaborative Projects – Agricultural knowledge and innovation systems

Skills & social capital: education, training, advice and connectivity

MA = Multi-actor

<p>AGRILINK ^{MA} www.agrilink2020.eu Total cost: 5 M€ EC contribution: 5 M€ Coordinator: INRA Jun. 2017 – May 2021</p>	<p>AGRILINK will stimulate transition towards more sustainable farming by better understanding the role of farm advice in farmers' decision-making. It will analyse the provision of advice in 26 regions, assessing the efficacy of the current system. It will then develop scenarios for introduction of new advisory methods and new forms of research-practice interaction to be developed, tested and validated in living laboratories bringing farmers, advisers and researchers together.</p>
<p>BOND ^{MA} bondproject.eu/ Total cost: 2,9 M€ EC contribution: 2,9 M€ Coordinator: Coventry University Nov. 2017 – Oct 2020</p>	<p>BOND seeks to unleash the potential for collective action and networking of individuals, groups and entities of farmers and land managers, focusing on countries where collective organisation is less developed. It will investigate the constraints and disincentives to collective action and draw-up solutions to help individuals and organisations to create long-lasting bonds which will help them build a stronger position in decision-making.</p>
<p>LIAISON ^{MA} http://liaison2020.eu/ Total cost: 5 M€ EC contribution: 5 M€ Coordinator: HNEE May 2018 - Oct. 2021</p>	<p>LIAISON is developing detailed best practices and approaches for H2020 multi-actor projects, Thematic Networks, Operational Groups and other interactive innovation projects, networks or initiatives that contribute to the implementation of EIP-Agri. The methods, protocols and tools will be co-designed with (potential) beneficiaries, innovation support services, policy makers and administrators from all over Europe. These include participatory approaches for co-creation and co-learning, for networking, communication and dissemination, and impact assessment including self-evaluation</p>
<p>NEXTFOOD ^{MA} nextfood-project.eu/ Total cost: 7 M€ EC contribution: 7 M€ Coordinator: Sveriges Lantbruksuniversitet May 2018 – April 2022</p>	<p>NEXTFOOD will drive the transition to more sustainable and competitive agri-food and forestry systems development by designing and implementing education and training systems. In several pioneering case studies, covering agri-food and forestry systems in Europe, Asia and Africa, farmers researchers, students and other stakeholders are working on challenges related to sustainability together while developing both green technical skills and soft collaborative competencies.</p>
<p>FAIRshare ^{MA} fairshareproject.eu Total cost: 7 M€ EC contribution: 7 M€ Coordinator: TEAGASC Nov. 2018 – Oct. 2022</p>	<p>FAIRshare aims to mobilise the rural advisory community to take ownership of digital tools and make best use of analytics and communication technologies for agricultural sustainability. The project engages the independent farm advisor community, through sharing of tools, expertise and motivations across various advisory and farming contexts across the EU.</p>

EURAKNOS^{MA}euraknos.eu

Total cost: 2 M€

EC contribution: 2 M€

Coordinator: Universiteit Gent
Jan. 2019 – Dec. 2020

EURAKNOS aims to extend existing thematic network outputs in an interactive way, both content-wise and in terms of geographical coverage. EURAKNOS will stimulate the exchange of existing approaches, methodologies and tools between the different thematic networks and search for a harmonised approach for setting up future thematic networks in order to maximise the impact on the practitioner, farmer and forester.

Demonstration activities and peer-to-peer learning

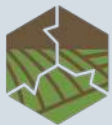
AgriDemo-F2F^{MA}agridemo-h2020.eu

Total cost: 2 M€

EC contribution: 2 M€

Coordinator: ILVO
Nov. 2017 – Jun. 2019

AgriDemo-F2F will deepen the understanding of effective on farm demonstration activities, detailing the sectors, themes and topics on which they provide expertise. It will perform a comparative analysis of their network structure, mechanisms and tools used for recruitment, interaction and learning, assessing the effectiveness of the different approaches. The project will deliver a set of best practices and recommendations on how to best support on farm demonstration.

**FARMDEMO****Joint Farm demonstration hub**<https://farmdemo.eu/>

PLAID and AgriDEMO-F2F are jointly developing a georeferenced inventory of demonstration activities in Europe covering 30 countries.

PLAID^{MA}www.plaid-h2020.eu

Total cost: 2 M€

EC contribution: 2 M€

Coordinator: James Hutton
Institute
Nov. 2017 – Jun. 2019

PLAID will identify, compile and communicate the topics, locations, best practices and innovative approaches to demonstration on commercial farms in the EU, Switzerland and Norway. It will analyse the impact of various governance, financing and demonstration approaches on learning processes and access to knowledge. PLAID will also pilot test 'virtual demonstration', to identify good practice in enabling farmers to demonstrate their innovations on-line.

NEFERTITI^{MA}www.nefertiti-h2020.eu

Total cost: 7 M€

EC Contribution: 7 M€

Coordinator: ACTA
Jan. 2018 – Dec - 2021

Building on the inventory of demonstration activities undertaken by PLAID and AGRIDEMO-F2F and on the work of running thematic networks, NEFERTITI will establish ten thematic networks of demonstration farms bringing together 45 regional clusters of demonstration farmers and other related actors in 17 countries. It will seek to boost innovation uptake and to improve peer-to-peer learning and connectivity across Europe.



Interesting activities under other Horizon 2020 sections

Marie- Skłodowska Curie Actions contribute to the development of AKIS by supporting scholarships in critically needed academic fields, Innovative training networks (ITN) and research and innovation staff exchange (RISE). An interesting example is “BIG4”, an ITN which will train 15 young entomologists in a cross-disciplinary way: big4-project.eu (1,3 M€ - Jan 2018 to Dec 2021).

Cooperation in science and technology (COST) actions are very important to build the European research area by building links and cooperation between research teams across Europe.

In the pipeline – 9 projects to start under 2019 H2020 SC2 calls (30.5 M€)

Thematic networks compiling knowledge ready for practice ^{MA}	(5 project, 10 M€)
Fuelling the potential of advisors for innovation ^{MA}	(1 project, 5 M€)
Reinforcing the EU agricultural knowledge base ^{MA}	(1 project, 2.5 M€)
Support to the BIOEAST initiative: boosting knowledge ^{MA} and innovation-based bioeconomies	(1 project, 3 M€)
Food cloud demonstrators	(1 project, 10 M€)

Funding opportunities - Open H2020 SC2 calls for 2020 (20 M€)

RUR-15-2020 - Thematic networks compiling knowledge ready for practice ^{MA}	(5 projects, 10 M€)
SFS-06-2018-2020 – Stepping-up integrated pest management B [2020]: EU-wide demonstration farm network ^{MA}	(1 project, 6 M€)
FNR-01-2020 - Strengthening the European agroecological research and innovation ecosystem	(1 project, 2 M€)
FNR-02-2020 - Developing long-term monitoring and evaluation frameworks for the Common Agricultural Policy	(1 project, 2 M€)

The key role of AKIS in the future of food and farming

The concept of “Agricultural Knowledge and Innovation System” (AKIS) is used to describe how people and organisations join together to generate, share and use knowledge and innovation for agriculture and rural areas and to promote mutual learning. The great diversity of people involved includes farmers, advisors, trainers, researchers, media and other agricultural experts operating at EU, national, regional and local levels. Knowledge exchange and innovation covers issues related to agriculture and wider rural concerns, including environment, climate change, energy, value chains and rural businesses opportunities. The European Commission’s Communication on the future of food and farming (Nov. 2017) recognises the role of farm advisors as particularly important to enhance innovation. It also states that “a modern Common agricultural policy should support the strengthening of farm advisory services within the AKIS systems” and that “this should be facilitated by strengthening the support for peer-to-peer exchange, networking and cooperation amongst farmers.” R&I activities funded under Horizon 2020 and EIP-AGRI pave the way to successful achievements in this field.



bit.ly/2HbDr5N





