



AGRI RESEARCH FACTSHEET PUBLIC GOODS FROM AGRICULTURE AND FORESTRY

Why do R&I on public goods from agriculture and forestry matter?

Agriculture and forestry are unique sectors delivering, alongside commercial products, societal public goods such as biodiversity, water regulation, landscape, erosion control, resilience to floods and climate change mitigation. The increasing value assigned by society to the environment, culture and heritage of rural areas can be a driver of their sustainable growth. This has materialised to a certain extent for public goods related to culture and heritage, e.g. tourism based on traditional landscapes or traditional food. However, the situation is less favourable for most environmental public goods.

Farmers and foresters are managing most of the EU land and, depending on practices used, can indeed be sources of a wealth of environmental public goods to the benefit of rural areas and society. Research activities can help improve the understanding of the complex interactions between primary production systems and ecosystems services and should support the provision of these public goods and services, through the delivery of management solutions, decision-support and monitoring tools and the assessment of their market and non-market value.

Public Goods under Horizon 2020 Societal Challenge 2



24

Projects or expected grants



139 M€

EU contribution 2014-2020



388

Participations in selected projects

Key themes

- Public Goods – Drinking Water –
- Biodiversity – Carbon sequestration
- Land management – Agriculture –
- Forestry – Governance & Business models
- Rural-urban

Public Goods under EIP-AGRI activities

Focus groups: Sustainable High Nature Value (HNV) farming; Ecological Focus Areas; Permanent Grassland; Carbon storage in arable farming; Grazing for Carbon; Sustainable mobilisation of forest biomass; Forest practices & Climate Change

bit.ly/2tPxclj

Workshops: Tools for environmental farm performance; New value chains from multifunctional forests; Creating diverse forests with multiple benefits

bit.ly/2GJ4I2u

Operational groups examples: *BiosphereElbeNetwork*;
Connecting isolated terrestrial habitats;
Enhance the autonomy of the farmers for assessing the biodiversity on their farm;
Development of a livestock model for agro-pastoral biodiversity;
Farm CO2Sink: C sequestration and GHG emissions reduction at farm level.

bit.ly/2GorMUT
bit.ly/2Gr2otL
bit.ly/2pRYOm5
bit.ly/2J93DiK
bit.ly/2Gq5gHh

SC2 collaborative projects – Public Goods from agriculture and forestry

Public goods, from theory to practice

PEGASUS

pegasus.ieep.eu

Total cost: 3 M€

EC contribution: 2.97 M€

Coordinator: IEPP

Mar. 2015 – Feb. 2018

PEGASUS will develop innovative, practical ways of making public goods and ecosystem services concepts accessible and operational: it will identify how, where and when cost-effective mechanisms and tools for policy, business and practice can most effectively be applied, increasing the sustainability of primary production in pursuit of the EU2020 vision of ‘smart, sustainable and inclusive growth’.

PROVIDE

www.provide-project.eu

Total cost: 3 M€

EC contribution: 3 M€

Coordinator: U. of Bologna

Sep. 2015 – Aug. 2018

PROVIDE will develop a conceptual basis, evidence, tools and improved incentive and policy options to support the «smart» provision of public goods by the EU agriculture and forestry ecosystems, in the light of trade-offs and conflicts brought about by prospective intensification scenarios. PROVIDE will consider a wide range of public goods in relation with a wide set of legislations.

Land management, HNV and Rural-Urban Synergies

ROBUST

rural-urban.eu

Total cost: 6 M€

EC contribution: 6 M€

Coordinator: Wageningen U.

Jun. 2017 – May 2021

Ecosystems provide a wide variety of goods and services such as purification of air and water, climate change mitigation and adaptation. Urbanisation impact upon land use and therefore on the availability, accessibility and quality of ecosystem goods and services. This makes it important to identify the functional relationships between rural and urban areas and their effect on the provision of these services.

LANDMARK

landmark2020.eu

Total cost: 5.3 M€

EC contribution: 5 M€

Coordinator: Wageningen U.

May 2015 – Oct. 2019

LANDMARK deals with the sustainable management of land and soil in Europe. It builds on the concept that soils are a finite resource that provides a range of ecosystem services known as “soil functions”. Functions relating to agriculture include: primary productivity, water regulation & purification, carbon-sequestration & regulation, habitat for biodiversity and nutrient provision & cycling.

HNV-Link

www.hnvlink.eu

Total cost: 2.2 M€

EC contribution: 2.2 M€

Coordinator: CIHEAM

May 2016 – Mar. 2019

High nature value (HNV) farmland defines areas where agriculture support and is associated with exceptionally high biodiversity but also with cultural heritage, quality products and rural employment. HNV-Link network will develop and share innovations that support HNV farming systems across Europe through a multi-actor approach.

Forest ecosystem services

<p>ALTERFOR www.alterfor-project.eu Total cost: 4 M€ EC contribution: 4 M€ Coordinator: Sveriges Lantbruks U. (SLU) Apr. 2016 – Sep. 2020</p>	<p>ALTERFOR's goal is to facilitate the implementation of forest management models (FMM) by: Identifying and developing FMM robust in their capacity to deliver ecosystem services (ES) and overcome projected socio-ecological risks and uncertainties; Assessing the impact of different FMM combinations in terms of resultant ES baskets on the landscape level, and improving cross-national knowledge transfer regarding their benefits, costs, management, and utilization.</p>
<p>DIABOLO www.diabolo-project.eu Total cost: 5 M€ EC contribution: 4.7 M€ Coordinator: LUKE Luonnonvarakeskus Mar. 2015 – Feb. 2019</p>	<p>DIABOLO will strengthen the methodological framework towards more accurate, harmonised and timely forest information, to enable the analysis of sustainable biomass supply and facilitate near real-time forest disturbance monitoring. It will support EU policy processes, international reporting obligations, forest administration and planning entities and make innovative use of existing field-collected data and EC space-based applications and global monitoring systems.</p>
<p>InnoForEst bit.ly/2GWetDm Total cost: 4.1 M€ EC contribution: 4 M€ Coordinator: HNE Eberswalde Nov. 2017 – Oct. 2020</p>	<p>InnoForEst's overall objective is to spark a transformation of the European forest sector by steering policies and businesses towards an economically viable provision of the wide range of forest ecosystem services. New actor alliances and comprehensive networks will be initiated in the forestry sector and beyond. Innovation platforms will support interactive information exchange about good practices and alternative income streams from forest ecosystem services.</p>
<p>SINCERE bit.ly/2JnfMkm Total cost: 4.3 M€ EC contribution: 4 M€ Coordinator: EFI Jan. 2018 – Dec. 2021</p>	<p>Responding to society's demands for services such as wood production, recreation, biodiversity provision and carbon storage, the project will look at innovative ways to value and implement such "forest ecosystem services". SINCERE will develop novel policies and new business models by connecting knowledge and expertise from practice, science and policy, across Europe and beyond.</p>

Drinking Water Quality and agriculture

<p>FAIRWAY www.fairway-project.eu Total cost: 5 M€ / EC: 5 M€ Coordinator: Wageningen R. Jun. 2017 – May 2021</p>	<p>The objective of FAIRWAY is to review policy, governance and farm water management approaches to protect drinking water resources in the EU and to identify and further develop innovative measures and governance approaches which will simultaneously increase the sustainability of agriculture.</p>
<p>WATERPROTECT water-protect.eu Total cost: 5 M€ EC contribution: 5 M€ Coordinator: VITO Jun. 2017 – May 2020</p>	<p>WATERPROTECT objective is to contribute to effective uptake and realisation of management practices and mitigation measures to protect drinking water resources. It will create an integrative multi-actor participatory framework including innovative instruments that enable actors to monitor, finance and effectively implement these practices and measures.</p>

Interesting activities under other Horizon 2020 sections

Horizon 2020's Societal Challenge on **Climate Action & Environment** supports activities on cultural heritage, some of which target the rural areas:

- The **CLIC** project brings forward the agenda on heritage-led local sustainable development by developing flexible, transparent, integrated and inclusive tools to manage the change of cultural landscape, tools which are required to leverage the potential of cultural heritage for Europe (Dec. 2017 to Nov. 2020 – EC contribution: 5 M€ - bit.ly/2uTn7Fj).
- A new project will be funded under the 2017 call on "Cultural heritage as a driver for sustainable growth, Heritage-led rural regeneration (SC5-21-2017, EC contribution: 10 M€).

In the pipeline – 9 projects to start under 2017 and 2018 SC2 calls (56 M€)

Socio-eco-economics – socio-economics in ecological approaches	(2 projects, 10 M€)
Enhancing synergies between land and sea-based activities	(1 project, 5 M€)
Integrated policies and decision support tools to the management of land	(1 project, 7 M€)
Contracts for effective and lasting delivery of agri-environmental public goods	(3 projects, 15 M€)
Permanent grassland – farming systems and policies	(1 project, 10 M€)
Bee health and sustainable pollination	(1 project, 9 M€)

Funding opportunities – Open SC2 calls for 2019 (37 M€)

RUR-01-2019 – Building modern rural policies on long-term visions and societal engagement	
C – Building resilient mountain value chains delivering private and public goods	(1 project, 6 M€)
SFS-01-2019 – Biodiversity in action: across farmland and the value chain	
B – Capitalising on native biodiversity in farmland landscape	(2 projects, 16 M€)
SFS-04-2019 – Integrated health approaches and alternatives to pesticide use	
A – Integration of plant protection in a global health approach	(1 project, 15 M€)

How does research on Public Goods support EU Policies?

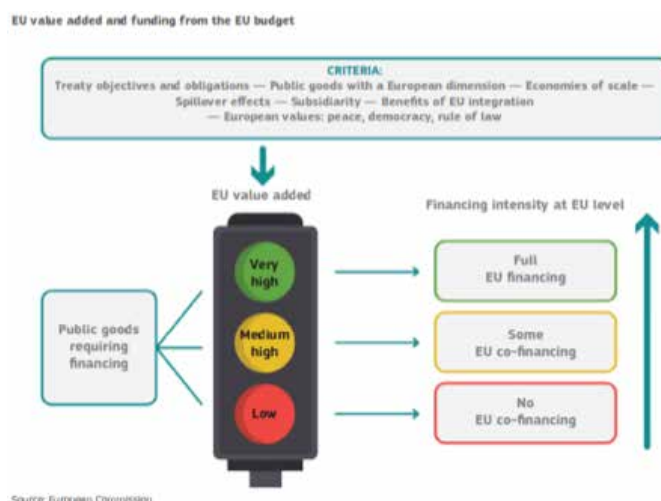
The **Reflection Paper on the future of EU finances** (2017) called for a shift towards new, sustainable growth that combines economic, social and environmental considerations in a holistic and integrated way and focuses more strongly on the provision of public goods.



Download the Reflection paper

Research and innovation activities supporting policy design for improved public good delivery will support this objective. They were also programmed in close alignment with the rural policy objectives pursued by the current **Common agricultural policy**, with the **Cork 2.0 declaration “A better life in rural areas”** and with the objectives foreseen for the future as laid out in the **European Commission’s Communication on the future of food and farming** (Nov. 2017).

These activities are also closely connected to the EU initiative on **Mapping and Assessment of Ecosystems and their Services** (MAES), which supports the implementation of the EU biodiversity strategy adopted in 2011.



More information:

DG Environment: bit.ly/1i8mjOr

MAES website: biodiversity.europa.eu/maes

