



EU-FarmBook


TESTIMONIALS OF EXISTING PLATFORMS

Spyros Fountas



21st
February

**EU-FarmBook
Platform Day**

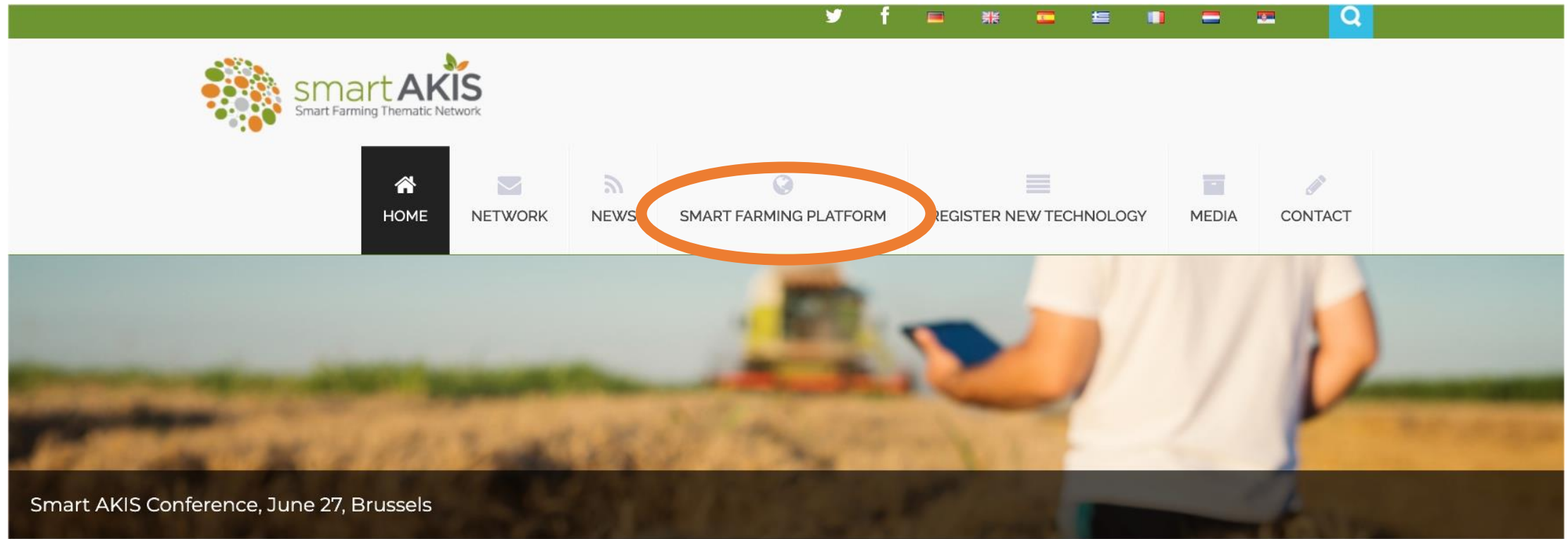
 **Brussels**

**EU-based
digital knowledge reservoirs
for the agricultural sector**

**Spyros Fountas, Professor
Agricultural University of Athens
Greece**



“smartAKIS” platform was just the beginning



I am a

“smartAKIS”: Smart farming technologies for all actors

Dashboard Technologies Short survey Help

Type your email address: Type your password: Login

Technologies

Search bar

Keywords

Category

Country


Cropping system

Total area cultivated

SFT type

More options Search

Technologies



HydraROPS

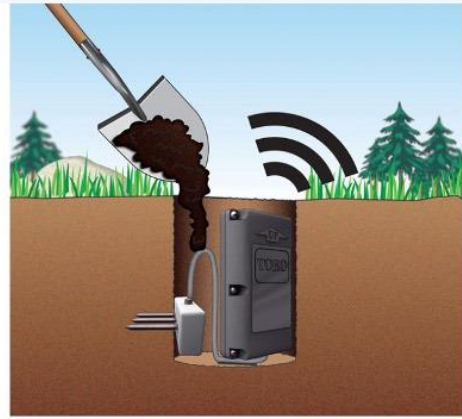
European Union

< 2 ha 2 - 10 ha 11 - 50 ha

51 - 100 ha

TRL 7

Available on the market



Pro Series Soil Sensor


< 2 ha 2 - 10 ha 11 - 50 ha

51 - 100 ha

Irrigation

TRL 9

Available on the market



Soil salinity and moisture measurement system

European Union

Vineyards


< 2 ha 2 - 10 ha 11 - 50 ha

51 - 100 ha

Irrigation scouting of crop and/or soil

TRL 5

Coming soon to the market



OrchardMan


European Union

Tree crops

< 2 ha 2 - 10 ha 11 - 50 ha

51 - 100 ha

fertilization pesticide application



Satellite-based herbicide rate recommendation for potato haulm killing

European Union

Arable crops

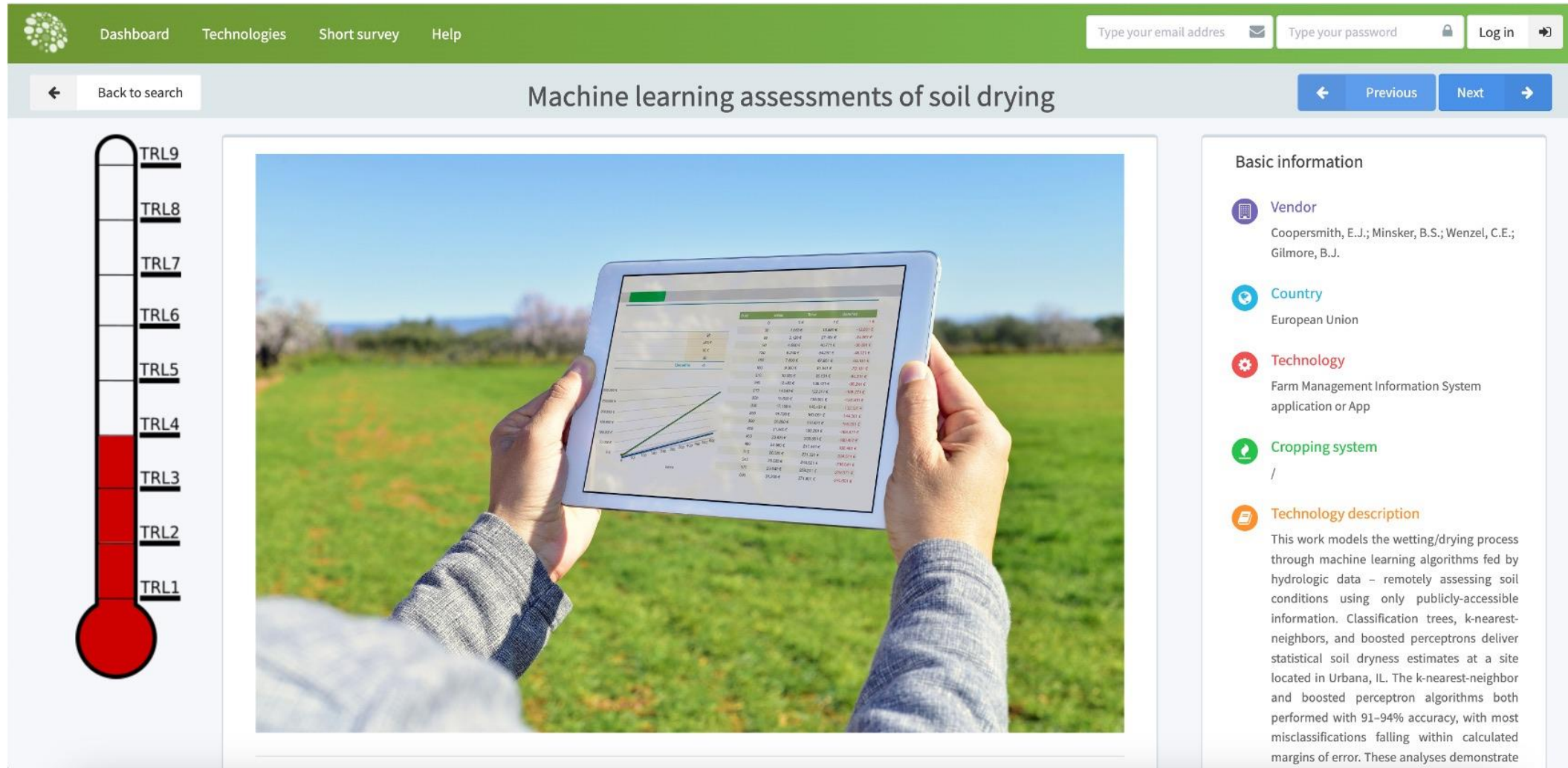
< 2 ha 2 - 10 ha 11 - 50 ha

51 - 100 ha

TRL 6

Available on the market

“smartAKIS”: Engaging presentation with metadata and resources



The screenshot displays the smartAKIS web application interface. At the top, there is a navigation bar with links for Dashboard, Technologies, Short survey, and Help. A search bar is present with the text "Type your email address" and "Type your password", along with a "Log in" button. The main content area is titled "Machine learning assessments of soil drying". On the left, there is a vertical scale from TRL1 to TRL9, with a red bar indicating the current level is TRL4. The central image shows a person holding a tablet displaying a data visualization with a line graph and a table. The table has columns for "Year", "Value", "Unit", and "Category". The right sidebar contains "Basic information" including Vendor (Coopersmith, E.J.; Minsker, B.S.; Wenzel, C.E.; Gilmore, B.J.), Country (European Union), Technology (Farm Management Information System application or App), and Cropping system (/). Below this is a "Technology description" section.

Dashboard Technologies Short survey Help

Type your email address Type your password Log in

Back to search Machine learning assessments of soil drying Previous Next

TRL9
TRL8
TRL7
TRL6
TRL5
TRL4
TRL3
TRL2
TRL1

Vendor
Coopersmith, E.J.; Minsker, B.S.; Wenzel, C.E.; Gilmore, B.J.

Country
European Union

Technology
Farm Management Information System application or App


Cropping system
/

Technology description
This work models the wetting/drying process through machine learning algorithms fed by hydrologic data – remotely assessing soil conditions using only publicly-accessible information. Classification trees, k-nearest-neighbors, and boosted perceptrons deliver statistical soil dryness estimates at a site located in Urbana, IL. The k-nearest-neighbor and boosted perceptron algorithms both performed with 91–94% accuracy, with most misclassifications falling within calculated margins of error. These analyses demonstrate

“smartAKIS”: Technology evaluation, feedback and interaction with users



TRL9
TRL8
TRL7
TRL6
TRL5
TRL4
TRL3
TRL2
TRL1



Farm Telemetry

FarmTelemetry provides an innovative solution able to support farmers in the management of farming activities.

Metric	Impact
Post-harvest crop wastage	Large decrease (50%)
Irrigation water use	Large decrease (25%)
CH4 (methane) emission	No effect
CO2 (carbon dioxide) emission	Large decrease (20%)

Please rate this technology

Question 1: Is this a useful innovation?

Question 2: Are you interested in this innovation?

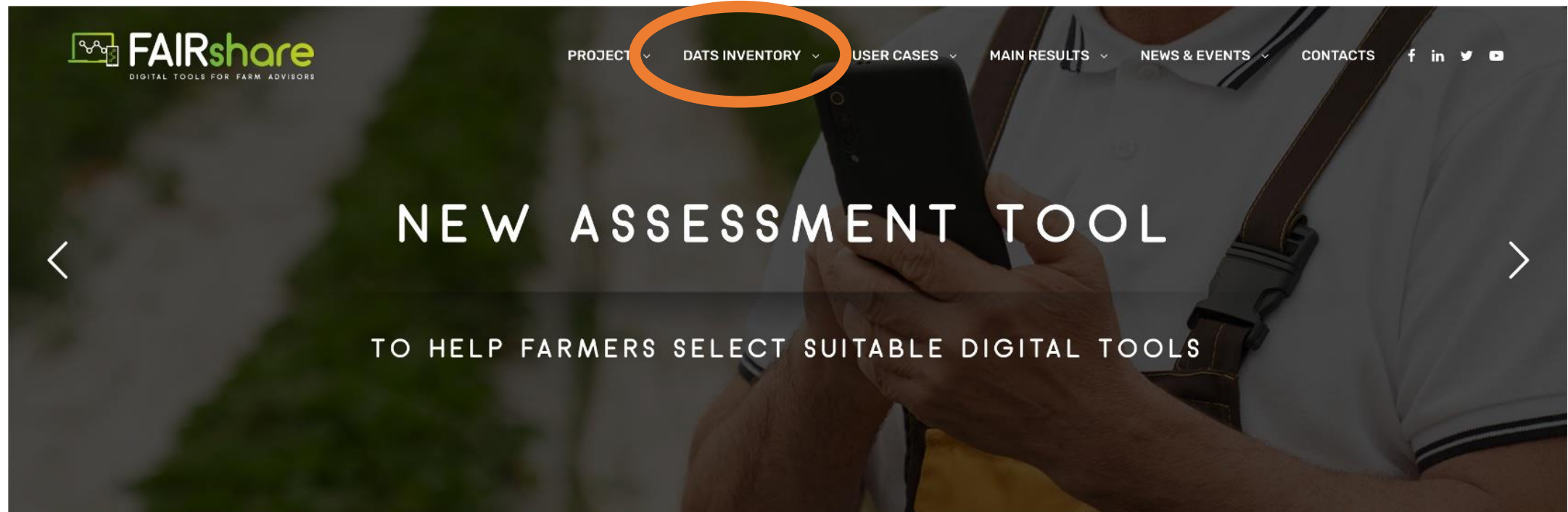
Question 3: Do you know other people [colleagues, neighbors, ..] who would be interested in this innovation?

No Maybe/Don't know Yes

Not at all Maybe Yes

Nobody A few Many

“FAIRshare”: Digital Advisory Tools and Services all in one platform



FAIRShare News

NEWS

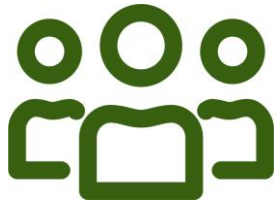
ACTA HAD A FAIRSHARE BOOTH IN ESA CONNECT CONFERENCE ON NOVEMBER 23RD IN ANGERS, FRANCE

06/12/2022

Tweets from @H2020_FAIRshare

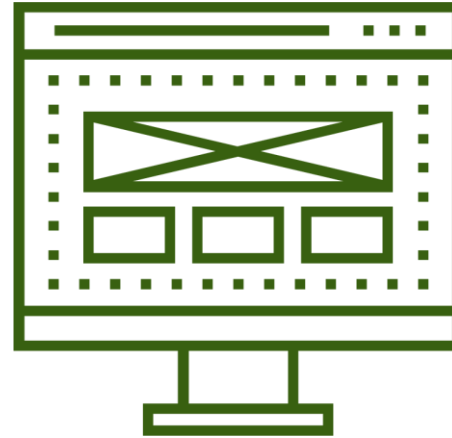
Follow

“FAIRshare”: The design process



Multi-actor group of people from all target audiences (advisors, farmers, industry)

Biweekly meetings
for 6 months

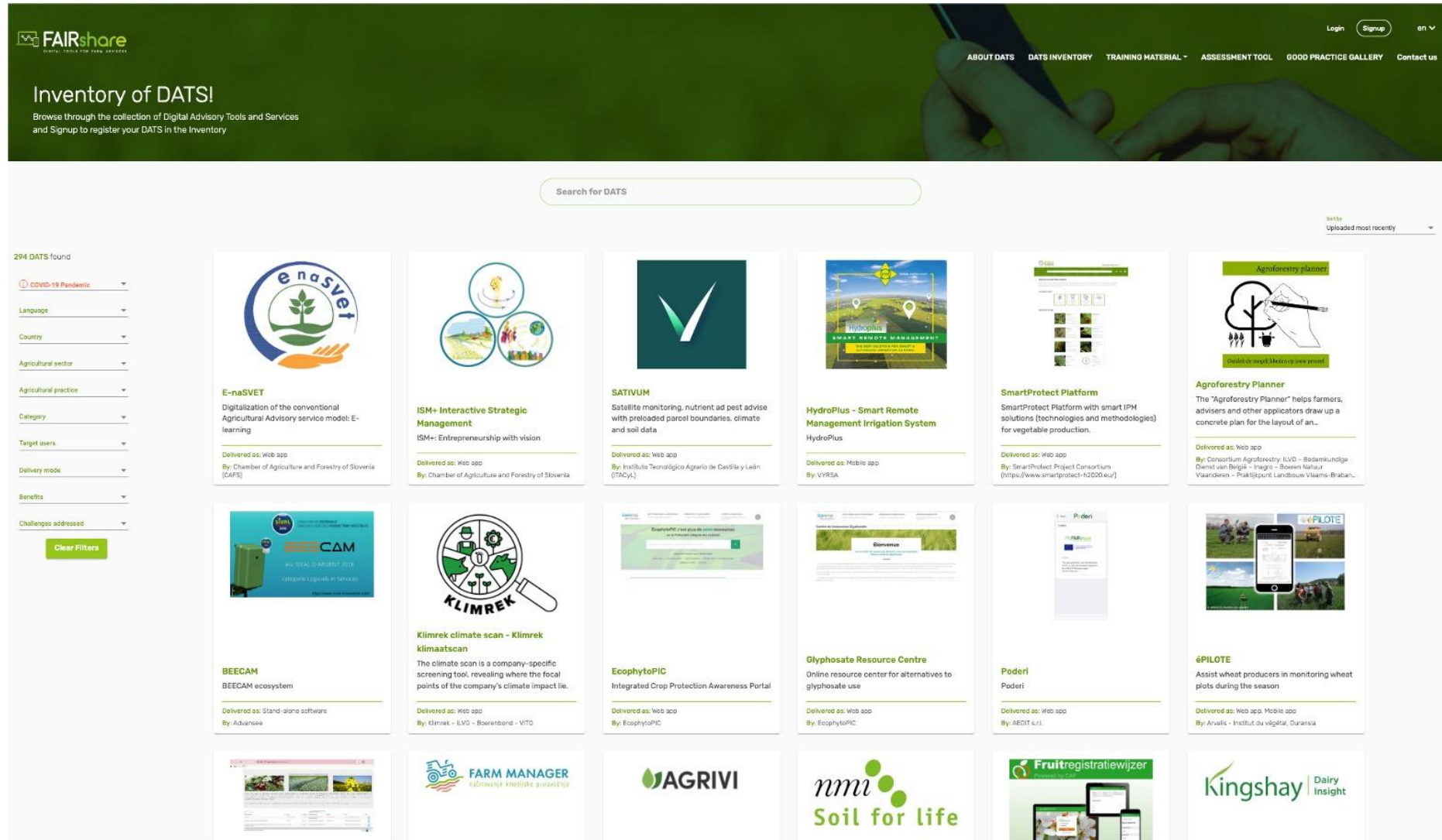


Data models
Functionalities



Continuous integration of users' feedback throughout an iterative process

“FAIRshare”: 300 DATS for the advisors across Europe



FAIRshare
DIGITAL TOOLS FOR FARM SUPPORT

Inventory of DATS!
Browse through the collection of Digital Advisory Tools and Services and Signup to register your DATS in the Inventory

Search for DATS

294 DATS found

COVID-19 Pandemic
Language
Country
Agricultural sector
Agricultural practice
Category
Target users
Delivery mode
Benefits
Challenges addressed
Clear Filters

DAT Name	Description	Delivered as	By
E-naSVET	Digitalization of the conventional Agricultural Advisory service model: E-learning	Web app	Chamber of Agriculture and Forestry of Slovenia (CAFS)
ISM+ Interactive Strategic Management	Satellite monitoring, nutrient and pest advice with preloaded parcel boundaries, climate and soil data	Web app	Chamber of Agriculture and Forestry of Slovenia
SATIVUM	Satellite monitoring, nutrient and pest advice with preloaded parcel boundaries, climate and soil data	Web app	Instituto Tecnológico Agrario de Castilla y León (ITACyL)
HydroPlus - Smart Remote Management Irrigation System	SmartRemote Management Irrigation System	Mobile app	VYRSA
SmartProtect Platform	SmartProtect Platform with smart IPM solutions (technologies and methodologies) for vegetable production.	Web app	SmartProtect Project Consortium (https://www.smartprotect-h2020.eu/)
Agroforestry Planner	The "Agroforestry Planner" helps farmers, advisers and other applicators draw up a concrete plan for the layout of an...	Web app	Consortium Agroforestry: ILVO - Bodemkundige Dienst van België - Inagro - Boeren Natuur Vaanderen - Praktijkpunt Landbouw Vlaams-Brabant
BEECAM	BEECAM ecosystem	Stand-alone software	Advancee
Klimrek climate scan - Klimrek klimaatscan	The climate scan is a company-specific screening tool, revealing where the focal points of the company's climate impact lie.	Web app	Klimrek - ILVO - Boerenbond - VITO
EcophytoPIC	Integrated Crop Protection Awareness Portal	Web app	EcophytoPIC
Glyphosate Resource Centre	Online resource center for alternatives to glyphosate use	Web app	EcophytoPIC
Poderi	Poderi	Web app	AEDIT s.r.l.
@PILOTE	Assist wheat producers in monitoring wheat plots during the season	Web app, Mobile app	Arvalis - Institut du végétal, Duranica
FARM MANAGER	Podriwalec kmetijske proizvodnje		
AGRIVI			
nmi Soil for life			
Fruitregistratiewijzer			
Kingshay Dairy Insight			

“FAIRshare”: Rich set of information for each DATS

Klimrek climate scan - Klimrek klimaatscan [↗](#)

The climate scan is a company-specific screening tool, revealing where the focal points of the company's climate impact lie.

Uploaded by [Engels Elly](#)



Who is it for

Klimrek is a VLAIO agriculture project in which ILVO, Boerenbond and VITO work together on a climate trajectory for dairy farmers, pig farmers, and arable farmers with potatoes in the cropping plan.

To this end, a climate consultant 'goes out on the farm' with a targeted climate scan and climate course to support farmers in switching to a more climate-friendly and climate-robust business management, also taking into account practical and economic feasibility.

A climate scan based on a life-cycle analysis (LCA) is developed per sector, with which the climate consultant visits the farmer to collect the necessary data.

That climate scan is a company-specific screening tool, which makes clear where the focal points in the company's climate impact lie. With that insight, the consultant can select climate measures tailored to the farm. The consultant then visits the company to present and discuss these measures with calculated scenarios. At the same time, a cost-benefit analysis is drawn up to estimate the economic feasibility.

Keywords: Climate scan - climate pathway - climate impact - climate measures

Klimrek is een VLAIO-landbouwtraject waarin ILVO, Boerenbond en VITO samenwerken aan een klimaattraject voor melkveehouders, varkenshouders, en akkerbouwers met aardappelen in het teeltplan.

Hiervoor gaat een klimaatconsulent 'de boer op' met een gerichte klimaatscan en klimaatkoers om de landbouwers te ondersteunen bij het overstappen naar een meer klimaatvriendelijke en klimaatrobuste bedrijfsvoering waarbij ook praktische en economische haalbaarheid in rekening worden gebracht. Per sector wordt een klimaatscan op basis van een levenscyclusanalyse (LCA) ontwikkeld, waarmee de klimaatconsulent bij de landbouwer langsgaat om de nodige data te verzamelen.

How it works

Why use it

Basic information

Applied in: Belgium
Languages: Dutch
Year of launch: 2019
Year of last update: Not defined
Number of users: Not defined
Cost: Free

Provided by:

Klimrek – ILVO – Boerenbond – VITO

[✉ Email provider](#)

[🌐 Visit providers' webpage](#)
[Provider 1](#)

Technical Details

Mode of delivery: Web app

Required ICT skills: Low

Training: Required

Data sources: Manual input, IoT installed devices, Technical 3rd party services, Administrative 3rd party services

Resources

Documents







[📄 Document 1](#)
[📄 Document 2](#)


Videos

[📺 Video 1](#)

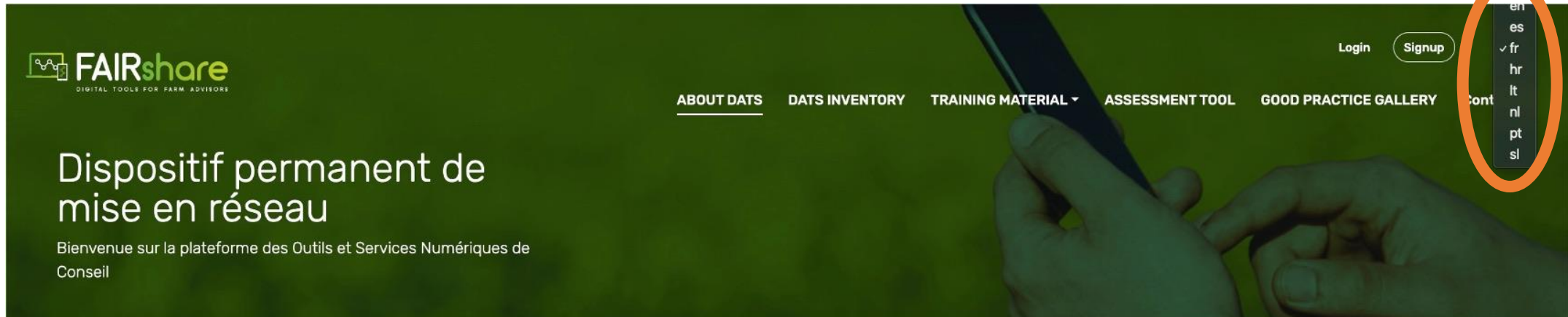
[Assess this DATS!](#)

“FAIRshare”: Identify target user and focus on specific needs

Who is it for	How it works	Why use it
Klimrek climate scan - Klimrek klimaatscan is designed for:		
 Farmers/Cooperatives		
 Agronomists/Advisory services		
who are active in:		
 Arable farming		
 Dairy (cattle, sheep, goats)		
 Meat (cattle, pigs, sheep, goats, poultry, rabbits, snails)		
 Organic and non organic		

Who is it for	How it works	Why use it
Benefits from using it:		
 Optimization of resources use		
 Environmental protection		
	Challenges addressed:	
	 Plant protection management	
	 Water management	
	 Nutrition/Fertilisation management	
	 Strategic planning	
	 Finance and budgeting	
	 Sustainable food production and healthy diets	

“FAIRshare”: Interface accessible in 11 languages



FAIRshare
DIGITAL TOOLS FOR FARM ADVISORS

ABOUT DATS DATS INVENTORY TRAINING MATERIAL ASSESSMENT TOOL GOOD PRACTICE GALLERY

Login Signup

en
es
✓ fr
hr
it
nl
pt
sl

Dispositif permanent de mise en réseau

Bienvenue sur la plateforme des Outils et Services Numériques de Conseil

Que sont les DATS?

Les outils et services numériques de conseil (OSNC) sont des technologies qui incluent des applications et des services pour ordinateurs et pour Smartphones. Ils peuvent être autonomes, sur des appareils individuels, ou être connectés via le Web. Leur fonction principale est d'aider les conseillers à fournir un service d'aide à la décision centré sur les agriculteurs, ou d'aider les conseillers sur des tâches administratives ou de communication.

Les OSNC permettent de collecter, analyser et partager des données / informations entre des agriculteurs et leurs conseillers, et / ou entre les agriculteurs et d'autres agriculteurs. Le terme OSNC comprend l'association des bases de données utilisateurs et des technologies de transmission de données, qui permettent aux technologies destinées aux conseillers et aux agriculteurs de fonctionner efficacement. Sont également inclus des outils prêts à l'emploi, ainsi que des outils personnalisés, qui facilitent l'aide à la décision grâce à l'enregistrement des

“FAIRshare”: DATS Inventory updated frequently with new functionalities

DATS Assessment Tool

< **1. Usability** 2. Data Management 3. Challenge 4. Knowledge Exchange 5. Business >

Key points	Advisor Score	Target Score	Remarks
Is User friendly	_____ ▾	_____ ▾	Easy to use
Tool can be accessed online and offline	_____ ▾	_____ ▾	
Multilanguage Tool	_____ ▾	_____ ▾	
Uses Open Standards, Open Data, Open Source, and Open Innovation	_____ ▾	_____ ▾	
Is free	_____ ▾	_____ ▾	Free for advisors
Requires training	_____ ▾	_____ ▾	

Download the Assessment Tool (in xlsx format) in your language!

Select one of the following languages to download the corresponding form.

Croatian	Dutch	English	French	German	Greek
Hungarian	Lithuanian	Portuguese	Slovenian	Spanish	

“SHERPA”: A repository of research outputs from projects related to rural topics



[SHERPA REPOSITORY](#)

[RURAL H2020](#)

[USER MANUAL](#)

[SHERPA OFFICIAL](#) 

WELCOME TO SHERPA RURAL PROJECT REPOSITORY

The SHERPA repository is a compilation of research outputs and findings from past and on-going projects related to rural areas.

It enables searches for outputs, findings and recommendations from research projects by topics relevant to rural areas of Europe.

It provides outputs of analysis of projects by topics and keywords, funding and research programmes. The Repository also provides access to the sets of SHERPA Discussion and Position Papers on selected rural topics.

“SHERPA”: Covering the most challenging rural topics

Long-Term Vision for Rural Areas



Biodiversity



Climate change and environmental services



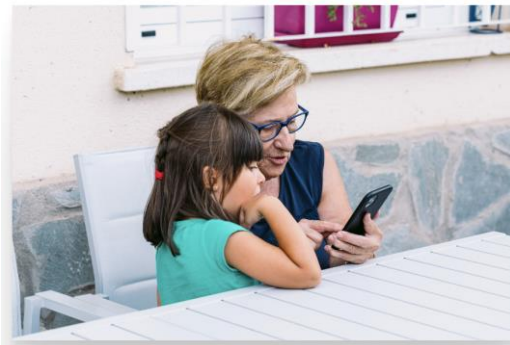
Change in production and diversification of the rural economy



Social dimension of rural areas



Digitalisation in rural areas



Climate change and land use



Towards sustainable and resilient value chains



“SHERPA”: Rich set of functionalities to reach to specific and targeted results

Selected Rural Topic > **Biodiversity**

98 Projects found

Sort by ▾

Filter by

Subtopics ▾

Funding Programme ▾

Keywords ▾

From year ▾

Finished by ▾

Participants ▾

Countries ▾

Clear All



Horizon 2020
European Union Funding
for Research & Innovation

PEGASUS (01-MAR-2015 - 28-FEB-2018) €3.01m H2020

Summary: EU's agricultural and forestry land provides a wide range of public goods (PG) and ecosystem services (ESS) on which society depends, yet land use decisions and society often under-value these . PEGASUS will develop innovative, practical ways of making PG and ESS concepts...

Subtopics: Biodiversity and Landscape
🔑 Keywords: sustainable, ecosystem, ecological, land use

[View Project's outputs \(49\)](#)



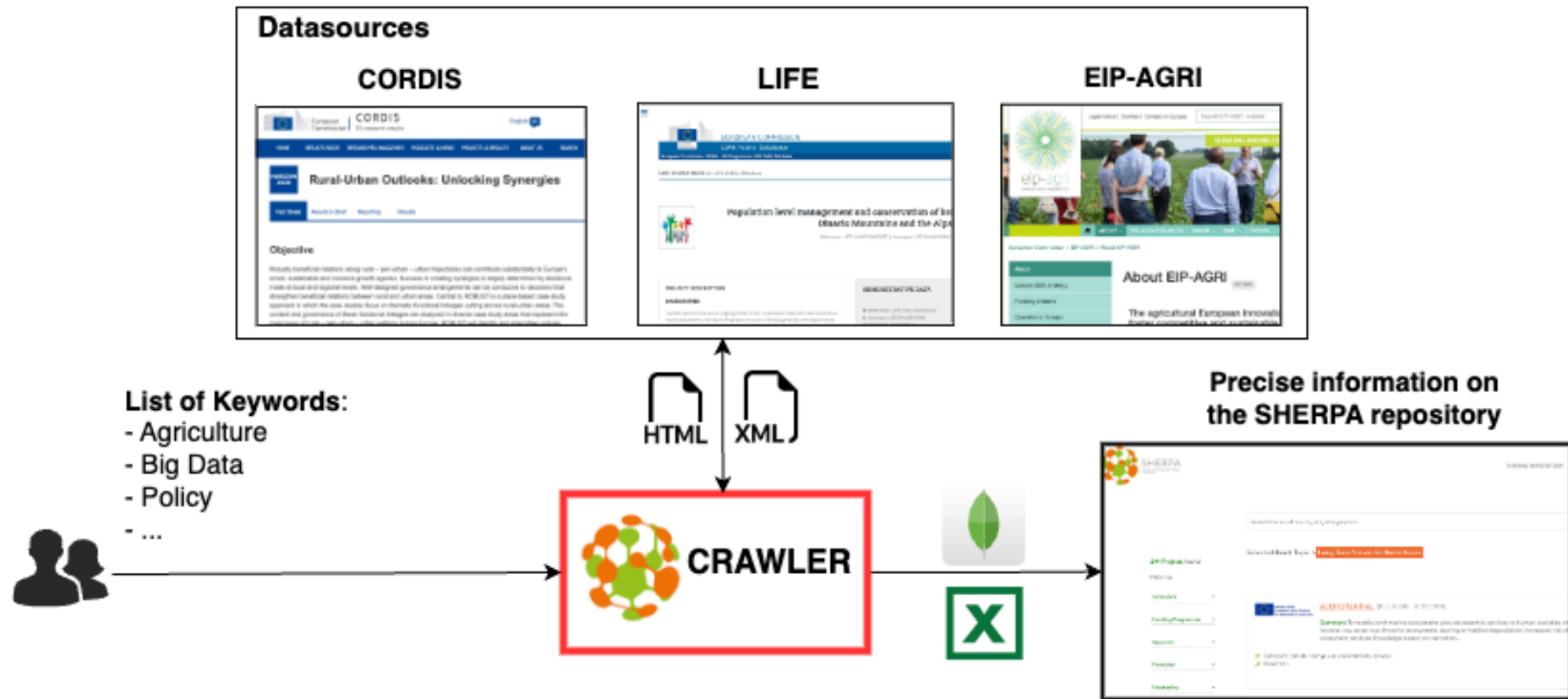
Horizon 2020
European Union Funding
for Research & Innovation

HNV-Link (01-APR-2016 - 31-MAR-2019) €2.23m H2020

Summary: "High nature value (HNV) farmland designates "those areas in Europe where agriculture is a major land use and where that agriculture supports, or is associated with, either a high species and habitat diversity or the presence of species of European conservation concern, or..."

Subtopics: Biodiversity and Landscape

“SHERPA”: A powerful crawler engine developed for the project’s needs



1. Thousands of projects from different datasources are analyzed in less than 24 hours.
2. Most relevant projects are ranked according to several factors (keywords, date, etc.).
3. Deliverables of the most relevant projects are also analyzed and ranked.
4. The crawler processes XML and HTML inputs and exports results into CSV (Excel) and JSON (MongoDB).

“SHERPA”: Summarisation of each project’s results powered by AI

PROJECT'S OBJECTIVE

EU's agricultural and forestry land provides a wide range of public goods (PG) and ecosystem services (ESS) on which society depends, yet land use decisions and society often under-value these . PEGASUS will develop innovative, practical ways of making PG and ESS 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'. Recognising that the appreciation of PGs is context-dependent, PEGASUS uses social-ecological systems as an analytical framework to explore systemic inter-dependencies among natural, social and economic processes. It will adopt participatory action research with public and private actors and stakeholders to better understand the range of policy and practical challenges in different case study contexts (localities, sectors, management systems, etc.). An EU-level spatially explicit assessment of causalities between socio-political and institutional drivers, different land management systems and multiple delivery of PG will be complemented by fine-grained analysis within the case studies, and comparative meta-analysis will be applied to develop an operational framework for mapping, valorising and determining what PG and ecosystem service (ES) provision is needed and feasible within particular territories and sectors. New data-sets, transferable methods and tools that are fit-for-purpose and sensitive to the plurality of decision-making contexts will be generated. By improving recognition of the social and economic value of PG, PEGASUS will promote improved and innovative approaches to their provision by businesses and communities, and highlight specific policy improvements. It will provide specific advances in CAP,

PEGASUS

Public Ecosystem Goods And Services from land management - Unlocking the Synergies

- 2015 - 2018
- Budget: 3.01m
- Coordinator: Institute For European Environmental Policy, London

[Original source](#)

[Project's website](#)

Keywords:

sustainable, ecosystem, ecological, land use







Countries involved:

UK, FR, NL, PT, BE, EE, DE, IT, AT, CZ, SI












“SHERPA”: Each project’s outputs categorized per type and purpose

Relevant outputs:

Filter by type ▼

-  [Project website online](#)
-  [Policy lessons and recommendations](#)
-  [Country reports: socio-political, economic and institutional drivers](#)
-  [30-35 short case study reports](#)
-  [Report on patterns and trends of PG/ESS in relation to land management systems](#)
-  [Database and classification system of different types of PG/ESS in relation to farming/forestry systems](#)
-  [Periodic Reporting for period 1 - PEGASUS \(Public Ecosystem Goods And Services from land management - Unlocking the Synergies\)](#)
-  [Synthesis report - conceptual framework](#)
-  [Report from the regional roadshows and the final conference](#)
-  Analyse von Landnutzungssystemen zur Erbringung Öffentlicher Güter

Legend for output types

-  Documents, reports
Publication: Case study
Publication: After-LIFE
Communication Plan, Book, Article-Paper, Guidelines-Manual, Layman report, Research findings, Technical report
-  Open Research Data Pilot
-  Video link
-  Journal paper
-  Websites, patent fillings, videos etc.
Demonstrators, pilots, prototypes
-  Project web site
-  Social media page
-  Poster
-  Newsletter
-  Brochures, leaflets, slides, presentations
-  Unknown


Food for thought...

- Digital reservoirs (or platforms) contain very **useful information**
- It will be a **pity to be “wasted”** after the end of the projects
- Digital reservoirs (or platforms) are **easier to navigate than “standard” project websites**, which are not attractive to our main target groups (farmers, advisors)
- Digital reservoirs are **not suitable for all projects**, only for the ones that collect vast amounts of information, mostly for **IA** and **CSA** projects
- EUFarmBook could be **THE place** to host these digital reservoirs when the projects end



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 **Brussels**

Thank you!

Spyros Fountas
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