

FARM

Technical issues concerning the FARM-Dashboard (IO 1) and its usage for IO2 and IO4

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FARM project 2020 - 2022



FARM

Fostering Agriculture
Rural Development
and Land Management



DAAD Deutscher Akademischer Austauschdienst
German Academic Exchange Service

Results (Intellectual Outputs)

The results developed in the project (so-called intellectual outputs) are summarized here.

- ▶ 1 - An online map and dashboard of European ICT and DSS Hotspots
- ▶ 2 - An online catalogue on the existing ICT and DSS tools in ARD
- ▶ 3 - Two prototype DSS tools
- ▶ 4 - Educative training material for DSS in ARD

FARM Dashboard

Dashboard generation (1)



– The dashboard has been realized with the software ArcGIS-Online



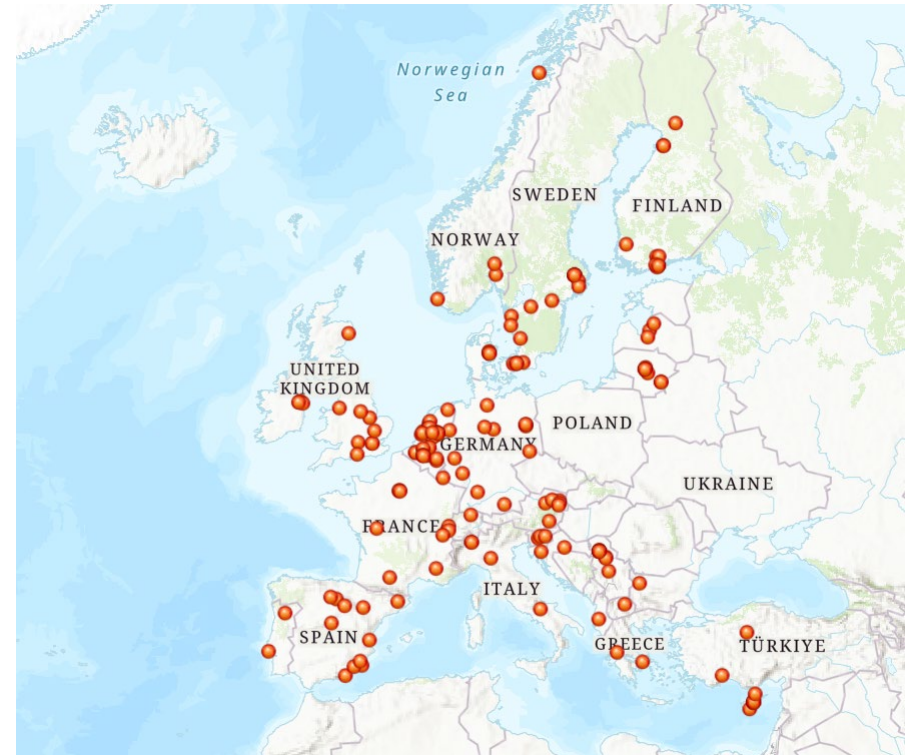
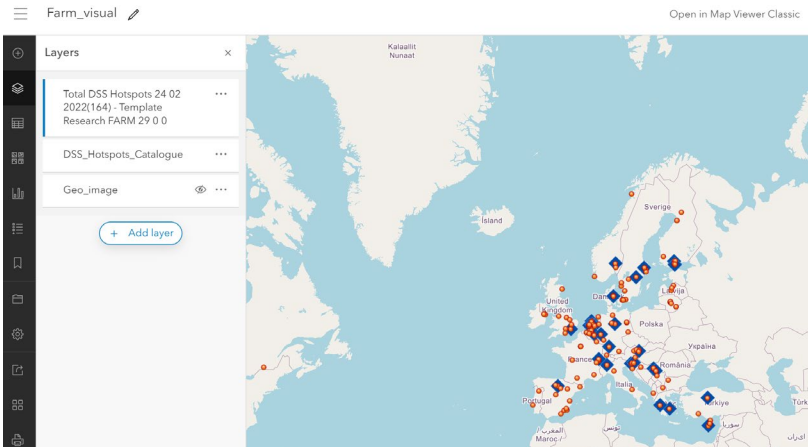
An online GIS that is easy to handle and enables users to develop maps, story maps, dashboards and other online information tools with large support

Dashboard generation (2)



- As responsible institution for IO 1, we used our universities' account for ArcGIS online.
- However, it is possible to develop applications locally, but disseminate results publicly (for instance, for FARM partners, but also the general public)

Dashboard generation (3)



- Map generation using ArcGIS online
- Goal: a European map with „DSS-Hotspots“

Dashboard generation (4)



Excel Final_DSS_Hotspots - Gespeichert

Suche (Alt + M)

Start Einfügen Zeichnen Seitenlayout Formeln Daten Überprüfen Ansicht Hilfe Anzeigen

No.	Title	Country	Region	Who is the	What are t	climate ch	soil manag	water mar	economic	other aspe	Literature	Technology	Useful link	Lat	Long	Products/(Objectld	x	y			
1	Mythronic	Netherlan	Molengraaf	Soheil Jah	B2B startup	committed to	developing AI	technologies	Crop health	monitori	Data scien	https://wv	52,17695	4,405494				1	4,405494	52,17695		
2	connector	Netherlan	Connecter	investor: S	To train an	Artificial Intelligence	to learn how to	farm, Ida	uses s	They have	Data scien	https://wv	52,60013	4,900308				2	4,900308	52,60013		
3	Gearbox Ir	Netherlan	Gearbox Ir	SIMONE	Smart cameras	with practical	vision			Analysing	quality witl	Data scien	https://ge	52,01825	4,209883			3	4,209883	52,01825		
4	Preciselan	Netherlan	6708 PB	Wageningen	Precision /	weather ir	what is needed	to achieve	cost-integrator	Coordinati	Precision /	https://wv	52,00115	5,670217				4	5,670217	52,00115		
5	AeroVisior	Netherlan	Stadsring 47	(3rd flo	independent	procurement	advisor of (geo-	Farmers hi	- Applicati	Use arial v	Supply chz	https://wv	52,1557	5,383178				5	5,383178	52,1557		
6	terraspher	Netherlan	Keizersgracht 125-12	Our business	is to an: satellite-bi	satellite-bi	satellite-bi	Crop quali	Procurement	Supply chz	https://wv	52,71583	4,982709					6	4,982709	52,71583		
7	ISOGrou	Netherlan	Middelkan	Wim van	cautomate	Robotics a	Robotics a	Robotics a	Have part	https://wv	Data scien	https://wv	51,8173	5,195124				7	5,195124	51,8173		
8	Corizon	Netherlan	Corizon BV,	Oude Bot	AgroSense: key	between the	measurements	in and or	analyses tl	GPS/GNSS	Data Anal	https://coi	53,31738	6,558348				8	6,558348	53,31738		
9	efarmer	Netherlan	Laan van K	Michael U	Precision z	cloud appl	The network	allows to	operate	agriculture	Internet o	Precision /	https://wv	52,33295	4,882021			9	4,882021	52,33295		
10	National Ir	Netherlan	Antonie va	Minister	rr Health,	Welfare and	Sport			Data colle	The organi	Data Anal	https://wv	52,11852	5,189059			10	5,189059	52,11852		
11	serket-tecl	Netherlan	Borneolaa	Kristof	developing	the world's	most advanced	technology	for Livestock	ri the pig	far	Data scien	https://wv	52,37113	4,9372			11	4,9372	52,37113		
12	Polariks	Netherlan	Polariks B.V.	Spaarne	g increasing	Yes				Crop quali	hyperspec	Data Anal	www.pola	52,07652	4,32691			12	4,32691	52,07652		
13	Spectro-A	Netherlan	Sueterswe	Hamed M	Spectral Sensing	and Artificial	Intelligence	For Precisi	the grass t	Data colle	Data scien	www.spec	52,22592	6,693586				13	6,693586	52,22592		
14	Swedish U	Sweden	Almas Allé	Mats Söde	Laboratory	for intellig	Improve soil	and crop	quality	decision si	Projects u:	Data Anal	https://wv	59,81501	17,66275			14	17,66275	59,81501		
15	THE HEUR	Sweden	Almas Allé	Peder Wik	demand o	to make	projections	under	different	climat	number o	Data anal	Data Anal	https://wv	59,81501	17,66275			15	17,66275	59,81501	
16	Global Op	Netherlan	21111 Lak	US Govern	Facilitate	everyone	who has	aim to	fulfill	zero	hunger	Open data	Providing	:Data Anal	https://wv	45,44792	-73,9351			16	-73,9351	45,44792
17	Foodie Prc	Spain	AustriaCz	EU Frame	Farming	equipment	and machinery	soil	management	t data-drive	Crops (ger	Data Anal	http://wv	42,20987	-3,22497			17	-3,22497	42,20987		
18	Next Gene	Sweden	Interactor	Jessica Lin	discuss	next	generation's	AgriDSS	which	are	useful ar	Paper on	v sustainabi	Sustainabi	https://wv	58,39421	13,85348			18	13,85348	58,39421
19	Next Gene	Sweden	Swedish U	Christina L	discuss	next	generation's	AgriDSS	which	are	useful ar	Paper on	v sustainabi	Precision /	https://wv	59,81501	17,66275			19	17,66275	59,81501
20	Next Gene	Sweden	Extension	Magnus.Lj	discuss	next	generation's	AgriDSS	which	are	useful ar	Paper on	v sustainabi	Precision /	https://wv	59,81501	17,66275			20	17,66275	59,81501
21	Swegreen	Sweden	ålambsväg	Pierre Mol	vertical	farming	industry			Vertical Fa	Use AI	anc Data	scien	https://wv	59,55763	18,01936			21	18,01936	59,55763	
22	LudaFarm	Sweden	Luda.Farm	Ludvig Bro	Smart	farming,	Farm video	surveillance,	Vehicle	came	For securit	IoT based	Internet o	https://wv	57,95304	12,1312			22	12,1312	57,95304	
23	Vultus	Sweden	Lilla Fiskar	Robert Sch	makes	precision	farm	Spectral ai	the	Normalised	Diffe	farmers ca	remote se	Precision /	https://wv	55,72564	13,17086			23	13,17086	55,72564

- Behind the map is a huge database of attributive information on the DSS-Hotspots (including coordinates)
- The database resulted from intensive research on Hotspots by the HSH and all other FARM partners

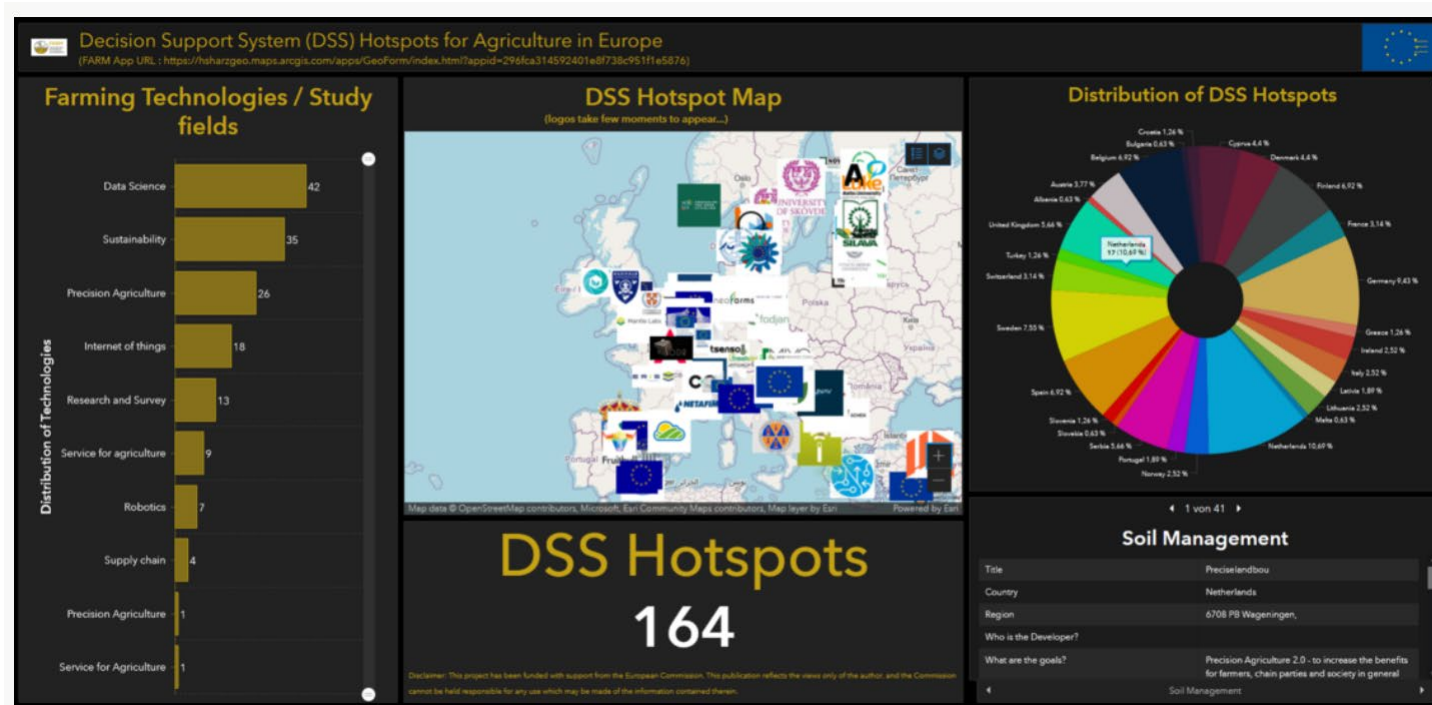
Dashboard generation (5)



	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	F
1	Title,Country	Region,Who is the Developer?,What are the goals?,climate change,soil management,water management,economic aspects,other														
2	Mythronics,Netherlands,"Molengraaffsingel 12, 2629 JD Delft, Netherlands",Soheil Jahanshahi,"B2B startup committed to developing AI technologies empower modern farmer",,,,,,"Crop health monitoring, man															
3	connecterra,Netherlands,"Connecterra B.V.															
4	Kraanspoor 50															
5	1033 SE Amsterdam", "investor: Sistema Venture Capital, AgFunder", "To train an Artificial Intelligence to learn how to farm, so we can empower farmers of all sizes to increase productivity of their farms, while re															
6	Gearbox Innovation Makers,Netherlands,"Gearbox Innovations BV															
7	Nollaantje 42C															
8	2676BW Maasdijk",SIMONE,"Smart cameras															
9	with practical vision",,,,,Analysing quality with the help of AI,,Data science,https://gearboxinnovations.com/contact/,52.0182486,4.209882695,3,4.209882695,52.0182486															
10	Preciselandbou,Netherlands,"6708 PB Wageningen, ",,"Precision Agriculture 2.0 - to increase the benefits for farmers, chain parties and society in general and increasing agricultural sustainability.",weather infc															
11	Wageningen University & Research",Precision Agriculture,https://www.preciselandbouwprojecten.nl/en/plb/PL-Projects/PL-2.0.htm,52.00115116,5.670217006,4,5.670217006,52.00115116															
12	AeroVision ,Netherlands,"Stadsring 47 (3rd floor)															
13	3811 HN Amersfoort",,independent procurement advisor of (geo-)information,,,"Farmers have an individual need for timely and regular delivery of crop and plot information, but individually the farmers cannot															
14	terrasphere,Netherlands,"Keizersgracht 125-127															
15	1015 CJ Amsterdam															
16																
17	The Netherlands",,Our business is to analyse and extract information from Earth Observation Satellites. We provide actionable data and business intelligence on crops throughout the world,,satellite-based intelli															
18	ISOgroup ,Netherlands,"Middelkampseweg 9															
19	5311 PC Gameren",Wim van der Meyden,automate labor intensive tasks within the international horticultural industry.,Robotics and Machinery for Horticulture sector,Robotics and Machinery for Horticulture s															
20	Corizon,Netherlands,"Corizon BV, Oude Boteringestraat 71, 9712 GG Groningen, Netherlands",,"AgroSense: key between the measurements in and on the field, and the specific knowledge you have of your farm.															
21	Visualize yieldmaps															
22	Explore data															
23	Visualize part fields															
24	Create treatment zones",Data Analytics,https://corizon.nl/,53.31738215,6.558347669,8,6.558347669,53.31738215															
25	efarmer,Netherlands,"Laan van Kronenburg 14, 1183 AS Amstelveen, The Netherlands",Michael Utkin,Precision agriculture technology for all the farmers in the world,cloud applications for agriculture,The netwo															
26	National Institute for Public Health and the Environment,Netherlands,"Antonie van Leeuwenhoeklaan 9, Bilthoven", "Minister responsible															
27	Hugo de Jonge", "Health, Welfare and Sport",,,,,Data collected for the purpose of DSS,,The organisation has data for food composition and national food consumption survey,Data Analytics,https://www.rivm.nl/e															
28	serket-tech,Netherlands,"Borneolaan															

- More information on each Hotspot was collected, and summarized as information which is clickable in the map

Dashboard generation (6)



– Finally, the map (and the underlying data) was integrated into a Dashboard, thus providing all information in a user-friendly manner

How to use the FARM dashboard for IO 2

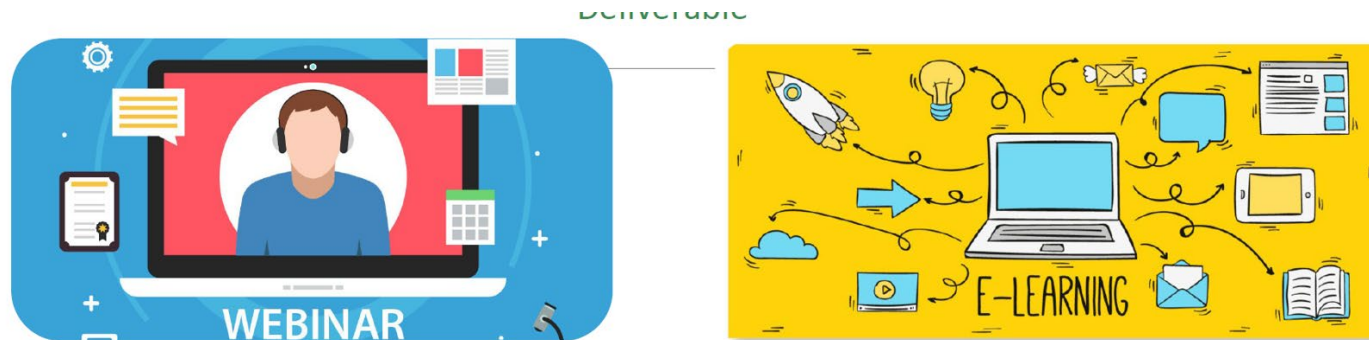
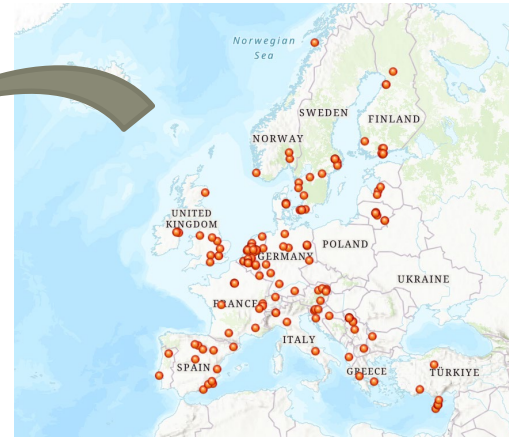
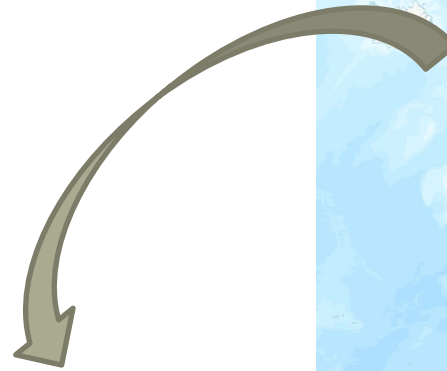


On-line catalogue on existing ICT-DSS tools

In IO 2, a selection of DSS-Hotspots will be presented in an online catalogue

The catalogue is usable as information material for farmers, agricultural consultants, scientists, and students in agricultural faculties interested in DSS

Using the dashboard in IO4



The dashboard can deliver basic information on DSS in agriculture and land development for the webinars, videos and other eLearning products that are produced within FARM



Thank you for your attention

Are there questions?