# D8.5 Dissemination & Communication Strategy (2)

robs4crops.eu

This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No 101016807

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| **Author(s)/Organisation(s)** | Mladen Radišić, Milica Klavžar, Tatjana Knežević, Tamara Trninić (FSH) |
| **Contributor(s)** | Grigoris Chatzikostas (FSH Greece), Ard Nieuwenhuizen (WUR) |
| **Work Package** | WP8 |
| **Delivery Date (DoA)** | 31 Dec 2022 |
| **Actual Delivery Date** | 23 Dec 2022 |
| **Abstract:** | This document provides a systematic and comprehensive overview of dissemination & communication strategy undertaken to date in the context of the Robs4Crops project. |

| **Document Revision History** | | | |
|---|---|---|---|
| **Date** | **Version** | **Author/Contributor/ Reviewer** | **Summary of main changes** |
| 23 December 2022 | 1 | Mladen Radišić, Milica Klavžar, Tatjana Knežević, Tamara Trninić (FSH) | Initial version |
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| **Dissemination Level** | | |
|---|---|---|
| **PU** | Public | **Yes** |
| **PP** | Restricted to other programme participants (including the EC Services) | No |
| **RE** | Restricted to a group specified by the consortium (including the EC Services) | No |
| **CO** | Confidential, only for members of the consortium (including the EC) | No |

| ROBS4CROPS Consortium | | | |
|---|---|---|---|
| Participant Number | Participant organisation name | Short name | Country |
| 1 | STICHTING WAGENINGEN RESEARCH | WR | NL |
| 2 | GIROPOMA COSTA BRAVA SL | GIR | ES |
| 3 | AGROTIKOS SYNETAIRISMOS POLISEOS XIRON KAI NOPON STAFYLION KIATOY KORINTHIAS PIGASOS | PEG | GR |
| 4 | SERRATER SL | SER | ES |
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| 9 | AGRO INTELLIGENCE APS | AI | DK |
| 10 | FOODSCALE HUB ENTREPRENEURSHIP AND INNOVATION ASSOCIATION | FSH | SR |
| 11 | TEYME TECHNOLOGIE AGRICOLA SL | TEY | ES |
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| 15 | UNIVERSITAET HOHENHEIM | UHOH | DE |
| 16 | PANEPISTIMIO PATRON | LMS | GR |



Funding Scheme: Innovation Action (IA) • Topic: H2020-ICT-46-2020

Start date of project: 01 January 2021 • Duration: 48 months

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| List of Abbreviations and Acronyms | |
|---|---|
| R4C | Robs4Crops |
| DC | Dissemination and Communication |
| | |

# Executive summary

This deliverable report offers a comprehensive overview of the dissemination and communication strategy planned and outlined in the deliverable D8.1 The Dissemination and Communication Strategy (1) throughout the project's first two years, from January 2021 to December 2022.

The Dissemination and Communication Strategy (1) that was previously submitted is updated by this report (D8.1, submitted in M03 of the project). The two documents' approaches and structures are comparable.

The purpose of this document is to compare the planned and actual actions and make decisions about how to move forward in the upcoming time frame. The initial strategy and its outcomes are described in Chapter 2, while the evaluation and improvement of the initial strategy is described in Chapter 4 - *Strategic directions, action points and next steps.*

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**Chapter 1** - *Introduction* > delves into further detail about the context and goals of the project's efforts to disseminate information, communicate and raise awareness. This chapter highlights the specific objectives of the Dissemination and Communication Strategy and how they were accomplished.

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**Chapter 2** - *Strategy* > provides updated information on the initial strategy > methodology, approach and principles. It will give an overview on how it was delivered, strengths and weaknesses, and learning takeaways.

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**Chapter 3** - *R4C Channel Mix* > the main objective of this chapter is looking into the dissemination and communication activities segmented into three categories - online, offline and in-person. It will give an overview of the focus of these activities, how they were implemented, what were the outcomes and learned lessons.

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**Chapter 4** - *Strategic directions, action points and next steps* > Focuses on evaluation of the initial strategy and highlighting plans on the improved strategy for the project's dissemination and communication activities over the next 24 months.

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**Chapter 5** - *Conclusions* > this chapter concludes the report.

# 1 Introduction

## 1.1 About Robs4Crops

In order to tackle the current challenges in European agriculture, i.e., the cost and scarcity of labour, which affect profitability and threaten the existence of farming, Robs4Crops is developing a robotic farming solution with smart implements, autonomous vehicles, and the farming controller.

As part of this robotic system, Robs4Crops works on upgrading current tractors and farming equipment so that they can function together alongside current agricultural robots. As the first half of the project is coming to an end, partners already had the opportunity to test their solutions in real farming environments, in four different countries: France, Greece, Spain, and the Netherlands. The project's stakeholders are being closely involved throughout the whole development and testing process, which are being carried out iteratively.

Robs4Crops is addressing non-technical challenges in addition to technical ones. This goal will be accomplished by utilising current agricultural standards and equipment (thus reducing the initial investment required), as well as by addressing the lack of maintenance, insurance, finance, and training. Both technical and non-technical aspects of robotic farming are being demonstrated at large-scale pilots in four countries.

On the other hand, Robs4Crops also examines the robotic farming solution's ability to adhere to legal requirements, how ethical principles might be managed (especially those relating to data collection and storage), and how to measure the socioeconomic impact. The project also examines whether new business models can help in the adoption of agricultural robotics technologies. The ecosystem for agricultural robots is being iteratively developed and simultaneously with technology advancements.

*To successfully adopt Robs4Crops robotic farming technologies on a big scale, the project will make significant communication and dissemination efforts during its duration. The project's goal is to have a far bigger effect, one that would improve the agriculture sector throughout Europe, and not merely to promote the adoption of its new technology within its large-scale pilots.*

## 1.2 Context

Robs4Crops will revolutionise automated agriculture by offering a cutting-edge robotic farming system that can address both technical and non-technical difficulties that farmers encounter. With the aim of bringing significant innovation, the robotic system's primary goal will be to provide repetitive, endangering, but also cognitively and physically demanding tasks, such as managing, storing, processing, and handling agricultural crops, that require increased manual effort or continuous human supervision, with correspondingly autonomous robotic-based procedures.

The main objective is to enable human and robotic collaboration in a setting where processing and manipulation tasks may be shared and carried out concurrently.

Therefore, it is crucial to communicate and disseminate Robs4Crops's insights on the technical and non-technical difficulties of integrating robots and AI into everyday life, in

order to influence the speed at which farmers are ready to embrace such solutions. Robs4Crops is a project that focuses both on farmers and technology, because it recognises the critical importance of a strong ecosystem in gaining farmer's trust and enabling widespread adoption of robotic systems and AI.

## 1.3 Objectives

The key objectives of dissemination, communication, and awareness raising initiatives are listed in the following table. All efforts made throughout the first half of the project's duration have been directed at achieving the objectives indicated in Deliverable 8.1 Dissemination & Communication Strategy (1). A breakdown of activities that are carried out to achieve the project's communication and dissemination objectives is provided under each specific objective for easier comprehension.

| | |
|---|---|
| Obj. 01 | Attract an adequate number of industry-leading innovators in food and farm (Digital Innovation Hubs, manufacturers, scientists, and researchers…), as well as farmers from all across Europe, to become a part of the ROBS4CROPS ecosystem. |
| The previous 24 months have been spent on raising stakeholder knowledge of and familiarising them with Robs4Crops' mission and goals. In the future, we intend to place more value on direct involvement with significant industry players and to forge deep connections with our stakeholders. | |
| Obj. 02 | Present to Robs4Crops stakeholders the importance of gaining access to novel, beyond the state-of-the-art agricultural robotic solutions and to their supporting ecosystem. |
| The campaign to market Robs4Crops through social media and blog articles has generated a lot of interest from a range of additional target groups that Robs4Crops want to engage, as well as from the robotics in agricultural community. The greatest indicators of this are the volume of website traffic and the growing number of social media followers. | |
| Obj. 03 | Highlight the significance of piloting, testing, and experimentation with fully autonomous robotic systems and business models in an environment that is heavy on collaboration. |
| This was achieved by presenting Robs4Crops at significant events for the robots in agricultural community. Furthermore, it has been featured in newsletters and non-scientific publications. | |
| Obj. 04 | Raise the awareness of a wide range of stakeholders, on the local, regional, and international level, on the role of Robs4Crops in increasing the competitiveness of existing industries through the autonomous robotic farming system, but also additional business creation. |
| It is noteworthy that while Robs4Crops and the wide range of benefits it would offer, have received a lot of attention, its communication efforts have not yet emphasised the influence it would have on building more resilient and sustainable farming systems or on potential market growth. This stage will be completed later, as the large-scale pilots are further developed. | |
| Obj. 05 | Ensure proper know-how exchange among Robs4Crops partners. |

| | |
|---|---|
| The exchange of information among partners has been a top priority since the project started. This has so far been done through informing partners on important and significant events, the progress of publications, newsletter features, and other things. | |
| Obj. 06 | Support the organisation of a range of events inside the Robs4Crops ecosystem (e.g., conferences, forums, workshops, business events, Roadshow events). |
| Robs4Crops collaborated on an event with other ICT-46 robotics initiatives, including CoRoSect, Robotics4EU, and FlexiGroBots. The scope of the awareness-raising and ecosystem-building initiatives will expand as the project progresses. | |
| Obj. 07 | Develop networks and liaison with relevant DIHs and other networks, existing initiatives and other related H2020 projects and projects tackling Agrifood and Robotics to share resources and maximise impact. |
| All past communication efforts have been focused on increasing awareness of Robs4Crops and the various benefits that its autonomous, integrated robotic system will offer to farming. Everything from social media posts and newsletters to online events was part of the promotion effort. | |
| Obj. 08 | Support the development and maintenance of the official project's website throughout the project lifecycle. |
| A project website featuring a project description, vision, goal, principles, and objectives, as well as current news and events, was built. It introduces the consortium while also detailing the project's concept and benefits. This website is updated on a regular basis with project-related news and deliverables. It serves both broad and specialist audiences as the key information centre for newcomers. | |
| Obj. 09 | Pave the way for successful exploitation and scalability of Robs4Crops technologies and solutions. |
| Through internal collaborations, deliverables and IP workshops, the R4C consortium will agree upon the best methodologies for robotic solution to reach the markets. It should not be neglect that external research will further support a methodology and expansion of the market following yearly trends. | |

*Table 1 R4C - Specific Objectives*

# 2 Strategy

## 2.1 Methodology approach

The goal of the Robs4Crops Dissemination and Communication Strategy is to engage the relevant stakeholders. It has been continually developed and improved through close collaboration among consortium members. The strategy has been effective in laying the groundwork for a successful outreach to all stakeholders involved in the food and farming industries, target groups, and interested parties.

In the first deliverable *D8.1 Dissemination and Communication Strategy*, we started with outlining key components that should be considered to increase the effectiveness of the Dissemination and Communication: targeting the right audience and developing the right content.

Best practices of marketing were implemented to bring together stakeholders from many sectors, encourage networking among them, but also to generate a broader awareness of the advantages of the Robs4Crops. The following methods were used and will continue to be used in the next phase of the project:

**Content Marketing**: Robs4Crops continuously creates content during the duration of the project and distributes it across a variety of media, including radio, television, printed newspapers, social media - LinkedIn, Twitter, Facebook, and YouTube. The Robs4Crops website receives traffic and leads thanks to a powerful content approach.

The content marketing strategy for Robs4Crops lays out a precise plan for reaching Robs4Crops' target audiences through frequent posting, maintenance, and dissemination of high - quality materials that is both informative and inspiring. As a part of Robs4Crops methodology approach, we are able to use content marketing to build awareness about the solutions R4C is offering, increase conversations among relevant stakeholders, show knowledge of specific concerns consumers have and how Robs4Crops is addressing them, build long - term and stronger relationships, ultimately establishing a sense of community around the brand.

**Inbound Marketing**: This is a thorough strategy for drawing in, engaging, encouraging, and gratifying early adopters and interested parties. It is a marketing strategy that intends to provide beneficial, personalised content for numerous online mediums (such as blogs, social media, and search engines) and is predicted to boost organic traffic to the Robs4Crops website, where various stakeholders may take action.

We applied search engine optimisation to increase the visibility of content on key customer-focused channels and search engines, cutting away the need for paid advertising. The inbound marketing strategy used by Robs4Crops includes creative strategic planning, content creation, and dissemination through the most effective channels, including online, print, and, where practical, in-person. All content is optimised with keywords for search engines as part of inbound marketing to take full advantage of organic growth.

The search engine optimisation has been used since the first implementation of the strategy in M03. In the first year of the project, based on Google Analytics, the average number of active users per month was around 300, while in the second year (up until November 2022), the average number of active users per month was around 400, which shows year to year increase of 33% in visitors. Below is presented the average number of active users on Robs4Crops website for year 2022:

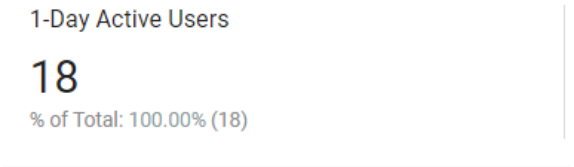



*Figure 1 R4C - Google Analytics: Average number of 1-Day Active Users in 2022*

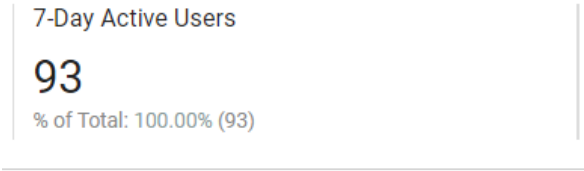



*Figure 2 - R4C - Google Analytics: Average number of 7-Day Active Users in 2022*

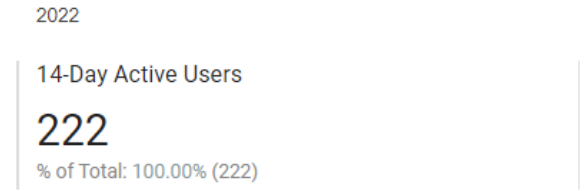



*Figure 3 - R4C - Google Analytics: Average number of 14-Day Active Users in 2022*

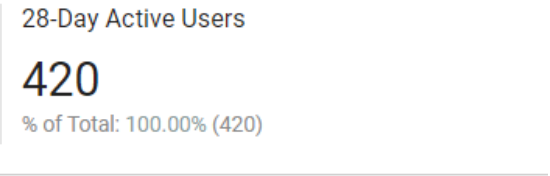



*Figure 4 - R4C - Google Analytics: Average number of 28-Day Active Users in 2022*An example of the search engine optimisation used in the blog post "Maximizing the Benefits of Automated Farming" visible on Robs4Crops website can be found in **Annex 1**.

These analytics show a positive impact that strategic search engine optimisation combined with content marketing and compelling blog posts/news had on the project's visibility.

## 2.2 Principles

Throughout all of its dissemination and communication activities, ROBS4CROPS strived to meet the following principles:

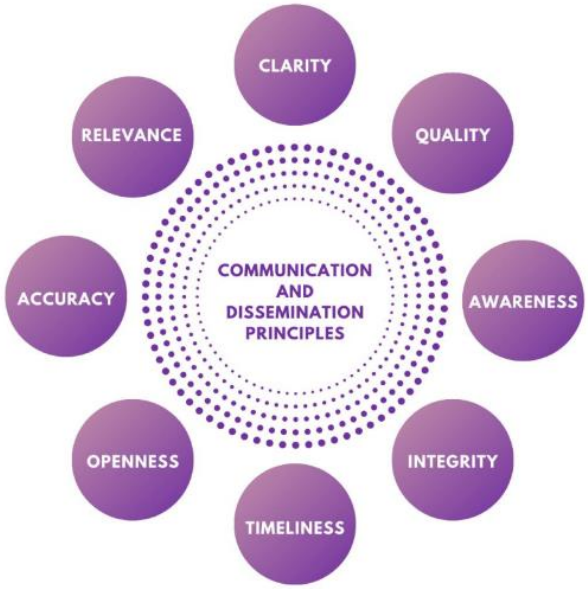



*Figure 5- R4C D&C Principles*

In order to properly construct new strategy approach, R4C conducted continuous internal evaluation as follows:

- Established the standards – first we set the standards to measure the progress and goals of the strategy (for example: comparing the performance of generic posts for social media versus pilot-related posts)
- Measure the performance – this was done through weekly check-ups of Google Analytics, where we documented the overall progress over the time (for example: conducting weekly check-up of traffic search of blog posts on the R4C website, by which we gained valuable insights of the posts that had the highest rate of traffic)
- Analysing results – R4C analysed performance and progress of all acquired data

Based on these principles and internal evaluation of the social media channels and website analytics done during the first half of the project, we were able to make logical decisions and develop new strategy approach in disseminating and communicating activities.

R4C strongly believes that new strategic directions can help the project to adapt to changes in the ever-changing digital world, to perform more effectively in disseminating and communicating project's activities and results, and to boost growth rates.

Quality: R4C aim is providing relevant content for our targeted audience, who are interested in what R4C has to offer. Awareness: so far, R4C was able to raise awareness of its brand and immersing material that attracted different stakeholders. Integrity: R4C remained straightforward and truthful with its audience. Timeliness: key messages were always communicated at the right time, which helped R4C also build its integrity. Openness: Apart from the information coming directly from the project, R4C was also distributing relevant, non-confidential information to its stakeholders. Accuracy: all the content was always thoroughly checked before distributing it to stakeholders. Relevance: all the messages that were being distributed were directly made to particular target group in accordance with the interests of that group. Clarity: R4C makes sure to disseminate and communicate all the information straightforward, leaving no room for misinterpretation of the information provided. R4C is using the writing style and language completely tailored to targeted audience.

# 3 R4C Channel Mix & Target Groups

## 3.1 Digital Channel Promotion

### 3.1.1 Website

The Robs4Crops website, which can be accessed at robs4crops.eu, has been improved with key information on our general idea and methodology, technical approach, pilots, and news & event details.

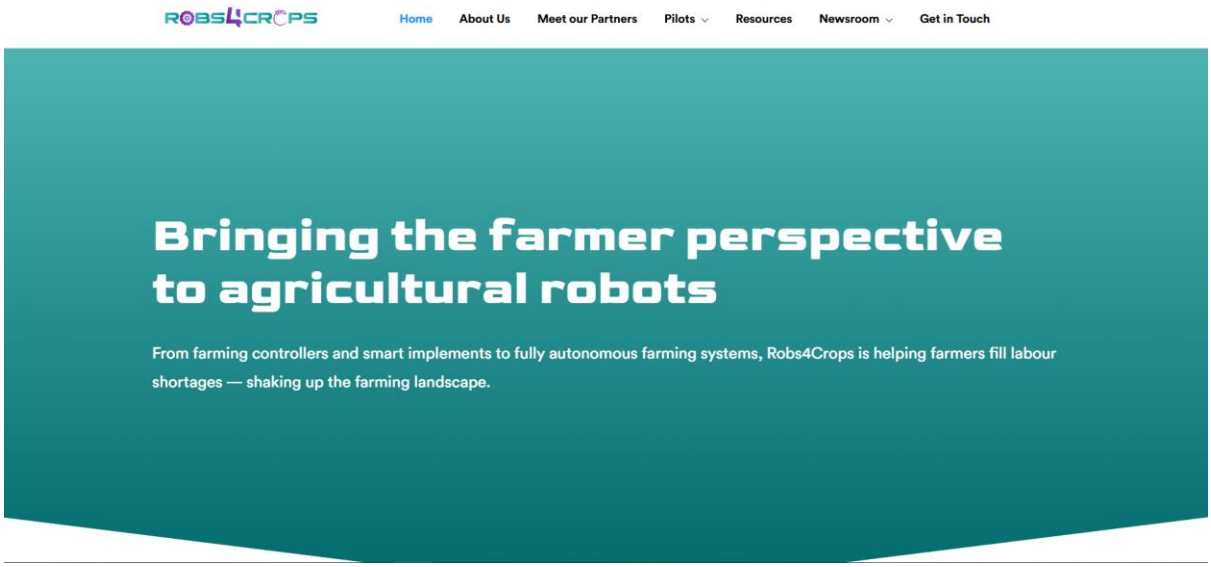



*Figure 6 Robs4Crops Homepage (available at robs4crops.eu)*

The website consists of 'Home Page' which is the main page of the website where visitors can find all the information they are looking for.

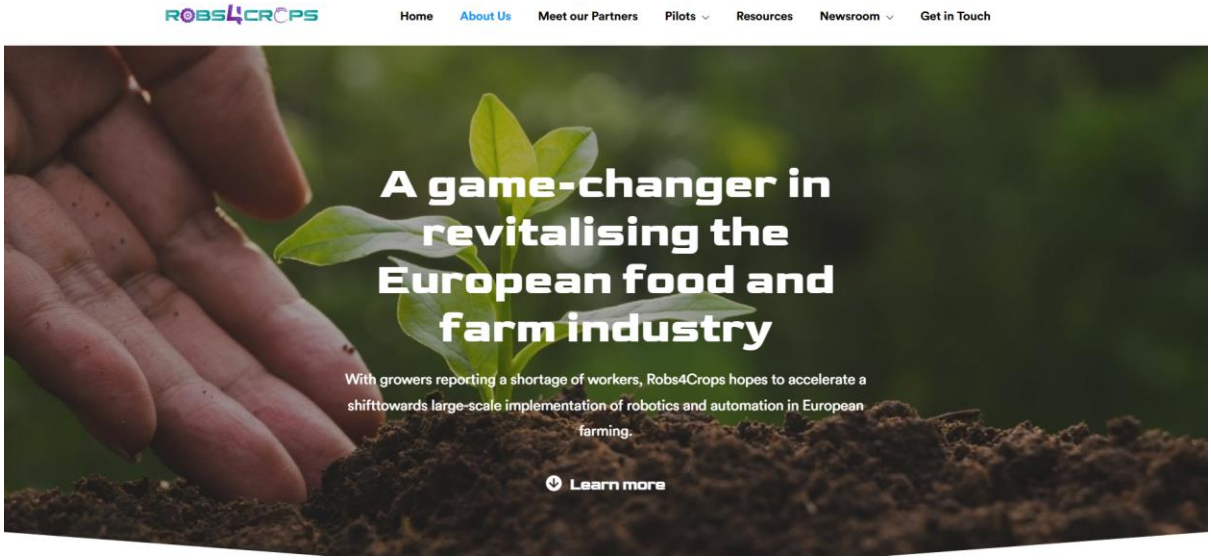



*Figure 7 Robs4Crops About Us Page*

'About Us' page informs the visitors about the project and its operations, what is unique about our work. It also shows what are the R4C values, how and why it started and who it serves.

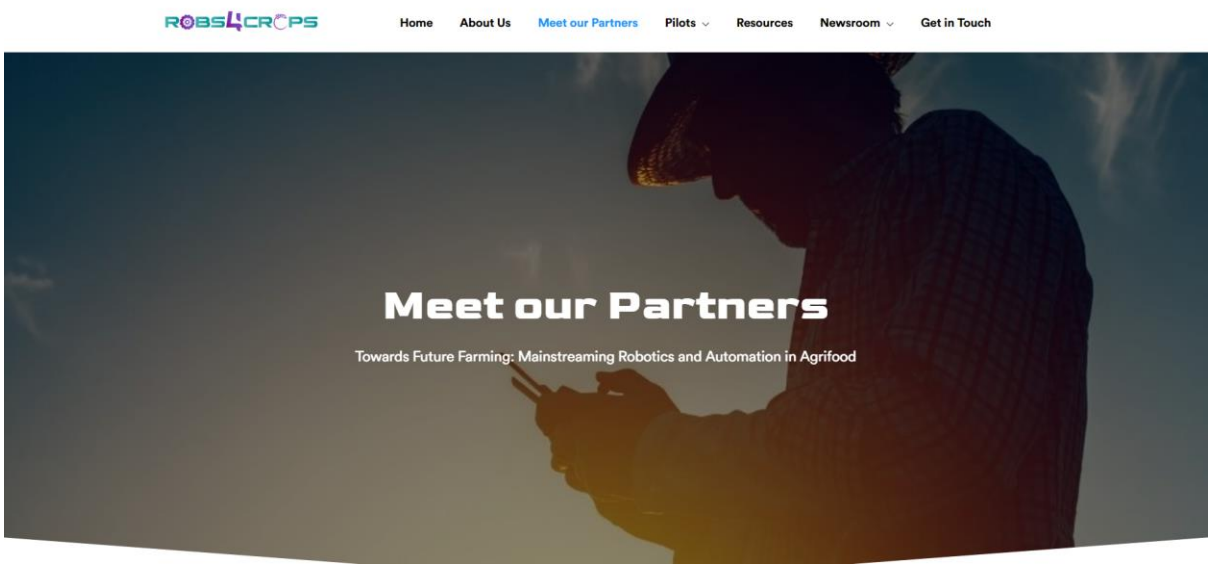



*Figure 8 Robs4Crops Meet Our Partners Page*

'Meet our Partners' page was designed in order to show who are the R4C partners in the project, link to their websites, as well as to show the advisory board of the project, short description of each member, and our communication collaborators.


*Figure 9 Robs4Crops Communication Collaborators*

'Pilots' page refers to all the large-scale pilots that are being conducted within the R4C project, what are the main activities of each pilot, what problems they are addressing, who is involved, what technology is used, what is the overall goal of the pilot.

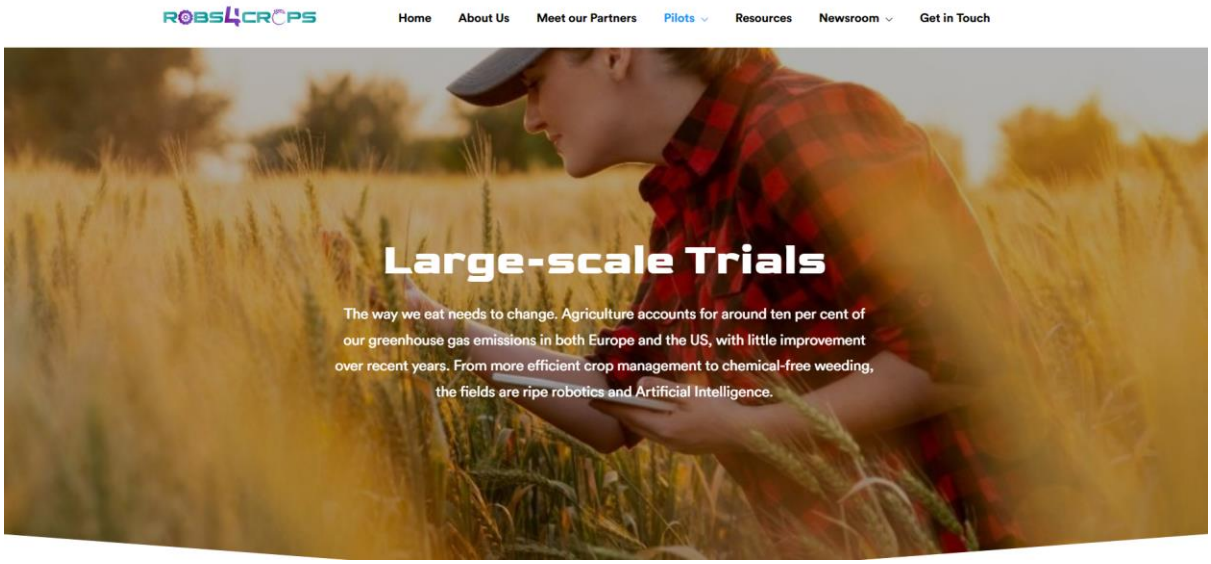



*Figure 10 Robs4Crops Pilots Page*

'Resources' page give more in-depth information on the project, what is its vision and mission, visitors can explore 'knowledge base' through which they can choose from the many components R4C offers based on their business needs. All the public deliverables are presented here. In the upcoming period, the website will be updated with all the technologies used in each pilot.

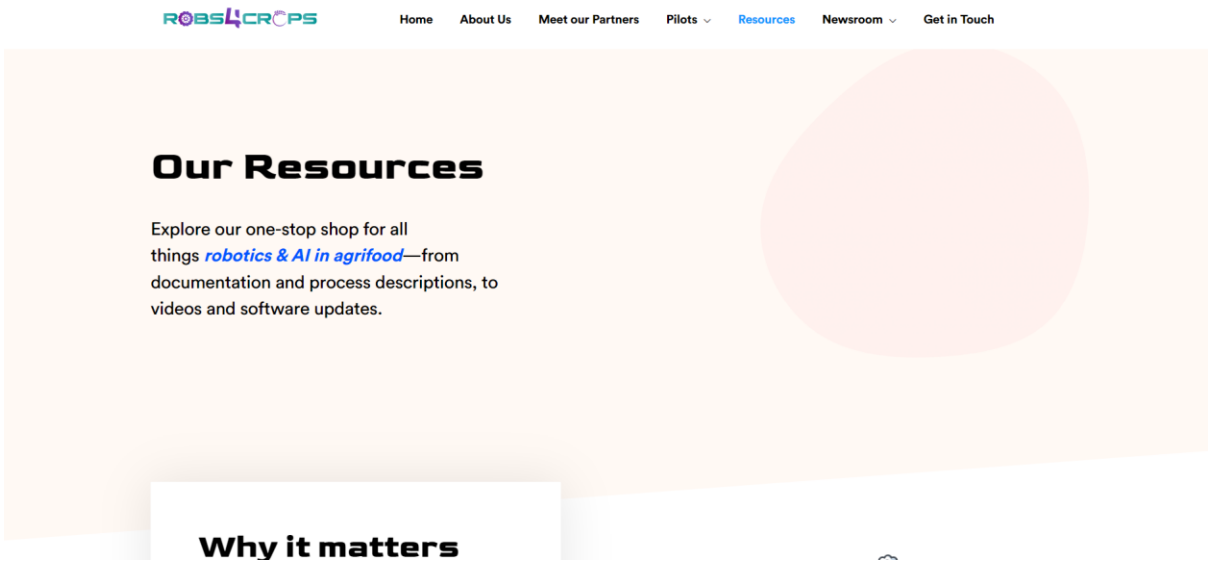



*Figure 11 Robs4Crops Resources Page*

'Newsroom' page is made with a purpose to feature all R4C press releases and project's news in one place. This is the best place for visitors to find out about who we are and what are we doing at the moment.

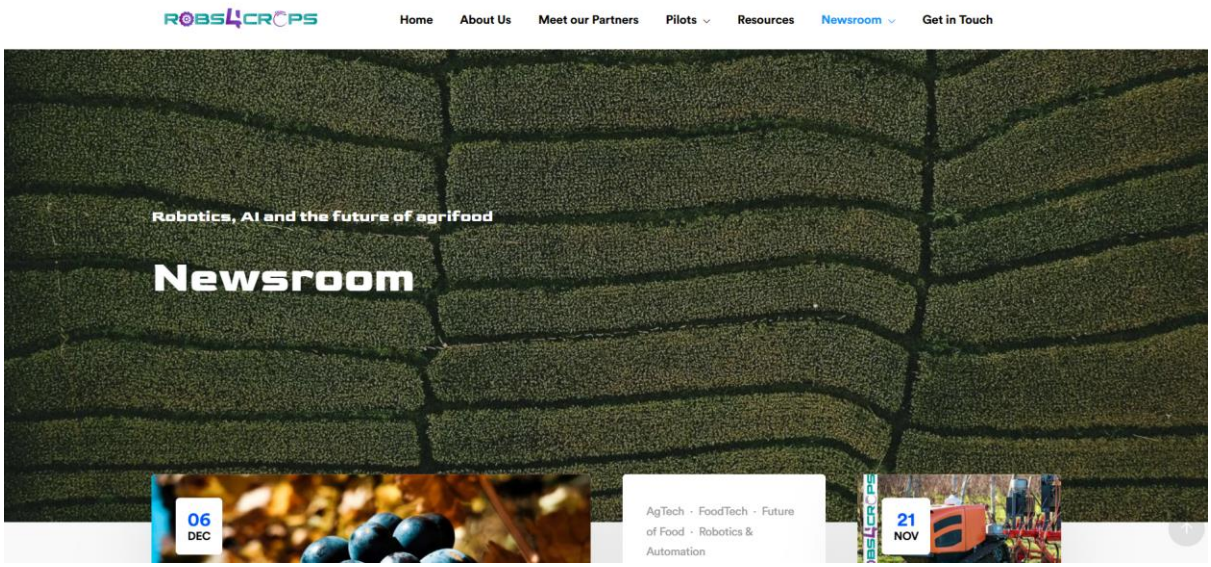



*Figure 12 Robs4Crops Newsroom Page*

'Get in Touch' page is dedicated to all of the visitors who wishes to connect with us in a simple way. They can directly fill in our contact form or send us an email using info@robs4crops.ue.

We receive relevant contact information on biweekly basis, from different stakeholders, both from European countries and outside countries (such as India, China, US), and we are happy to see how Robs4Crops has global outreach. These contacts were mainly from the field of R&D Institutes, robotic developers, robotic process automation, technology programs, machine learning and AI-based applications.

As an example, we have received a request from a Lithuanian company that works on developing a robotic platform with hardware components for agriculture. R4C D&C team had a meeting with the company's founder and discussed their interest in high-tech solutions, and potential future collaboration with R4C. The company recently participated in the EIMA2022 exhibition in Bologna, Italy, and got the first requests for developing spraying and weeding robots. In the next month, R4C will organise a new meeting with Workaholic-Robotics MB in order to better understand their products, technology readiness level, as well as their market position.

All the links to R4C social media channels are also shown on this page.

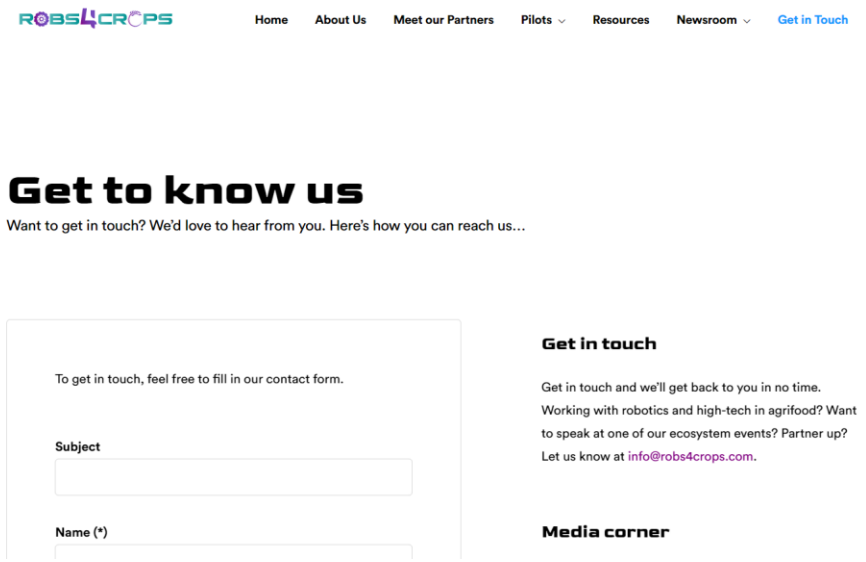



*Figure 13 Robs4Crops Get InTouch Page*

Robs4Crops website has become the face of the project, which helps in attracting more and more organic to-be-customers. It offers high-quality content and is easy-to-navigate.

### 3.1.2 LinkedIn

The LinkedIn page dedicated to Robs4Crops project has shown the most success from all of the social media channels. Through this page, we are more effectively communicating with and engaging with our key stakeholders, target audiences, and, in particular, present and potential collaborators from all areas of the agri-food value chain.

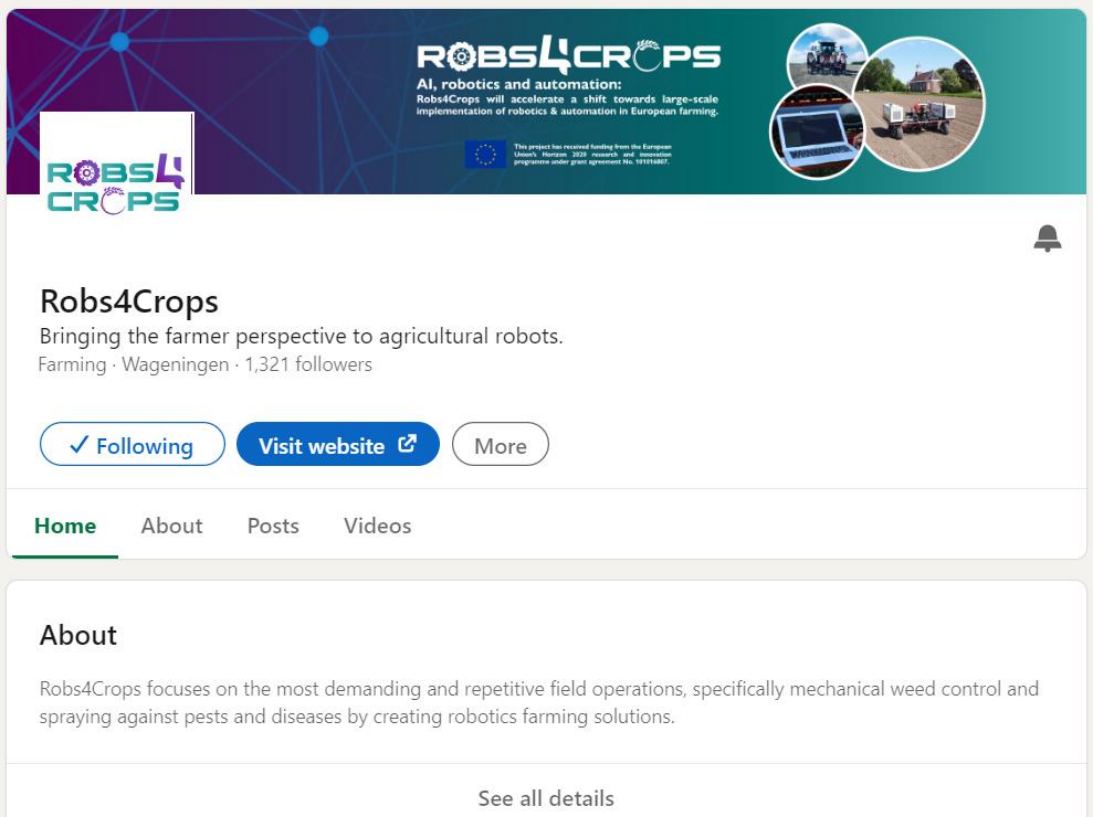



*Figure 14 Robs4Crops LinkedIn Page*

Apart from regular posting on weekly basis, news and stories from the Robs4Crops ecosystem are being shared in several LinkedIn groups with the focus on 7agrifood and manufacturing industries. The focus in this and upcoming period will be on communicating and disseminating the results from large-scale pilots, what impact they may have on society and how they will be integrated into society.

Through LinkedIn page, R4C has been able to successfully create awareness and improve brand reputation. Along with putting out informative content and driving traffic to R4C website, LinkedIn has been utilised to personally identify potential leads, engage with them, and learn how to convert them into customers or clients in the future. This has been done by working on a perfect balance of listening, analysing, participating, sharing, networking, and responding.

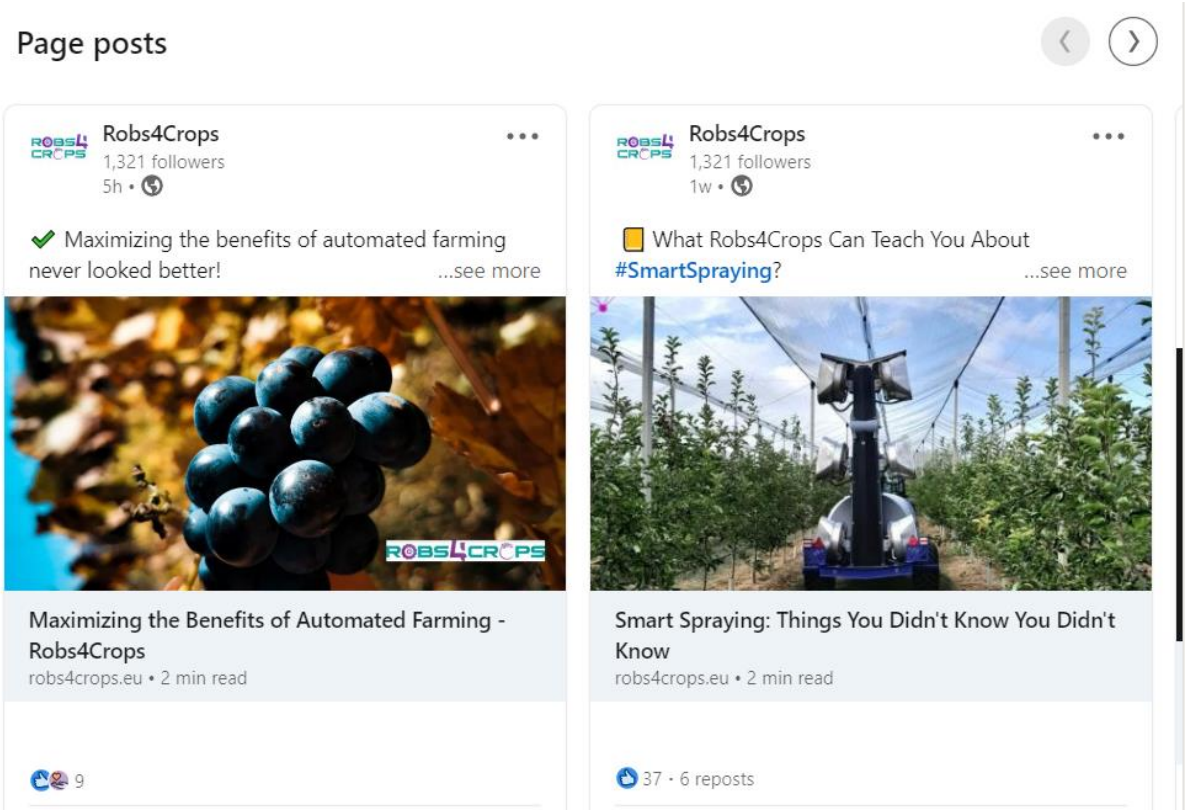



*Figure 15 Robs4Crops LinkedIn Page Posts*

### 3.1.3 Facebook

Facebook page has been delivering messages that are both accurate meaning, completely trusted by industry—and knowledgeable (i.e., speaking in the language of our target audiences). Robs4Crops provides various content marketing efforts (cheat sheets, short clips, infographics and visual material) on a range of subjects: the benefits of automated farming; Smart Spraying; Climate-smart agriculture; mechanical weeding in vineyards, 2022 Crop Robotics Landscape.

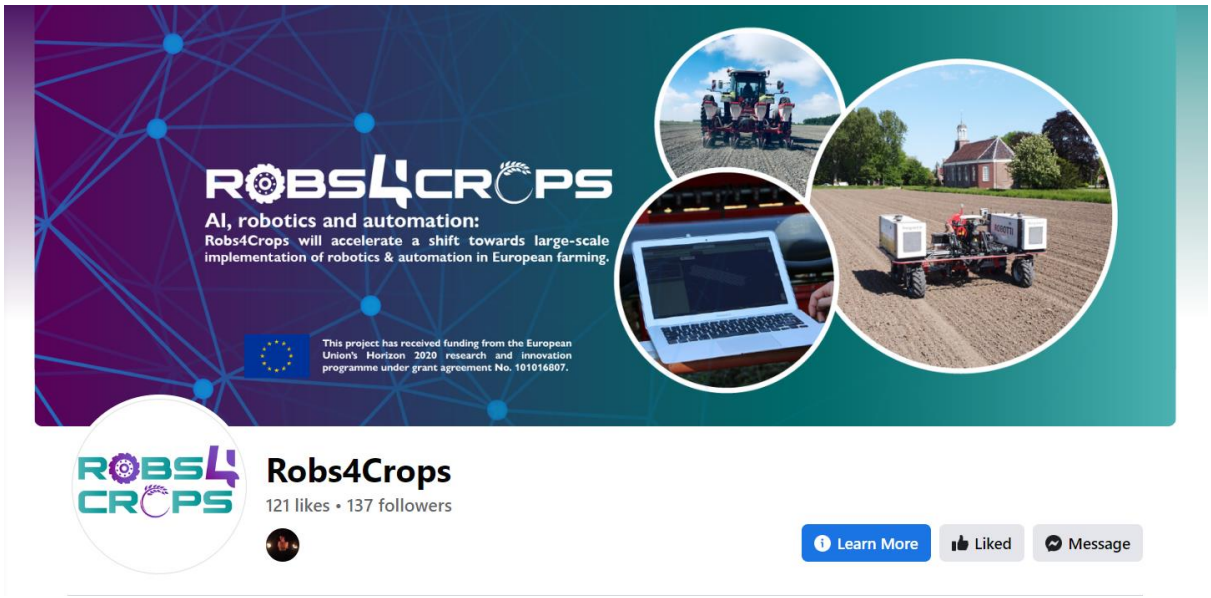
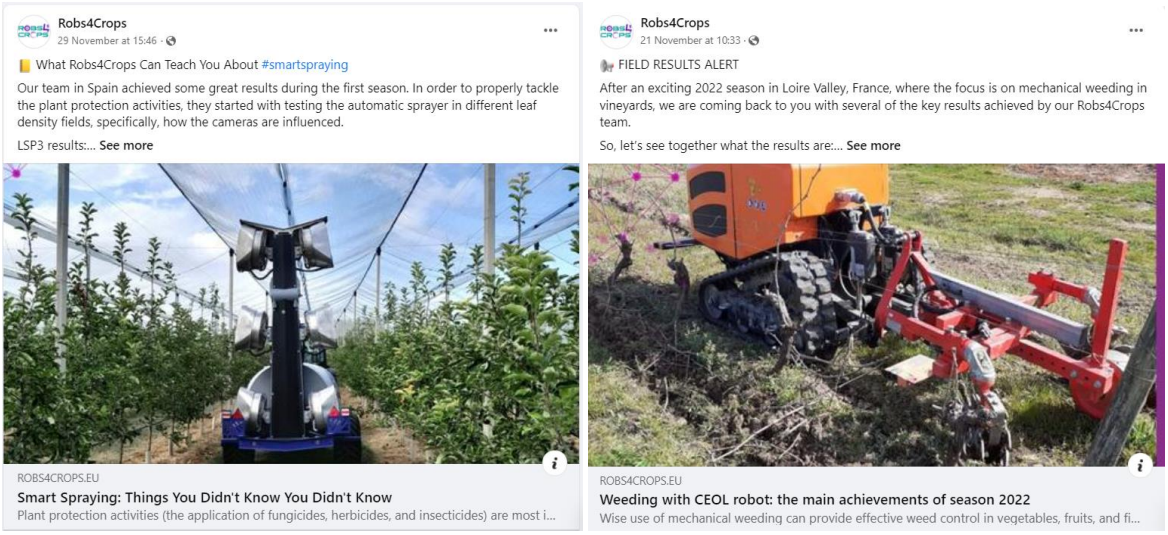



*Figure 16 Robs4Crops Facebook Page*

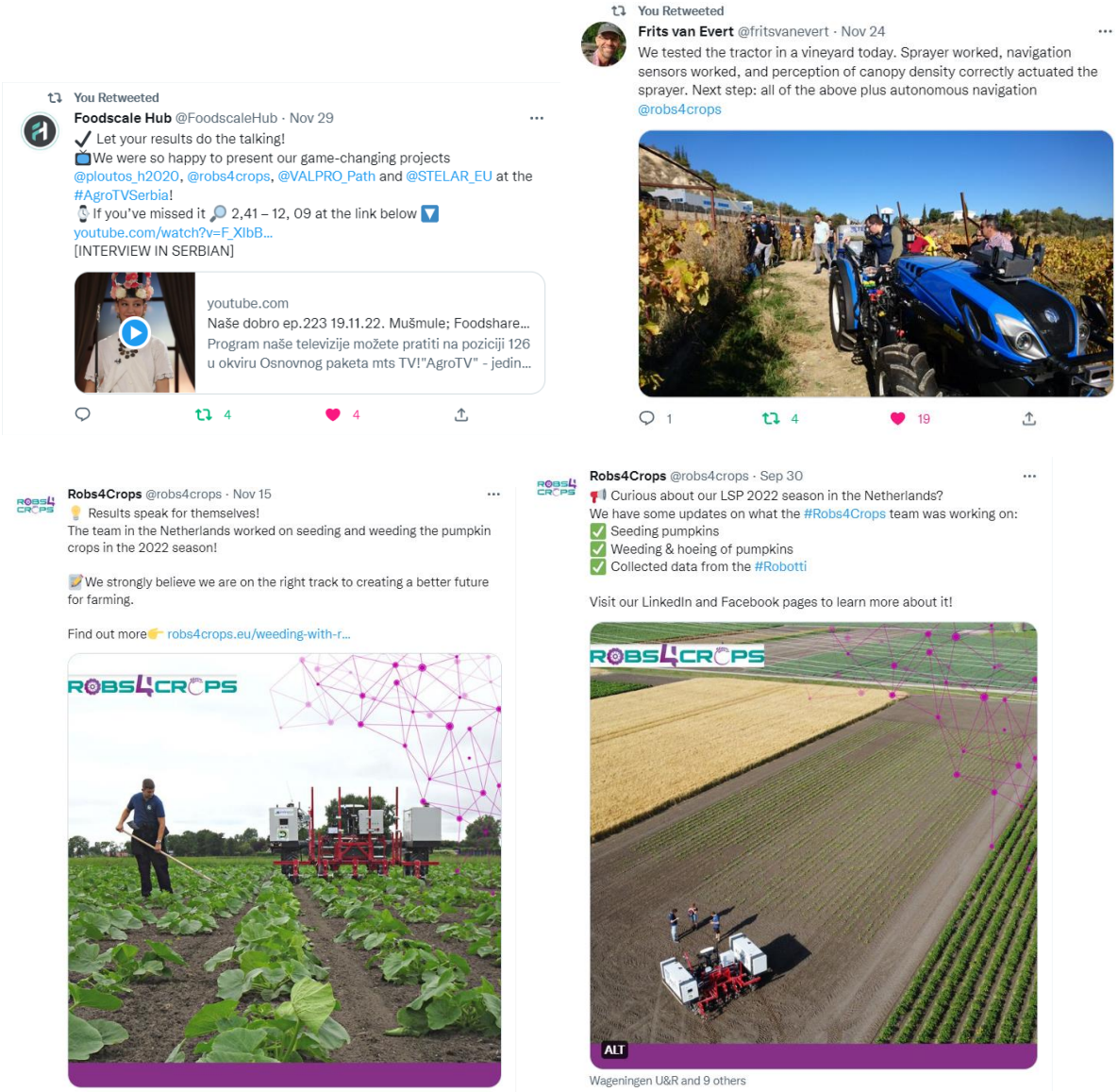



*Robs4Crops Facebook Posts*

## 3.1.4 Twitter

The Twitter account for the project, Robs4Crops, intends to share comprehensive data and significant trends on robotics transformation both inside and outside the project's scope. Through this network, R4C is building a group of top innovators in the sector who can help build, maintain, and expand the Rob4Crops ecosystem.


*Figure 17 Robs4Crops Twitter Page*




*Robs4Crops Twitter Posts*

## 3.1.5 YouTube

YouTube channel has been used to promote videos from the pilots, recorded webinars and pre-pilot activities. Stakeholders can better familiarise themselves with the project's activities and the project itself thanks to these carefully thought-out video materials. The Robs4Crops official YouTube account hosts all officially recorded material, which is accessible to anyone interested in agricultural robots both during and after the project's completion.

In the next phase of the project, video testimonials that showcase each pilot, who are the representatives of the pilots, what problems they are trying to solve, what technology they are using, what issues they are facing, how Robs4Crops is helping them, will be thoroughly explained. After those videos are released, the recorded content from demonstration events organised by partners will also be published on the YouTube channel.

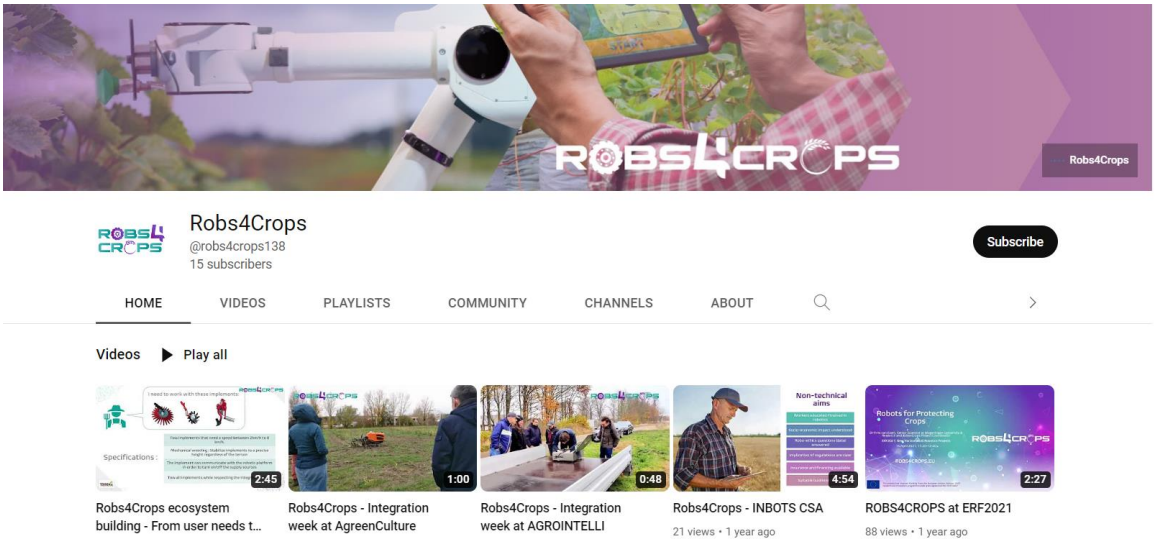



*Figure 18 Robs4Crops YouTube Channel*

### 3.1.6 Newsletter

As part of the new strategy described in **Chapter 4.** *Upgrade of strategic directions, action points and next steps*, the Newsletter will be distributed once a month, to communicate the essential pieces of information and news from the Robs4Crops ecosystem.

The purpose of this approach is to continuously disseminate relevant and useful information to key stakeholders in an effort to build long-lasting relationships of trust and engagement with leading innovators who fit the Robs4Crops target audience.

## 3.2 Offline Communication

### 3.2.1 Scientific and technical publication

The dissemination of Robs4Crops outcomes to academic and industrial groups, establishing knowledge impact, and enabling stakeholders to apply the results in their own work all depend on scientific and industry publications and magazines. R4C partners are committed to delivering 10 Scientific publications and conference papers, from which 4 have been in process of realisation at the moment, and 1 paper has been accepted for publication by **UCPH** "Multi-stakeholder perspectives on field crop robots: lessons from four case areas in Europe".

### 3.2.2 Promotional Material

As Robs4Crops has made firm commitment to sustainable impact, the promotional material has been used and printed carefully. Partners were advised and encouraged to print the materials and distribute it only on relevant occasions. All the digital promotional materials have been used continuously and whenever possible.

For the live consortium meeting held in Kiato, Greece in November 2022, FSH printed 29 of each of the following promotional material: stickers, notebooks, keychains, and 1 rollup.

### 3.2.3 In-person & events-based outreach

The consortium worked hard to present Robs4Crops at important farmer, academic, and industry events that draw a significant stakeholder base that may benefit from its adaptable and versatile modern innovation.

Through these events, such as conferences, info days, forums, and workshops, partners effectively communicated project stakeholders and organisations outside of the project's community about the project's main activities and outcomes.

These activities will be reported in detail in the deliverable 8.2 Dissemination and Communication activities report in M36.

Pilot leaders have started with organising the first demo-events in 2022 that attracted a large number of interested stakeholders in Robs4Crops activities. Since the Covid-19 situation has become better, the demo-events are expected to be performed fully. It was agreed among the pilot leader partners to organise 4 demo-events per pilot. In the table below is shown the suggested timeline of demo-events for years 2023 and 2024:

| LSP | # | Description | Date | Expected number of participants |
|---|---|---|---|---|
| LSP1 | 01 | Present the robot, how it works, its functions. | June 15th 2023 | All actors, around 15 people + journalists |
| | 02 | SIVAL event - Present the robot, how it works, its functions. | January 2023 | Around 20 thousand |
| | 03 | FIRA event - Present the robot, how it works, its functions. | November 2023 | Around 2 thousand |
| | 04 | TBD | TBD | TBD |
| LSP2 | 01 | Present the tractor, its components, how it works. | Late March, early April 2023 | 25-30 farmers + journalists |
| | 02 | Present the tractor, its components, results achieved. | End of October, early November 2023 | 25-30 farmers + journalists |
| | 03 | Present the tractor, its components, how it works. | Late March, early April 2024 | 25-30 farmers + journalists |
| | 04 | Present the tractor, its components, results achieved. | End of October, early November 2024 | 25-30 farmers + journalists |
| LSP3 | 01 | Present the tractor, its components, how it works. | Middle of April 2023 | 30-35 farmers, technicians + journalists |
| | 02 | Present the tractor, its components, results achieved. | Middle of August 2023 | 30-35 farmers, technicians + journalists |
| | 03 | Present the tractor, its components, how it works. | Middle of April 2024 | 30-35 farmers, technicians + journalists |
| | 04 | Present the tractor, its components, results achieved. | Middle of August 2024 | 30-35 farmers, technicians + journalists |
| LSP4 | 01 | Future of Food event - Present the robot, how it works, its functions. | May 30th 2023 | Around 250 |
| | 02 | Present the robot, how it works, its functions. | End of April, beginning of May 2023 | 15-20 farmers + journalists |
| | 03 | Present the robot, how it works, results achieved. | End of April, beginning of May 2024 | 15-20 farmers + journalists |

| | | | | |
|---|---|---|---|---|
| | 04 | Abemec Show | November 2023 | n/a |

*Table 2 Robs4Crops Demo-events for years 2023 and 2024*

### 3.2.4 Non-Robs4Crops Events

- Through an event tracking spreadsheet, all events where Robs4Crops consortium partners participated in and intend to participate in the following year are carefully reported and registered. Since the start of the project, Robs4Crops partners participated in the following events and co-organised workshops:FIRA 12-2021 – December 2021
- Innovatiedag 2022 "Autonoom vooruitboeren"; Valthermond (NL) – June 2022
- VDI Conference – July 2022
- JAD XXIII Encuentro Nacional De Lideres Del Sector Agropecuario, Punta Cana, Dominican Republic – September 2022

In the next six months, Robs4Crops is considering partaking in events, such as:

| # | Event name | Event Description | Location and Dates |
|---|---|---|---|
| 1 | ECPA2023 Conference | 14th European Conference on Preci | 2-6 July 2023, Bologna, Italy. |
| 2 | FIRA | International Forum for Agricultural | Toulouse, France , 7-9 February 2023 |
| 3 | European Robotics Forum (ERF) | This workshop aims to a) form a connection between these communities, while introducing more researchers to precision agriculture; b) become a hub among technology providers and researchers, for applying technologies provided from research into the field. | March 2023, in Denmark |

## 3.3 Target Groups

At the beginning of the project, R4C segmented its target groups based on their profile in order to maximise the efficiency and impact of the communication and dissemination strategy. During the first half of the project, R4C successfully targeted its audience, and will continue to do so in the following part of the project.

The main R4C key groups and the key messages for each target group are presented in the table below.

| Target Stakeholder Groups | Targeted Stakeholder Profiles (TO WHOM) | Examples | Expected Impacts (WHY) |
|---|---|---|---|
| End-users | Farmers and farmers' associations<br>NGOs and civil society<br>Digital Innovation Hubs<br>Large-scale companies<br>Food processing companies<br>Retailers | ADAS<br>Farming Associations,<br>NILEAS Associations<br>CEMA - European Agricultural Machinery,<br>FVP house,<br>Belgapom, | Advanced knowledge, usefulness and viability of the variety of policy alternatives to promote agricultural diversity and progress<br>Enhance the pilot's replication (through specific demonstration activities) with the possibility to fine tune to their activities via the 3 MVPs<br>Created media attention and their participation and support |

| | | | |
|---|---|---|---|
| | Transporters<br>Consumers Associations | EUPPA | Increased support for the implementation of R4C structures and approaches across Europe<br>Boost the outputs' exploitation |
| **Manufacturers** | Large Agricultural Corporations<br>Tractor manufacturers<br>Producers of agricultural products, as well as software and platforms | CEMA – European Agricultural Machinery<br>European Crop Protection Association (ECPA)<br>Deere & Company<br>CHN Industrial<br>AGCO<br>Kubota AVR<br>Farmplan<br>FieldTrack<br>Leaf | Behavioural change by stakeholders in the context of current and novel market-based regulation and voluntary instruments<br>Adoption of innovative requirements in agro-robotic industry<br>Access and guidance to adapt their products to disruptive solutions with high potential, thus opening to new markets |
| **Researchers** | Individual scientists<br>Academia (robotics, agriculture, environment)<br>EU Research projects | Agriculture and robotics researchers and scientists | Improved and encouraged additional scientific and engineering activities, contributions for the next generation of robots<br>Ensure local and international scientific visibility of ROBS4CROPS results |

So far, R4C has been successfully reaching its targeted audience. As the project developed, more data was gathered, and more interactions were made. R4C dissemination and communication team developed the strategy focusing on how to get an increasingly accurate understanding of R4C target audiences. Below is the description of strategy used for each social media channel.

Website: Using Google Analytics, R4C collected extensive data about the users visiting the website. This information has been leveraged to determine key insights such as what channels R4C target audience is coming from or what type of content they're engaging and connecting with the most, allowing R4C to make more data-driven decisions during the media planning process.

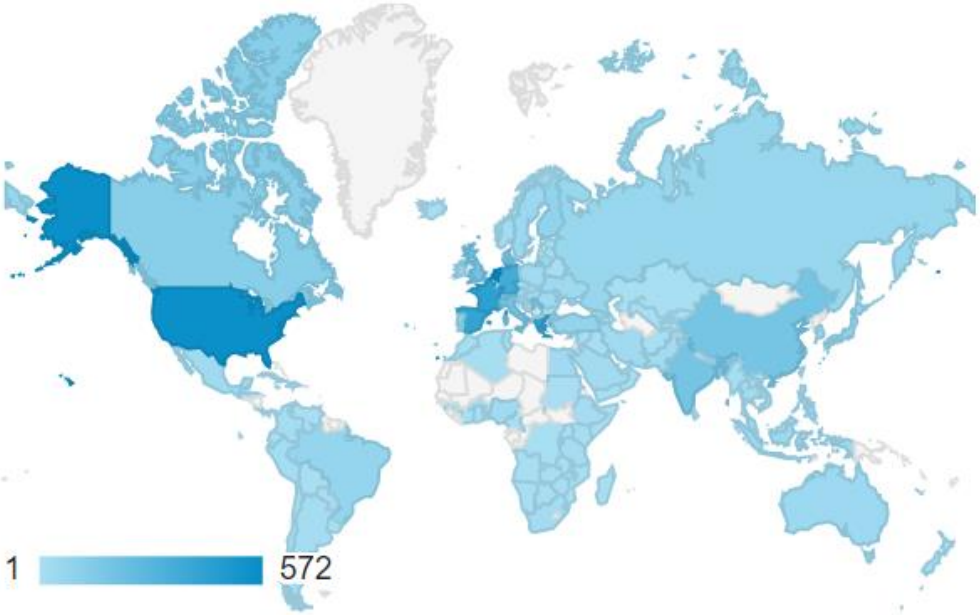



*Figure 19 R4C - Google Analytics: User Demographics by Location*

For example, from *Figure 19 R4C – Google Analytics: User Demographics by Location* we can see an overview of users from which country they are visiting the most. Below is another analytic showing the exact percentage of top 10 visitors of R4C website by location.

| | Country | Users |
|---|---|---|
| | | 5,790<br>% of Total:<br>100.00% (5,790) |
| 1. | Netherlands | 572 (9.80%) |
| 2. | United States | 552 (9.45%) |
| 3. | France | 433 (7.42%) |
| 4. | Greece | 413 (7.07%) |
| 5. | Spain | 409 (7.00%) |
| 6. | Germany | 355 (6.08%) |
| 7. | United Kingdom | 189 (3.24%) |
| 8. | India | 181 (3.10%) |
| 9. | Italy | 181 (3.10%) |
| 10. | China | 180 (3.08%) |

*Figure 20 - R4C - Google Analytics: Percentage of R4C top 10 visitors by location*

Furthermore, while evaluating the type of content visitors are engaging and connecting with the most, we discovered that the page with the highest percentage of search traffic was page 'Pilots' (*19.16%*), followed by pages 'Partners' (*16.09%*), and 'About' (*9.62%*).

Based on these analytics, R4C is now able to:

- Conduct more targeted keyword research to identify the search terms R4C should be optimising for (these keywords are specifically tailored to each post, for example, key words used for the post related to ***Greek pilot – Table Grape Spraying***, will be the following: #Horizon2020 #researchimapcteu #robotics #agriculture #automation #smartfarming #greece #plantprotection #smartsprayer #tablegrapes)
- Create content that's perfectly aligned to R4C target audience, therefore improving their experience on the website due to the relevancy of the content they're consuming.
- Drive more relevant traffic from people who are more likely to become R4C next client or customer.
- Convert a higher percentage of R4C organic traffic into leads

Consistent blog posts updates are important to curate a message to R4C viewers so that they can better understand what the R4C brand is all about, and hopefully find the information they're looking for. **That is why we have implemented a new strategy where we are publishing a blog post once a week that is significantly related to the posts shared across social media.**

LinkedIn: LinkedIn targeting is differentiated because members are incentivised to keep their profiles accurate and up to date for networking, personal branding, and job opportunities. This means R4C can target members using profile-based demographic information or re-target visitors from R4C website. On LinkedIn, R4C reaches members using the following demographic targeting options:


Available in R4C account dashboard, demographics reporting enables us to optimise the targeting of R4C campaigns with information on who's responding to it.

Visitor demographics analytics of Robs4Crops on LinkedIn are visible in Annex 2.

Facebook: Facebook has a tool called audience insights, where similar to Google analytics, R4C can lean the different demographics of users who are following the page, or what their

interest behaviour is. This way, when R4C is formulating next marketing plan, it can create content based on audience's previous actions on the platform. Asserting the presence on Facebook is important to reaching targeted audience as well.

Twitter: R4C uses twitter analytics that compiles all the behaviours and actions audiences take when they come across posts or profile–the clicks, follows, likes, expands and more–and breaks down that data to help track performance and refine the strategy. This data is critical for understanding who's interacting with R4C Tweets and how the account is performing overall. For each month, we can see the top Tweet, top mention, top follower and top media Tweet. Also, there is a summary of the number of Tweets, Tweet impressions, profile visits, mentions and new followers.

Twitter analytics are helpful in determining the type of posts that are most interesting to R4C followers. These insights are crucial for optimising Twitter marketing strategies to maximise results.

YouTube: R4C emphasis during the next half of the project will be on engaging relevant audience through its YouTube channel. The pilot activities are well under way, therefore the videos from pilots will be released soon enough. We expect to have videos from the following demo-events in the upcoming 2023 and 2024 season. These videos will be shared across all social media channels in order to raise the engagement rates of the YouTube channel.

# 4 Upgrade of strategic directions, action points and next steps

## 4.1 Improvements of strategic approach

In the first half of the project, we focused on creating and sharing online material that is intended to stimulate the interest and engagement of the targeted audience and gather feedback in order to improve our strategy.

After analysing the first half, we started working on developing the best methods on „How are we going to reach that audience?", what is the best „timing" to post content on social media and evaluating „How effective are our public outreach efforts".

What we focused our work on so far (in purple, as described in previous deliverable *D8.1 Dissemination & Communication Strategy (1)*), and what are our future steps (in green), can be seen in the table below:

| Activity | Critical questions |
|---|---|
| Targeting | Who is our target audience? What is our message? |
| Methods | How are we going to reach that audience? |
| Content development | What types of content does our audience find engaging? |
| Timing | When is the right time to reach our target audience? |
| Evaluation | How effective are our public outreach efforts? |

*Table 3 Taken from D8.1 Dissemination & Communication Strategy (1) – Critical Dissemination and Communication questions*

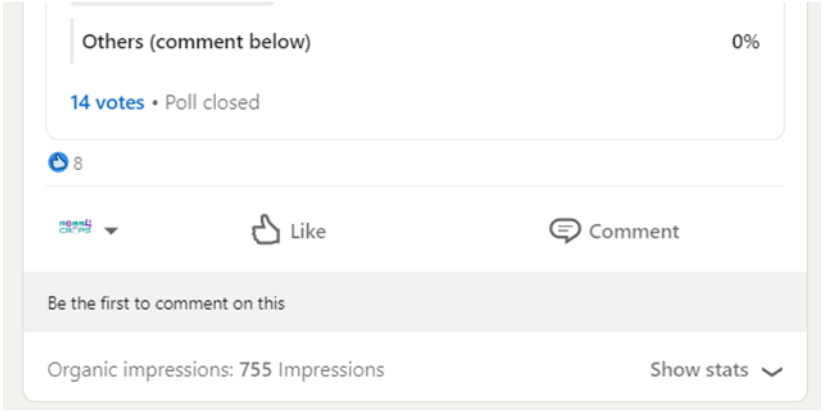
Starting in the second half of the project, we will begin with implementing our new approach "Expert Co-created Content" in our dissemination and communication activities. Partners who will be involved in these activities are expert representatives of each large-scale pilot.

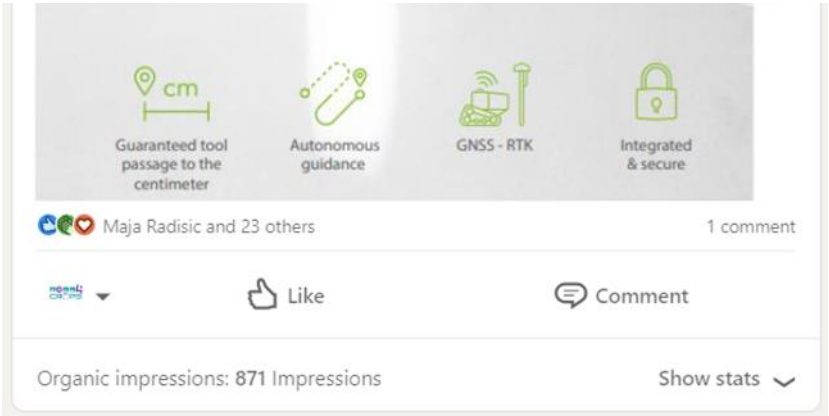
### 4.1.1 Evaluation

First, we started with evaluation. From evaluation of all our posts on social media (LinkedIn, Twitter, Facebook), we were able to see that the posts that got most attention since the project begin, were the ones related to activities on LSPs.

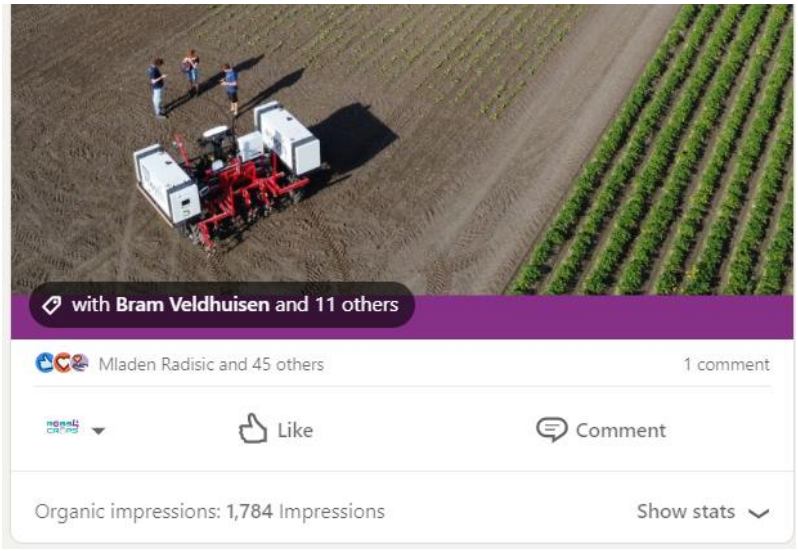
We evaluated 'generic' posts versus 'LSP related' posts. The 'generic' posts got much less attention (Organic impressions). See below:

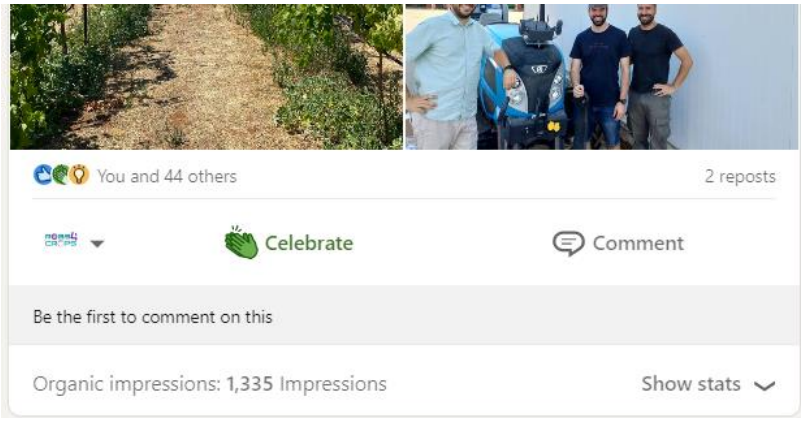
➡ *Generic posts and their organic impressions:*

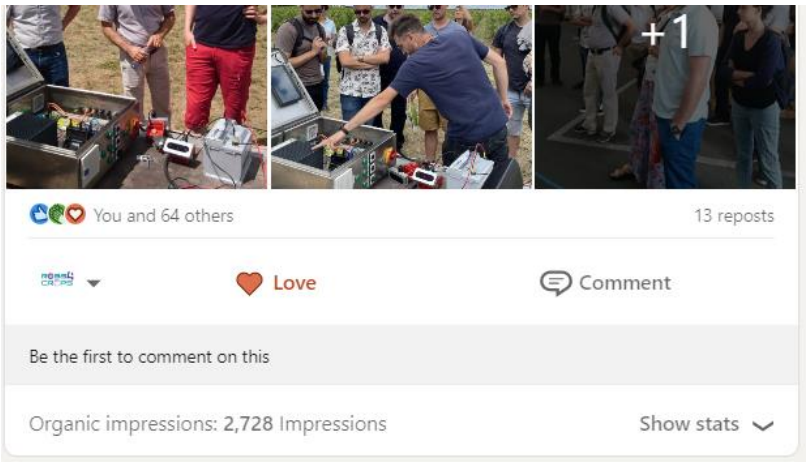



➡ *LSP related posts and their organic impressions*




After seeing these analytics, where LSP related content got the highest number of organic impressions (2,728), we decided to test some methods and see what works the best for our project.

### 4.1.2 Methods

After the evaluation, we came up with the new strategy method for creating content for social media, that will include expert partners in **co-creation** of the posts, articles and newsletters.

In the table below, we can see the plan for disseminating and communicating LSP related content on social media channels:

| I<br>Overview of the pilots | II<br>Technology & Advancements | III<br>Results |
|---|---|---|
| **January – March**<br>12 posts / 3 per LSP in total<br>(1 post per week) | **April – September**<br>24 posts / 6 per LSP in total<br>(1 post per week) | **October – December**<br>12 posts / 3 per LSP in total<br>(1 post per week) |
| These posts will give an overview of each pilot, what they are working on within the project, and what kind of problems they are trying to solve. | Continuous update on each LSP, what is the current status and what are the next steps. | After the season ends, we will create posts showing the results of each LSP. |

*Table 4 R4C – New Strategy Method*

In the first phase, it is intended to have 3 posts > over the course of 3 months > per 1 LSP (which means 1 post per 1 LSP per month). Each post will have its own story to tell about the pilot, overview of the pilot and its activities, plans for that year, etc. In the second phase, focus will be on communicating and disseminating activities and next steps of each pilot. Again, it is intended to have 7 posts > over the course of 6 months > per 1 LSP (which means 1 post per 1 LSP per month). Finally, in the third phase, we will be disseminating results of the pilots. For this phase, it is intended to have the same number of posts per pilot as in the first phase.

**Professionally relevant personal content is the best content!**

In order to fully cover all the methods that can help R4C reach targeted audience, the translation of significant posts will be implemented as well. The aim is to translate the posts related to four pilots in the language appropriate for each pilot.

For example, when R4C publishes a post in English for French pilot, across it channels, partners in France will be advised to reshare the post and translate it in French language. This method of promotion will help R4C reach relevant target groups.

**A good example of this practice can be found in Annex 3.**

## 4.1.3Timing

From our evaluation of posts, we were able to find out what is the best time to post content on social media channels and achieve the highest number of organic impressions. In the table below is present the time schedule for the co-creation of the content with partner experts and publishing posts on social media.

| Step | Activity |
|---|---|
| 01. Wednesday | Ask for short input from an LSP expert partner (2 days to deliver). |
| 02. Friday | Create a draft of a post. (3rd day) |
| 03. Monday | Approval from partners EOB (4th day) |
| 04. Tuesday | Publish the post (5th day) |

*Table 5 R4C - Timeline of publishing posts on social media*

It is envisioned to publish posts on social media on Tuesdays, as this is the day that showed to have most activities on social media posts. Every Wednesday, partners will be asked to deliver short input by Friday. On Friday, we will create a draft and send it to partners together with a visual. Approval from partner is expected by Monday EOB. On Tuesday morning, the post is published.

Concerning the generic posts, where we promote events related to the project, and similar, expert partners will not be involved, and these posts will be published during the week (as much as required), regardless of LSP related posts.

## 4.2 Monitoring & evaluation

A comprehensive monitoring is being carried out during the project execution to ensure the effective implementation of the Dissemination and Communication Strategy and the achievement of the relevant objectives. All communication and dissemination activities are monitored on a regular basis and adjusted as needed.

The monthly check-in assures that the planned actions are carried out in line with the initial communication and dissemination strategy.

To monitor the weekly and monthly growth on digital channels, the following tools are applied:

- Email Campaign Tracking & Reporting
- Google Analytics reporting dashboards
- Social Media Metrics dashboard

These tools/dashboards are saved and kept up to date on the project's OneDrive. Additionally, every partner is required to report on their individual public outreach initiatives, and they are encouraged to do so at least each month, when our dissemination & communication team contacts them through email and remind them about this activity.

Efforts for dissemination and communication are only as effective as the endeavours made by each of the partners to carry them out, hence the project significantly depends on the steps undertaken by each consortium partner.

All consortium partners are encouraged to participate in dissemination and communication efforts by routinely posting news and information from Robs4Crops to their social media platforms.

Once a month, partners fulfil the questionnaire with the information about the type of event/activity they organised or plan to organise to support dissemination and communication plan – workshop, webinar, pitch event, video, press release, etc.; estimated total funding amount; timing & location of the dissemination activity along with other relevant information; channels used to promote the project along with the links of the channels used for dissemination; the number of organisations and people reached through dissemination activities; which target groups were reached through the dissemination activity; and to upload relevant photos/videos, agenda, screenshot, etc. to a shared folder. Collecting this information will provide an accurate picture of each partner's dissemination

efforts, demonstrating the activities associated with the set Dissemination and Communication Strategy.

# 5 Conclusion

This strategy, contents and tools for dissemination and communication activities, has been carefully revised and updated in line with project progress. The Robs4Crops dissemination and communication strategy is described in detail in report D8.5. This extensive document lists the resources, methods, and actions employed and updated throughout the project to guarantee widespread adoption and long-term viability of the Robs4Crops solutions.

The Robs4Crops project will communicate with a variety of stakeholders using the strategy, actions, and tools outlined in this document. It also details the timeline of the various activities during the next phase of the project. Updates should also be made as necessary when strategies are evaluated.

Robs4Crops strives to create a prosperous ecosystem and engage key players from different fields, in order to take part in value co-creation for the ecosystem, which will eventually raise the overall adoption rate of agricultural robots and automation in Europe.

# 6 Annex 1

*The successful search engine optimisation for blog post "Maximizing the Benefits of Automated Farming" visible on Robs4Crops website.*

Yoast SEO

SEO | Readability | Schema | Social

Focus keyphrase

automated farming

Get related keyphrases

Google preview

Preview as:

Mobile result | Desktop result

robs4crops.eu › maximizing-the-benefits-of-automated…

Maximizing the Benefits of Automated Farming - Robs4Crops

Dec 6, 2022 - With automated farming, farms are becoming more efficient in the production of crops. Robs4Crops pilot in Greece has the same goal.

SEO title — Insert variable

SEO title — Insert variable

Maximizing the Benefits of Automated Farming | Page | Separator | Site title

Slug

maximizing-the-benefits-of-automated-farming

Meta description — Insert variable

With automated farming, farms are becoming more efficient in the production of crops. Robs4Crops pilot in Greece has the same goal.

SEO analysis

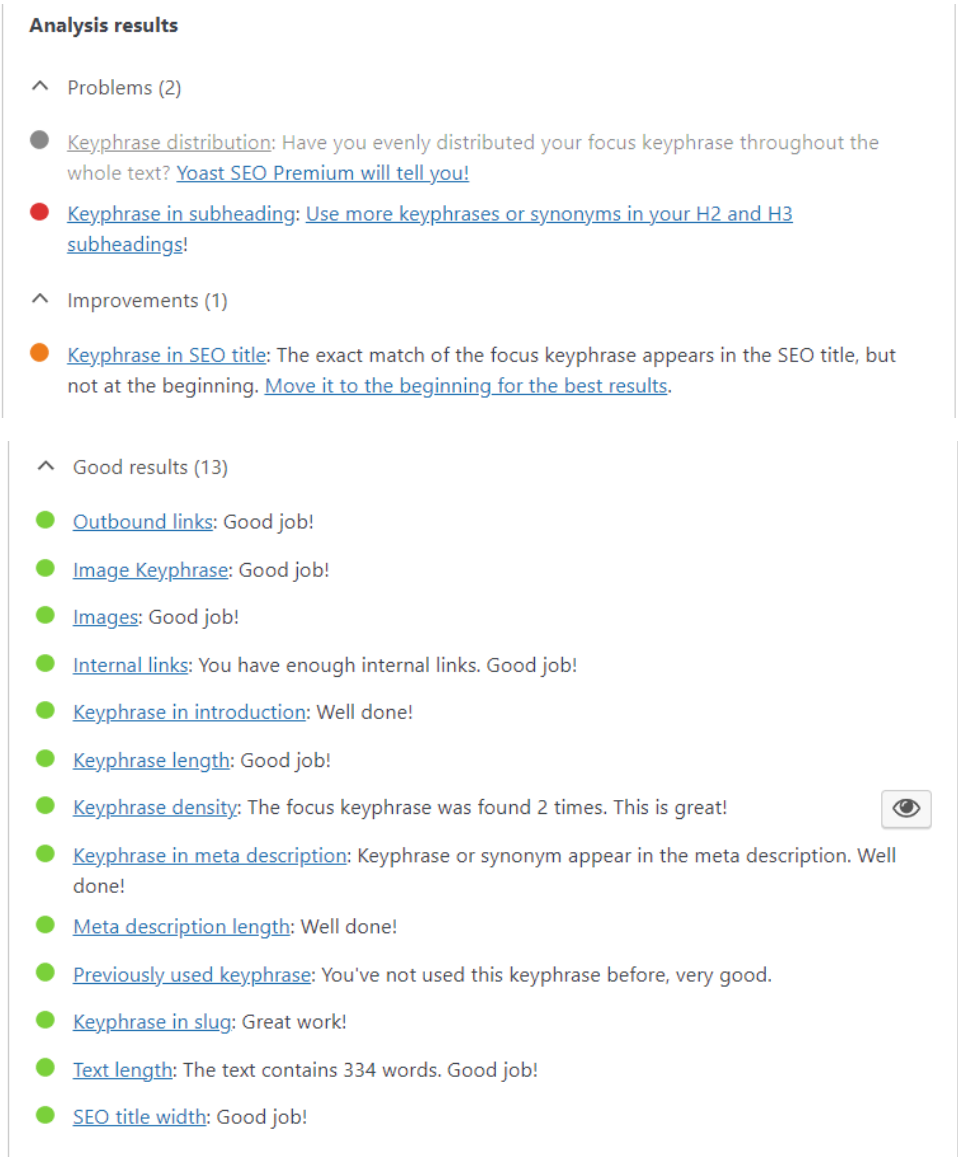
automated farming

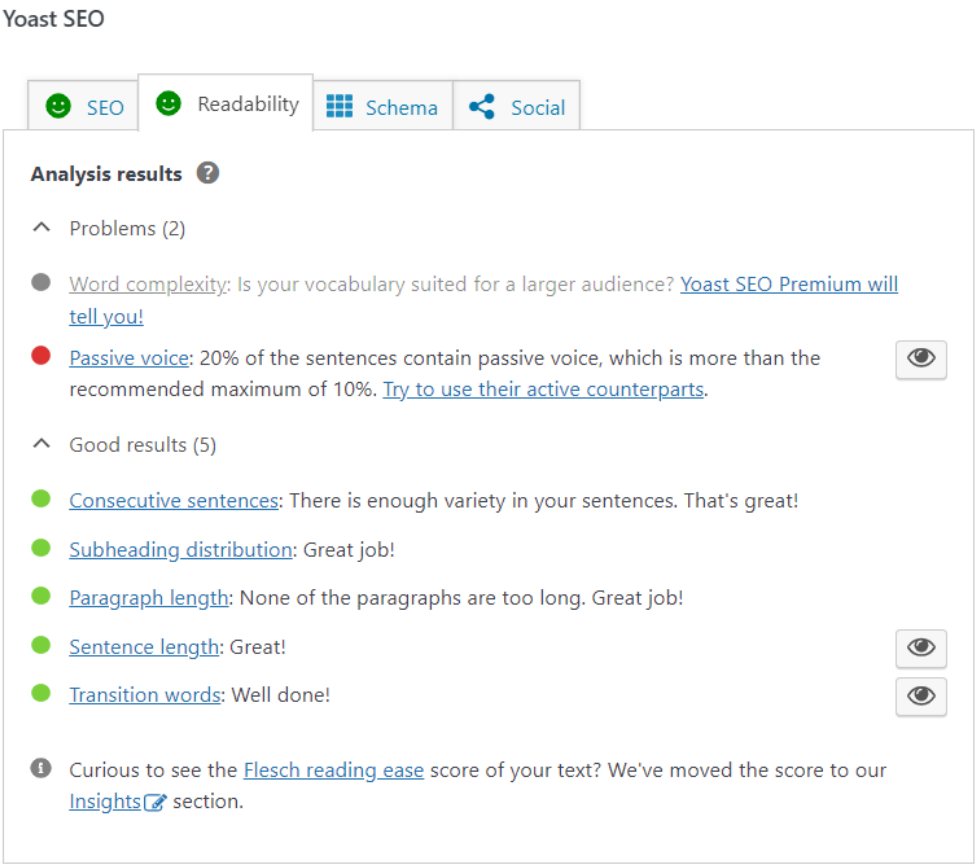
+ Add synonyms

+ Add related keyphrase

Did you know Yoast SEO Premium also analyzes the different word forms of your keyphrase, like plurals and past tenses? Go Premium!

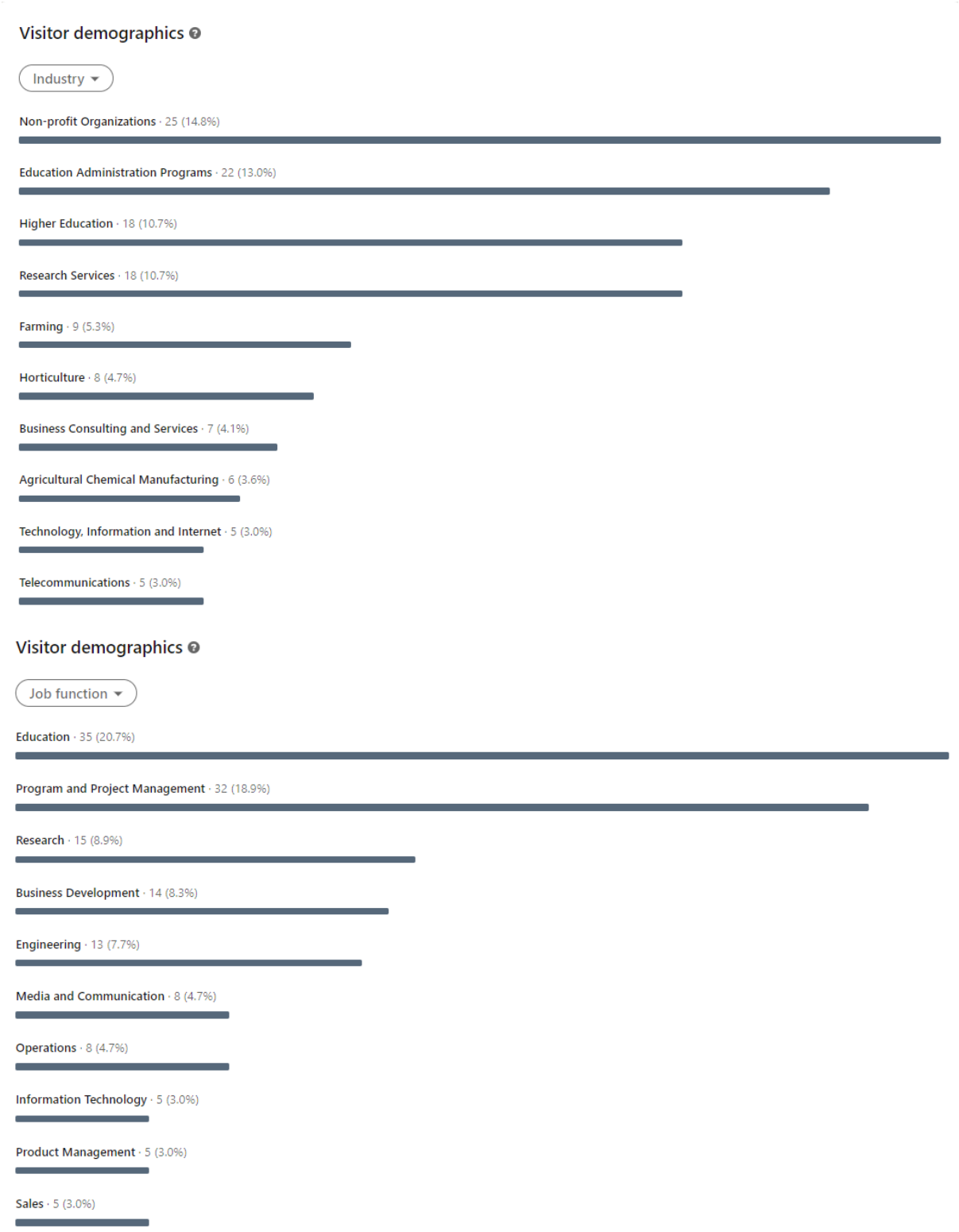
**Analysis results**


Analysis results
Problems (2)
Keyphrase distribution: Have you evenly distributed your focus keyphrase throughout the whole text? Yoast SEO Premium will tell you!
Keyphrase in subheading: Use more keyphrases or synonyms in your H2 and H3 subheadings!
Improvements (1)
Keyphrase in SEO title: The exact match of the focus keyphrase appears in the SEO title, but not at the beginning. Move it to the beginning for the best results.
Good results (13)
Outbound links: Good job!
Image Keyphrase: Good job!
Images: Good job!
Internal links: You have enough internal links. Good job!
Keyphrase in introduction: Well done!
Keyphrase length: Good job!
Keyphrase density: The focus keyphrase was found 2 times. This is great!
Keyphrase in meta description: Keyphrase or synonym appear in the meta description. Well done!
Meta description length: Well done!
Previously used keyphrase: You've not used this keyphrase before, very good.
Keyphrase in slug: Great work!
Text length: The text contains 334 words. Good job!
SEO title width: Good job!


Yoast SEO
SEO
Readability
Schema
Social
Analysis results
Problems (2)
Word complexity: Is your vocabulary suited for a larger audience? Yoast SEO Premium will tell you!
Passive voice: 20% of the sentences contain passive voice, which is more than the recommended maximum of 10%. Try to use their active counterparts.
Good results (5)
Consecutive sentences: There is enough variety in your sentences. That's great!
Subheading distribution: Great job!
Paragraph length: None of the paragraphs are too long. Great job!
Sentence length: Great!
Transition words: Well done!
Curious to see the Flesch reading ease score of your text? We've moved the score to our Insights section.

# 7 Annex 2

Top 10 Visitor Demographics of Robs4Crops LinkedIn Page by 'Industry' and 'Job Function'.



# 8 Annex 3

*An example of a post in English for French pilot, translated in French language by AgreenCulture partner:*

AgreenCulture
4,848 followers
3w •

📢 Découvrez quelques retour du projet Robs4Crops!

"Après une saison 2022 passionnante dans la vallée de la Loire, en France, où l'accent est mis sur le #désherbage mécanique dans les #vignobles, nous revenons vers vous avec plusieurs des résultats clés obtenus par notre équipe Robs4Crops:

✔ Réalisation d'un cycle quasi complet de désherbage robotisé sur 2 types de vignes.
✔ Testé sur 9 parcelles : 5 avec des rangées étroites et 4 avec de grandes lignes.
✔ Le robot #CEOL d'Agreenculture a pu effectuer 4 passages

Grâce à cela, l'équipe en France espère mener un cycle complet au cours de la période 2022-2023, en commençant avant l'hiver !

💡 Vous souhaitez en savoir plus?
En savoir plus sur Robs4Crops projet pilote à grande échelle en France ici https://lnkd.in/dCRGRJA9 👉

#horizon2020 #agriculture #automation

Wageningen University & Research | Giropoma Costa Brava, S.L | PEGASUS AGRIFOOD COOP - 7Grapes | SERRATER SL | Doorgrond.nl | Terrena | Abemec bv | AGROINTELLI | Foodscale Hub | TEYME · Pulvérisation intelligente · Smart Spraying | Smart Farming Technology Group - Agricultural University of Athens | Eurecat - Technology Centre of Catalonia | Department of Food and Resource Economics, University of Copenhagen | Universität Hohenheim Universität Hohenheim Versuchsstation Agrarwissenschaften | Laboratory for Manufacturing Systems and Automation

See translation

Robs4Crops
3w •

📢 FIELD RESULTS ALERT

After an exciting 2022 season in Loire Valley, France, where the focus i ...see more

Robs4Crops
3w •

📢 FIELD RESULTS ALERT

After an exciting 2022 season in Loire Valley, France, where the focus is on mechanical weeding in vineyards, we are coming back to you with several of the key results achieved by our Robs4Crops team.

So, let's see together what the results are:
✔ Conducted an almost complete cycle of robotized weeding on 2 types of vines.
✔ Tested on 9 plots: 5 with narrow rows and 4 with large rows.
✔ The #CEOL robot (by AgreenCulture) had to make 5 passes (all passes after winter) and was able to conduct 4 of them.

Thanks to this, the team in France hopes to conduct a complete cycle during 2022-2023, beginning before winter!

💡 Interested in learning more?
Read more about #Robs4Crops large-scale pilot in France here 👉
https://lnkd.in/dCRGRJA9

#Horizon2020 #researchimapcteu #robotics #agriculture #automation #mechanicalweeding #robs4crops #france

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