

Deliverable 5.3

Project Acronym: PRECIMED

Project full Name: Precision Irrigation Management to Improve Water and Nutrient Use Efficiency in the Mediterranean Region

[Preliminary Plan for Dissemination and Exploitation of Results (M22)]

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|------------------------|------------------------|
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Summary

The deliverable [**D5.3** – Preliminary Plan for Dissemination and Exploitation of results (M12)], defines some key terms and explains what can be achieved concerning the dissemination and exploitation of results during the project. In addition, the deliverable presents how these activities will contribute to the fulfillment of the objectives of the project on the development of a dissemination strategy concerning the project. It also presents the design and production of the necessary material, the development of communication tools and the organisation and implementation of various communication activities.



Introduction

This deliverable is the Preliminary Plan for Dissemination and Exploitation of Results of the Project "Precision irrigation management to improve water and nutrient use efficiency in the Mediterranean region".

The Plan includes the following sections:

- General Aspects of the Project
- Description of the Project's goals
- Description of the Project's activities
- Description of the publicity and information actions
- Recording of the effects of implementing the Project
- Recording of the crucial factors of the Project's success

General Aspects of the Project

The Project "PRECIMED" is financed by a combination of funds, coming from PRIMA's Participating States, and also the European Union through the Horizon 2020 programme and is co-funded by the European Union and National Funds of the participating countries. The views and opinions expressed in this document are purely those of the writers and may not, in any circumstances, be regarded as stating an official position of the European Commission. The Project Partnership includes 5 partners from 4 countries (Greece, Spain, Algeria and Tunisia).

The PRECIMED partnership is presented in the following table:

| COUNTRY | Organisation Name of Project partner | Type of entity and role in the project |
|----------------|---|--|
| SPAIN | CSIC M ^a Fernanda Ortuño (Coordinator) | RTD. Management and agronomical expertise to develop the new fertigation technologies. |
| SPAIN | ODIN Antonio Skarmeta | SME. Technical expertise in the development of ICT's and their expected impacts. |
| GREECE | UTH Nikolaos Katsoulas | RTD. Modelling and use of ICT's to improve water productivity in greenhouses |
| ALGERIA | INRAA Mohammed Semiani | RTD. Modelling and use of ICT's to improve water productivity |
| TUNISIA | OPTIM Khouloud Boukadi | RTD. Design, development, deployment and testing of a smart DSS |



Description of the Project

The main objective of PRECIMED is the development, validation and transfer of a data driven irrigation/fertilization management system, in order to improve Water and Nutrient Use Efficiency (WUE and NUE, respectively) in the Mediterranean region, by integrating the knowledge about fertilizers and irrigation water management with Information Communication Technologies (ICTs).

Although more complex definitions exist, the simple description of the Precision Agriculture is a way to “apply the right treatment in the right place at the right time” (Gebbers and Adamchuk, 2010). Precise irrigation methods are developing rapidly in order to save water while improving yields and fruit quality. Although irrigation has been practiced for centuries, precision irrigation is a new issue as the sector had to respond to societal demands for reductions in water allocation and improvements in efficiency. Irrigation strategies have been proven to successfully increase of WUE by reducing water use. Thus, the current trend of fertirrigation management implies

- ✓ precision crop irrigation and fertirrigation
- ✓ use of crop-based information (crop indicators/descriptors),
- ✓ enhanced analysis, interpretation and valorization of the collected data &
- ✓ development of systems for growers’ aid on efficient fertirrigation control.

Therefore, other objectives of PRECIMED is to provide knowledge, know-how and tools related to efficient and intelligent applications to aid fertirrigation control.

To achieve the intent of the project, 4 Key Objectives have been identified:

Objective 1: To Improve WUE and NUE in the Mediterranean Region by using intensive ICT solutions

Objective 2: To facilitate the interchange of technology and best good practices between EU and non-EU Mediterranean countries in order to improve WUE and NUE in all the Mediterranean Region

Objective 3: To develop and validate (in different demonstration farms) a Standards-based Decision Support System for data-driven irrigation/fertilization management that evaluates the medium-term evolution of crop nutritional status, soil salinity, yield and fruit quality and safety, optimizing the water and fertilizers needs and the energy costs at farm level

Objective 4: To ensure that the project activities and outcomes reach the relevant target groups, especially end-users (farmers), thus, enhancing the market uptake of PRECIMED’s solutions.



Description of the Project's goals

PRECIMED project will research, develop and validate a Standards-based Decision Support System (DSS) including Irrigation/Fertirrigation models for a massive analysis of real-time crop and meteorological status data to improve the efficient use of water, nutrients and energy. For this, the consortium will integrate the knowledge on fertilizers and irrigation of Mediterranean crops with ICTs to develop a solution that will be respectful with the environment and economically profitable. In the PRECIMED project, the DSS will be developed for the end user that can easily access and manage through web interfaces from anywhere with the Internet and using their mobile phones, tablets or PC. The DSS platform will be able to collect a large amount of crop data, which will be processed and analyzed in order to provide notices to the user about fertilizers and water crop needs and real-time recommendations to farmers regarding the best irrigation and fertilization practices. The DSS will offer management services and remote actuations to improve the lives of Mediterranean farmers and also save water and fertilizers in a region with significant problems of water stress and soil and water pollution. The challenge is to create stronger bridges between the two areas of the Mediterranean basin, which is made up of EU and non-EU countries: Tunisia, Algeria, Spain and Greece. In this sense, the consortium is made up of SMEs, research centers and end users that will collaborate to validate the solution for subsequent commercialization.

At the commercial level, the consortium will, also, define profitable economic models to make the proposed solution feasible to commercialize based on a Software as Service (SaaS) approach and will involve the end user from the beginning of the development phase to its final validation, for which an iterative design and development process will be applied for agile project management. This project will allow the consortium to develop an irrigation and fertilization DSS that is designed, evaluated and validated by farmers of the various participating countries, in order to achieve a better connection between platform developers and farmers so as to reach a success point for the agricultural sector.

Project Activities

Concepts – Definitions

Activities serving the dissemination and exploitation of the results are a way to showcase the work that has been done as part of the PRIMA (Partnership for Research and Innovation in the Mediterranean Area). Sharing results, lessons learned, outcomes and findings beyond the participating organizations will activate a wider community to benefit from a work that has received EU funding, as well as to promote the organization's efforts towards the objectives of PRIMA, which actually adds fundamental importance to the connection between the Programme and the policies.

Dissemination is a planned process of providing information on the results of programmes and initiatives to key actors. It occurs as and when the result of programmes and initiatives become available. Making others aware of the project will impact on other organizations in the future and will contribute to raising the profile of the organization carrying out the project. To effectively disseminate results, an appropriate process at the beginning of the project needs to be designed. This should cover why, what, how, when, to whom and where disseminating results will take place, both during and after the funding period.

Exploitation is (a) a planned process of transferring the successful results of the programmes and initiatives to appropriate decision-makers in regulated local, regional, national or European systems, on the one hand, and (b) a planned process of convincing individual end-users to adopt and/or apply the results of programs and initiatives, on the other hand. Results should be developed in such a way that they can be tailored to the needs of others; transferred to new areas, sustained after the funding period has finished or used to influence future policy and practice.

Dissemination and exploitation are, therefore, distinct but closely related to one another.

The situation provoked by COVID-19, has forced to adapt these activities to the "new normality", and this deliverable presents how PRECIMED project is implementing dissemination and exploitation of the results in the context of the Coronavirus crisis.

Activity 1: Kick-off Meeting

The Project was presented at the kick-off meeting in CEBAS facilities, in the city of Murcia where all the partners had the opportunity to discuss and agree about the following aspect of the project:

- The scheduled timetable of the Project
- The goals of the Project
- The structure and partnership
- The structure and the content of the work packages and the deliverables

- The dissemination of the outcomes
- The coordination and the economical topics



Figure 1. Kick off Meeting. Murcia., 19/11/2019

Activity 2: Regular meetings of the Project partners

This activity refers to the implementation of regular meetings (one per year) including the members-partners of the Project. The meetings are organized aiming at monitoring the deadlines of the Project, as well as the confirmation that everything goes as planned by the schedule, including 3 meetings in total, which had to be held online (for the moment) due to the pandemic. Moreover, the scientific manager of every organization is in touch communicating via Skype every 6 months, so as to monitor the progress of the work packages. Also, there is a continuous update via e-mails and telephone calls. In special occasions, if this is needed, more meetings – than the arranged ones – are going to be held.

The meetings strength the cooperation between the partners of the Project, making it easier to trace possible lacks and suggest solutions for the improvement of the existing practices in the future. Moreover, through these meetings, the Project's team will monitor the progress of the Project and offer what needed to achieve the predefined goals.

The arranged meetings were planned as follows:

GENERAL ASSEMBLY: Once per year (in person) and when required.

Proposed meetings locations and dates:

1. October-2020. Greece (UTH). Online meeting (15/10/2020)
2. October-2021. Algeria (INRAA)
3. October-2022. Tunisia (OPTIM)



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At the moment, it is not decided how the meetings proposed for Algeria and Tunisia will take place, and it will depend on the evolution of the pandemic. In case of online meetings, the partners will respect the proposed dates.

PROJECT EXECUTIVE BOARD (PC, AM, TM, QM, DM, IM):

In person/ Skype every two months.

WP LEADERS:

Skype every six months.

Activity 3: Dissemination and publicity actions

The dissemination and publicity actions include the design and the development of the Project's website. Many of the Project's results will be published on the website, making up a practical guide for the farmers, concerning which protocols are more suitable to use in order to irrigate their crops. The Project's website will also be used for the dissemination and promotion of material related to the Project "Precision irrigation management to improve water and nutrient use efficiency in the Mediterranean region", combined with the existing policy of the EU for the «Water and Nutrient Use Efficiency».

Moreover, the publications that will be written along with the Project, will be delivered to the public and everyone interested (e.g. a leaflet including the goals of PRECIMED, relative information, conference material, etc.). All these publications are also included on the website of the Project. Initially, the dissemination material, including banners, posters and other types of printed material, went to be offered to the public during the conferences and other public events. As a consequence of the pandemic restrictions, these activities has been cancelled or postponed, and most of the Project publications are being distributed mostly through social networks (Facebook, LinkedIn) and local Press.

By using the previously mentioned material, it will be easier to achieve a more complete dissemination of the Project and its goals.

The deliverables of this activity are:

- Website
- Informative trifold leaflet of the project
- Newsletters
- Poster
- Banner



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The dissemination actions of the results of the Project, will contribute at ensuring the best of their utilization. At the beginning of the Project, a dissemination plan was developed, so as to ensure the management of the most effective dissemination of the Project's activities, which has been published through the Project's website designed and developed especially for the promotion of the Project. The website includes all the Project's activities as well as information concerning the effectiveness of using water and fertilizers. Furthermore, educational opportunities will be published, concerning the regions of Greece, Spain, Algeria and Tunisia along with all the contact details of the relative actors and organizations.

The material coming up during the implementation of the Project will be offered to every one (including agronomists, extension agents, farmers, policy makers etc.) either by e-mails or by post.

An informative trifold leaflet will, also, be created concerning the Project and its goals, and it is going to be offered to the interested actors along with posters, and other types of printed material at every event that is going to be held. Moreover, the use of a banner at all the events will contribute to this effort of dissemination. In the end, there is intention of using the public media, as the Press, a radio or even a television show for dissemination purposes.

| Indicator | Audience | Objective |
|--|--|-----------|
| Website visits during first 2 years of the project | External technical audience and general audience | 10000 |
| Website visits during last year of the project | External technical audience and general audience | 30000 |
| Average number of followers in different social media platforms | External technical audience and general audience | 1000 |
| Number of open access publications | Technological developers, researchers | 20 |
| Number of published articles explaining project as a reference in ICT applied to agriculture | General audience | 3 |
| Number of brochures distributed | External technical audience and general audience | 750 |
| Number of end-user trying out PRECIMED System | External technical audience | 20 |
| Number of farmers interested for potential implantation | External technical audience | 150 |

Table 1: PRECIMED Dissemination Success Indicators



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The webpage of the project, hosted on <https://precimed-prima.org/> is providing information about the basic principles of the project, including the partners, its goals etc. A first version of the webpage is, already, released.

Activity 4: One day workshop presenting a practical guide for farmers

After 2 years of activity, PRECIMED project may organize a 1-day workshop in each of the PRECIMED regions to present a practical user's guide to the farmers about fertigation. "Key-persons" for the project will be invited to present this guide, while it is going to be attended by the local authorities, the local municipality and more.

The events will be open to everyone interested in being informed about the best fertirrigation protocols for the Mediterranean region. Moreover, through the presentation of the guide, a further update concerning this field is going to take place.

Activity 5: Forum of PRECIMED

This action is about online Forum that is created in the framework of PRECIMED project according to its objectives and functionality. For this purpose, we have selected LinkedIn as the media for this forum so as to ensure its sustainability. This way, partners can continue publishing on the forum and animating the discussion after the end of project using their personal accounts.

The forum is a good tool for the promotion of the cluster developed in the framework of PRECIMED project. It should encourage the collaboration with the most promising existing networks, clusters, alliances, associations and other key actors (regional authorities, chamber, municipalities, development agencies etc.) of the agricultural sector in order to promote the project and enhance the visibility of its results.

Additionally, this forum aims to create synergies among actors related with agriculture- water management sector and keep updated the stakeholders of the sector with related news and upcoming events (including project's events).

Activity 6: Video of PRECIMED

A video demonstrating the installation and the operation of PRECIMED project and addressing the public audience, farmers, as well as experts in the agriculture sector highlighting economic and societal potential of precision farming will be produced to bring the stories to a higher level of visibility. The video will be used for dissemination and communication activities such as events, in the



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media and will be made available of the project website, as well as on social networks such as YouTube and PRIMA online channels (if deemed appropriate by PRIMA secretariat).

Activity 7: Presentation of the results at Conferences and Scientific Magazines

The results of the Project will be published at national and international conferences (probably also virtual events), making them available for open access. Partners are encouraged to present the findings in conferences form their respective areas of expertise as well as transdisciplinary or specialized fora. The dissemination at these venues will be done throughout and beyond the project lifespan. All partners are responsible of proposing conference papers, panels, symposia, roundtables or any other type of public presentations.

The publications at scientific magazines consist of the main means of disseminating the results of research projects and one of the most important indexes of research activity at a national and international level. Articles will be publishing in high impact journals in agriculture and computing areas. The reports resulting from each work package will be the basis for the scientific articles and specific special issues. Publication in open access journals will be prioritized.

Activity 8. Open Day

An opening event provides the chance to create a strong first impression, as well as getting to see the experimental facilities and pilot farms of the project. This is the reason why, in our opinion, an open day is a great opportunity to find out more about the aim of the project and the results.

A properly marketed opening event is very likely to attract lots of foot traffic and media attention. Besides, an OPEN DAY event can be the least expensive and most effective way to spread the word about the project.

Among the main objectives of this activity, we can highlight the followings:

- Attracting people to look at our Programme, and to make sure that they leave wanting to take the relationship further.
- Also to listen to the public opinion.

Therefore, we will use this event as an opportunity to establish a two-way communication and to get feedback from our stakeholders on some important issues.

Initially, two open days per participating country would be organized during the life of the project. . Due to the pandemic, these kind of face to face activities had to be postponed and they will be done, only during the last year of the project, if the situation of each country allows it.



Activity 9: Final Conference

The Project will finally be presented at the Final Conference. Everyone interested in agro-economy, including political actors will be invited to participate at this conference, where they will have the opportunity to be informed about the goals of the Project and its results. The participants will also be informed about the development of a system of irrigation management and other related issues. Also, there will be plenty of time for opinion sharing and proposal offering concerning the support of new business opportunities at the field of sustainable agriculture.

Furthermore, the results of the research made, will be presented and talked through, providing a chance of interlocation on the digital modernization of the agricultural sector, based on the use of advanced IoT technologies, the data science and smart irrigation, guaranteeing the sustainability of the sector through time.

It is important to note that the results of the conference will be published on the Project's website and will, also, be distributed at a printed form to every one interested.

Activity 10: Virtual Events

The Coronavirus has totally changed the way we conduct business and in this age of social distancing web-conferencing has come up as a productive alternative to in-person conferences. Making use of a streamlined web-conferencing platform enables an international team to stay connected, productive, and engaged. The leading entrepreneurs are scrambling for new ways to operate their businesses, and in such a scenario web-conferences have come up as a useful communication mode that allows people to stay connected with their colleagues, peers and partners.

Given the situation nowadays, public events are really restricted, so plans have been cancelled. Proposed activities (4-7-8-9) could change the location of the conference from a physical location to a virtual or online exhibition. A virtual conference platform provides a highly adaptable, attractive and secure environment in which we can successfully gather the public, without risking health and safety (travel).

Four Proposed Types of Virtual Events

- Webinars
- Virtual Conferences
- External Hybrid Events
- Virtual open day



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Webinar

A webinar is a form of one-to-many communication: a presenter can reach a large and specific group of online viewers from a single location. Providing it is used effectively, interaction during a webinar can be very powerful. Particularly when you have a large number of participants, smart tools are essential to channel that interaction. Webinars typically last somewhere from 45 to 80 minutes. A webinar offers various interactive opportunities:

- Ask a question
- Chat
- Poll
- Survey
- Test
- Call-to-action

Virtual Conferences

A virtual conference allows organizations to reach a broad audience, as virtual conferences often result in 8x the number of registrations as traditional in-person conferences. Virtual conference includes discussion forums, networking opportunities, a conference resource center, the ability to search for and chat with other conference participants, and other features. Video conference, teleconference, and web conference are three main types of virtual conference, which are applied to different kinds of situations or industries.

External Hybrid Events

These are events held for participants outside the organization, generally attendees of common interest or industry come together to exchange ideas, showcase products, make major announcements, or share information.

Virtual open day

Virtual open days can include anything from online seminars or video virtual tours.



Stakeholders involvement

Stakeholder involvement helps to identify the legitimacy, interest and role of each stakeholder in the strategic planning and management process. It helps to ensure the participation and recognize the needs of groups that are more vulnerable. It also provides an insight into the capacity of each stakeholder to engage in the agricultural-water management driven planning process. Determining the significance and legitimate interest of the stakeholders has a great importance for enabling all stakeholders to participate in development decision-making; and for empowering stakeholders to perform their roles and undertake responsibilities for real implementation of the strategic actions

Stakeholder identification

When identifying relevant stakeholders, pilot area coordinators will include people who:

- are directly affected by one or more issues
- have an interest in one or more issues
- can influence strategic development (positively or negatively)
- have access to, or control of, resources (financial, technical, intellectual) that may be needed to develop new water management strategies.

In the context of PRECIMED project, the stakeholder groups typically include:

- Representatives from regional and local authorities and policy makers. PRECIMED will support the regional development by implementing programs, initiatives and aids that can facilitate the market uptake of smart precision farming products.
- Representatives from the private sector (in the framework of PRECIMED, this category included mainly irrigation technologies boards and service providers),
- Farmers, who are among the most impacted actors when major changes occur in the Mediterranean area of the European and non-European countries with the main characteristics of erratic rainfall, high temperatures, irregular topography and nearness to large water bodies,
- Providers of agricultural products: PRECIMED guarantees a better planning of resources for providers of fertilizers and irrigation communities,
- Food producers and distributors: PRECIMED offers a timely and guaranteed delivery of agricultural products due to an improved predictability of yields (in both quantity and quality) that would benefit for both the food producers since the productivity of their farm will be increased,
- Environmental organizations: PRECIMED can have an important impact in the climate change mitigation due to its expected impacts in the reduction of the use of water and fertilizers,
- Scientific community: New irrigation, fertilization and phenology models validation that are provided by PRECIMED will support all the scientific community for further researches. This would lead to reducing the gap between farmers and the scientific community,



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- Society as a whole: As a lump sum, PRECIMED is a contribution to this whole modern society, providing tools to improve the quality and productivity of agriculture in affected areas affected by climate change (arid and semi-arid areas).

Organization of the participatory process

PRECIMED puts a special emphasis on the need to involve stakeholders from the very beginning of the process and to make it last up to its completion. Different strategies will be used for mobilizing different groups of stakeholders depending on the characteristics of the group, their special interest or stake, and their capacity, as well as on the respective project phase. Strategies for mobilizing and involving stakeholders take the form of:

- Small meetings to share information, identify problems and propose solutions. Those meetings, which are mainly organized at the early phases of the project, are often bilateral, hold between pilot area coordinators and relevant institutions. They allow having a better understanding of the sectoral vision of each of the stakeholders, as well as of their personal expectations from the project;
- Multi-stakeholder meetings which will allow stakeholders to better understand the views of the other sectors and to take their needs and expectations into account;
- Workshops which will give stakeholders and the local population an opportunity to meet with members of the project team and work together on strategical plans.
- In four pilot areas (**Spain, Greece, Algeria** and **Tunisia**), meetings will set up with the participation of relevant stakeholders. These meetings are composed of representatives of the core political stakeholders, of the national government and of higher-level competent local administrations. They will be responsible for monitoring, supervising, controlling and reorienting the process. The meetings regularly will meet in order to follow the process step by step.

Expected Impact

The Project is expected to contribute to the digital enhancement of the agricultural sector, based on the use of advanced IoT technologies, the data science and smart irrigation, guaranteeing the sustainability of this sector through time.

According to the Strategic R&I Agenda, PRECIMED targets the topic of "**Irrigation technologies and practices**" to contribute to the following objectives:

- a) Innovative earth observation and ICT tools-based, Decision Support Systems for planning adaptation to global changes and anticipating droughts;
- b) Enhanced remote sensing and ICT technologies and devices for assessing water and energy budget;



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- c) Optimized balance between soil evaporation and plant evapotranspiration to improve plant water status and water productivity;
- d) Decision support systems based on cost-effective devices and sensors for irrigation under water quality/quantity constraints;
- e) Water treatment technology for specific irrigation requirements (e.g., precision irrigation).

The methodology proposed will enhance the users' acceptance and will facilitate a wide adoption of the developed technologies by a larger agriculture community including the relevant stakeholders (farmers).

The project will also achieve awareness and stronger commitment from all stakeholders and actors to strengthen cooperation and develop stronger ties with each other. PRECIMED will also create stronger bridges between the two shores of the Mediterranean basin, which is composed of EU and non-EU countries. Finally, the project is expected to better disseminate water management, existing tools and other reporting materials, through the Information Parties, Conferences and lighting / information campaigns that will be undertaken during the project.

Factors that influence the design and the successful development of the action plan

Design and effective implementation of the action plan for the implementation of this project, constitute a complex process, which is influenced by various factors, such as:

- The coordination of the process and the participation of those directly concerned and
- Parties involved (economic and social partners, etc.)
- The choice of a realistic and feasible number of actions
- The monitoring and evaluation of the Action Plan.



Conclusion

PRECIMED is a large-scale project which gather a wide variety of pilot areas, and whose implementation has been particularly complex.

Dissemination and exploitation activities take place in the initial stage, during implementation and after completing a plan directly by communicating each to his circle of influence and indirectly by using the means and tools to the wider parts of the target audience free and by allocating resources.

The goal is to effectively disseminate and utilize the results of a plan to be positively influenced as much as possible. The essence is each participant, regardless of the size or complexity of his plan, to see his action as a means to the success of others, his contemporaries and later.



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Dissemination Material

Leaflet of PRECIMED Project.


| Objectives | Methodology | Expected Impacts |
|---|---|---|
| <p>The main objective of PRECIMED will be the development, validation and transfer of a data driven irrigation / fertilization management system, in order to improve Water and Nutrient Use Efficiency (WUE and NUE respectively) in the Mediterranean region, by integrating the knowledge about fertilizers and irrigation water management with Information Communication Technologies (ICTs).</p>  | <p>The development process of PRECIMED will be carried out using an Agile/SCRUM framework. It follows an approach known as "adaptive life cycle". It is based on:</p> <ul style="list-style-type: none"> - <u>End user</u>: is a key pillar and should actively work during the project life cycle, - <u>Iterative cycles</u>: "n" iterative and repetitive cycles until the end users are happy with the solution, - <u>Incremental added value</u>: each iterative will deliver to end user a deliverable product with new and improved functionalities. | <p>The main impact foreseen by PRECIMED is to improve the farm productivity through the reduction of costs and the increase of the crop yield with a solution that minimizes the environmental impact due to the sustainable use of resources (water, fertilizers and energy consumption) and reduce the human laborious tasks while feasible business models are generated for the different farming scenarios.</p>  |

Figure 2. The inside of the trifold leaflet of the project

| Project Description | Project Partners | PRECIMED |
|--|---|--|
| <p>PRECIMED project will research, develop and validate a Standards-based Decision Support System (DSS), including Irrigation / Fertirrigation Models for a massive analysis of real-time crop and meteorological status data to improve the efficient use of water, nutrients and energy.</p>  | <p>Project Partners</p>  <p>Scientific Associate of the project</p> <p>Nikolaos Katsoulas, Professor nkatsoul@uth.gr +30 24210 93249</p> <p> www.facebook.com/precimed.prima www.precimed.eu @PrecimedP, #precimed www.linkedin.com/company/precimed-prima </p> | <p>PRECIMED</p>  <p>PRIMA IN THE MEDITERRANEAN AREA</p> <p>PRECIMED Precision Irrigation Management to Improve Water and Nutrient Use Efficiency in the Mediterranean Region</p> <p>PRECIMED is a project funded by the European Commission in line with rules for participation of H2020 and is centrally managed by the PRIMA IS whose goal is to give an appropriate and real-time solution to the existent irrigation problem in the water stressed countries in the Mediterranean basin through integration and adaptation of technologies.</p> |

Figure 3. The outside of the trifold leaflet of the project



[Deliverable 5.3] [Preliminary Plan for Dissemination and Exploitation of results (M22)]

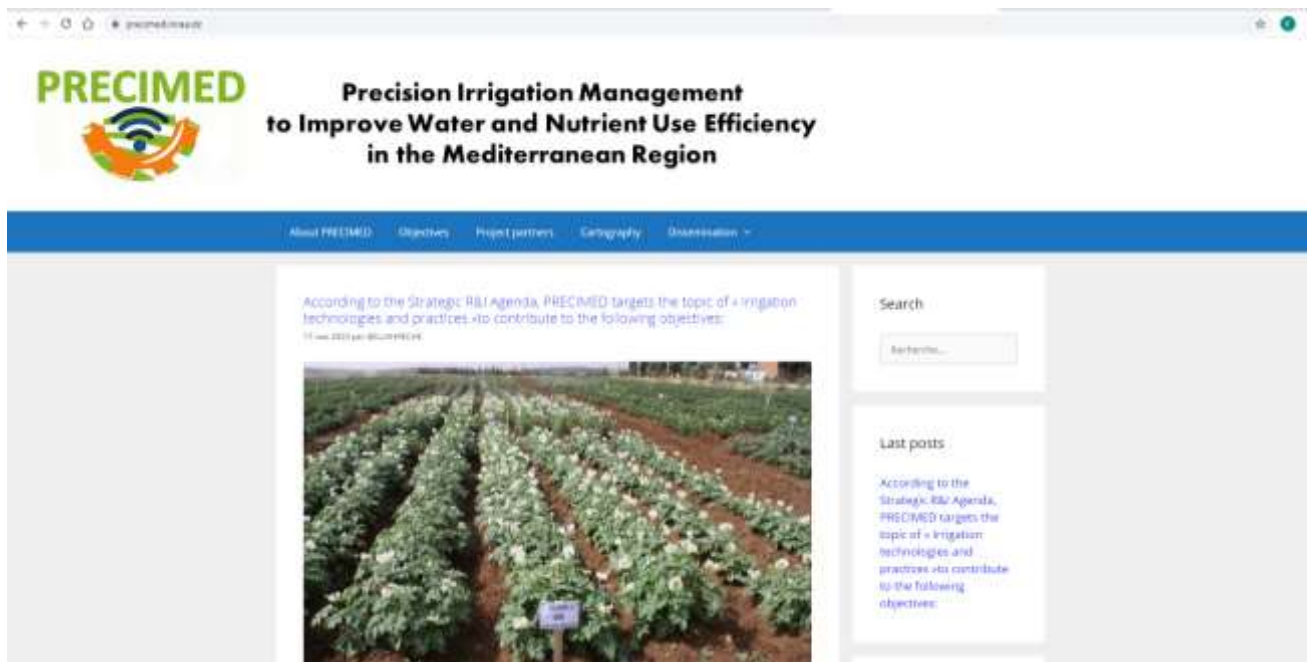


Figure 4. The webpage of the project



[Deliverable 5.3] [Preliminary Plan for Dissemination and Exploitation of results (M22)]



Project Objective

The main objective of PRECIMED will be the development, validation and transfer of a **data driven irrigation/fertilization management system**, in order to improve Water and Nutrient Use Efficiency (WUE and NUE respectively) in the Mediterranean region, by integrating the knowledge about fertilizers and irrigation water management with Information Communication Technologies (ICTs).

Expected Impacts

The main impact foreseen by PRECIMED is to improve the farm productivity through the reduction of costs and the increase of the crop yield with a solution that minimizes the environmental impact due to the sustainable use of resources (water, fertilizers and energy consumption) and reduce the human laborious tasks while feasible business models are generated for the different farming scenarios.

Project partners



PRECIMED



www.precimed.eu
[@precimed.prima](https://www.facebook.com/precimed.prima)
[@PrecimedP](https://www.twitter.com/precimedp) , [#precimed](https://www.twitter.com/precimed)
www.linkedin.com/company/precimed-prima

Contact person: Nikolaos Katsoulas
 E-mail: nkatsoul@uth.gr
 Tel.: +302421093249

Project co-financed by the European
 Regional Development Fund

Figure 5. The poster of the project

PRECIMED NEWSLETTER

Newsletter

April 2020

Title of Newsletter

Specific PRECIMED objectives

To Improve Water and Nutrient Use Efficiency (WUE and NUE) in the Mediterranean Region by using intensive ICT solutions

To facilitate the interchange of technology and best goods practices between EU and non-EU Mediterranean countries in order to improve the water and nutrient use efficiency in all the Mediterranean Region

To develop and validate (in different demonstration farms) a Standards-based Decision Support System for data-driven irrigation/fertilization management that evaluates the medium-term evolution of crop nutritional status, soil salinity, yield and fruit quality and safety, optimizing the water and fertilizers needs and the energy costs at farm level.

To ensure that the project activities and outcomes reach the relevant target groups, especially end-users (farmers), thus enhancing the market uptake of PRECIMED's solutions.

"The advantages of the newsletter

The purpose of the newsletter is to provide specialized information to a specific audience. Newsletters are often the ideal choice for promoting products or services. They also increase your credibility and inform the public about your business and the services you offer. Use positive, engaging customer phrases for discreet but effective marketing



Figure 6. The newsletter template of the project (page 1)



Λεζάντα φωτογραφίας

Title of the article

The headline or *title* is the most *important part*. so you need to think carefully about it.

In short, it must accurately describe the content of the article and attract readers. Before writing the article, consider the title. So don't get carried away with the title when writing the article.



Photo caption

Figure 7. The newsletter template of the project (page 2)

Article title in the side- bar

The side lines complete the main article. If you want the main articles to remain as they are and the information to be complete, but at the same time you want to share additional or additional content, then use the side lines.



Λεζάντα φωτογραφίας

Title of another article

Figure 8. The newsletter template of the project (page 3)

PROJECT PARTNERS



Contact

For more information about our Project

Tel:

Email:

Visit our webpage: www.precimed-prima.eu

Find us on



www.facebook.com/precimed.prima



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@PrecimedP / #precimed

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Figure 9. The newsletter template of the project (page 4)