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Turning climate-related information into added value for traditional **MED**iterranean **G**rape, **O**Live and **D**urum wheat food systems

Deliverable 6.14

Co-designed climate services communication and exploitation indicators n°2



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All partners involved in the production/implementation of the deliverable should comment and report (if needed) in the above table. The above table should support the decisions made for the specific deliverable in order to include the agreement of all involved parties for the final version of the document.

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EXECUTIVE SUMMARY

The objective of this deliverable D6.14 – “Co-designed Climate Services Communication and Exploitation Indicators Report n.2” is to primarily report on the project’s communication and exploitation activities (as already presented in D6.2 - Co-designed Climate Services Communication and Exploitation Indicators Report n.1) and at the same time build upon deliverable 7.1 – “Communication, dissemination, and exploitation management plan” by presenting additions to the initial strategy that will be reinforced during the project lifetime. The deliverable will provide input to the MED-GOLD deliverables D6.9 – Climate Replicability Report and D6.10 – Business Plan, Technology Transfer – IPR report.

Finally, it is important mentioning that this document reflects the current status of the technological developments. At the time of release, the ICT platform, the dashboard and most of the MED-GOLD services have been developed and pilots are on-going, which will have a significant impact in the current communication and exploitation plan.

With this deliverable, the project has contributed to the achievement of the following objectives (DOA, Part B Table1.1):

No.	Objective	Yes
1	To co-design, co-develop, test, and assess the added value of proof-of-concept climate services for olive, grape, and durum wheat	
2	To refine, validate, and upscale the three pilot services with the wider European and global user communities for olive, grape, and durum wheat	X
3	To ensure replicability of MED-GOLD climate services in other crops/climates (e.g., coffee) and to establish links to policy making globally	X
4	To implement a comprehensive communication and commercialization plan for MED-GOLD climate services to enhance market uptake	X
5	To build better informed and connected end-user communities for the global olive oil, wine, and pasta food systems and related policy making	X

1. INTRODUCTION

1.1. PURPOSE AND SCOPE

This document provides in detail the dissemination and exploitation indicators during the period covering M25 to M48 of the project. The grounding of such activities was clearly defined and guided by both the Description of Action (DoA) and relevant deliverables of WP6 – Communication and exploitation of the MED-GOLD value chain.

The purpose of the current deliverable is therefore two-folded: 1) to report on the MED-GOLD project's dissemination and exploitation indicators conducted between month 25 to month 48 and 2) to present additions to the initial strategy that will be reinforced during the project lifetime.

The remaining part of this document is organised as follows:

- Section 3.1 provides a summary of MED-GOLD with the purpose of introducing the project to the reader.
- Section 3.2 provides the communication and dissemination indicators and activities during the first period of the project.
- Section 3.3 provides exploitation indicators together with an update of the exploitation strategy.

1.2. DEFINITIONS AND ACRONYMS

1.2.1. DEFINITIONS

Concepts and terms used in this document and needing a definition are included in the following table:

Table 1-1 Definitions

Concept / Term	Definition
Business Model	The concept of the business model in the literature on information systems and business refers to ways of creating value for customers, and to the way in which a business turns market opportunity into profit through sets of actors, activities and collaboration.
Exploitation	The utilization of results in further research activities other than those covered by the action concerned, or in developing, creating and marketing a product or process, or in creating and providing a service, or in standardization activities.
Climate Service	Timely production and delivery (translation and transfer) in customized products (projections, forecasts, information, trends, economic analysis, assessments, etc.) of useful climate-related data, information and knowledge that support adaptation, mitigation and disaster risk management to decision makers
Communication	Strategic and targeted measures for promoting the results to a multitude of audiences
Dissemination	Public disclosure of the results by an appropriate communication channel.
End-user	Organization or person who ultimately uses or is intended to ultimately use a product or service
Key Performance Indicators	Measurable value that demonstrates the effectiveness of an activity
Plan	Detailed proposal or scheme agreed within parts of acting, doing, proceeding and/or making.
Result	Tangible or intangible output (data, knowledge or information)
User	Organization or person who support, maintain, procure, authorize or pay a product or service

1.2.2. ACRONYMS

Acronyms used in this document and needing a definition are included in the following table:

Table 1-2 Acronyms

Acronym	Definition
CS	Creative Service
EIP-AGRI	Agricultural European Innovation Partnership
EU	European Union
EYPL	European Union Public Licence





Acronym	Definition
GA	Grant Agreement
ICT	Information and Communication Technologies
KPI	Key Performance Indicators
MED-GOLD	Turning climate-related information into added value for traditional MEDiterranean Grape, Olive and Durum wheat food systems
MGs	MED-GOLD partners
PR	Public Relation
SMEs	Small and medium-sized enterprises
WP	Work Package



2. REFERENCES

2.1. REFERENCE DOCUMENTS

The following documents, although not part of this document, amplify or clarify its contents. Reference documents are those not applicable and referenced within this document. They are referenced in this document in the form [RD.x]:

Table 2-1 Reference Documents

Ref.	Title	Date
[RD.1]	MED-GOLD Grant Agreement	16-10-2017
[RD.2]	MED-GOLD Quality Plan	23-04-2017
[RD.3]	D6.16 Dissemination and Capacity Building Materials no.3	30-11-2021
[RD.4]	D7.1 Communication, Dissemination and Exploitation Management Plan	31-05-2018
[RD.5]	D6.2 Co-designed climate services communication and exploitation indicators n°1	30-11-2019
[RD.6]	D6.16 Dissemination and Capacity Building Report (n3)	30-11-2021
[RD.7]	D6.18 Science-based knowledge relevant for climate related policies (n3)	30-11-2021

3. DOCUMENT CONTENT

3.1. SUMMARY OF MED-GOLD

3.1.1. PROBLEM STATEMENT

MED-GOLD aims to translate state-of-the-art climate data and climate predictions — at the seasonal timescale and beyond — into easily accessible, valuable information for a wide range of end-users in the agriculture sector.

Within the European Commission (EC), the field of climate services has been identified as one of the few “flagship initiatives” of key areas of public interest in which to invest with priority during Horizon 2020. In this context, the term ‘Climate Services’ has a broad meaning: transforming climate-related data and other information into customized products such as projections, trends, economic analysis, advice on best practices, development and evaluation of solutions, and any other climate-related service liable to benefit that may be of use for the society at large. These services include data, information and knowledge that support adaptation, mitigation and disaster risk management.

3.1.2. MED-GOLD CLIMATE SERVICES

In summary and as described in details in MED-GOLD deliverable D6.18:

- **MED-GOLD has developed, implemented and tested co-designed climate services to support sustainable adaptation in agriculture.**
- **MED-GOLD services address the need of a broad range of end-users**, from farmers to regional, national, and European stakeholders.
- **MED-GOLD services contribute to enhance climate resilience** and offer tools to address the climate ambition of the new Common Agricultural Policy.
- **MED-GOLD tools are essential to achieve the targets set by the Green Deal**, the Farm to Fork Strategy, and the forthcoming Climate Law.

MED-GOLD invested in three agricultural sectors (durum wheat, grape, and olive production) and focused on the Mediterranean region. However, all its prototypes have been developed by ensuring broader applicability to other regions and other sectors. By breaking silos and reaching out to a broader community of end-users (composed of farmers, breeders, regional stakeholders, food companies), MED-GOLD has achieved its challenging goals.

Involved from the very beginning in the design of the services, end-users contributed to defining the specific needs, followed the development of the services by providing continuous feedback, and tested their effectiveness and usability. Each pilot service was co-developed with specific users and with a specific technical team in MED-GOLD by adopting a common methodological approach across the three climate service pilots. Thanks to this co-design approach, the MED-GOLD services address the needs (by providing targeted climate information) of farmers, breeders, regional stakeholders, and national and European policymakers.

MED-GOLD services build on and take advantage of existing initiatives as well as data and infrastructure facilities. The Copernicus Climate Data Store represents a cornerstone of climate services and has offered the possibility to transform existing data into sectoral information through the development and the implementation of a dedicated platform and open-source tools that are freely available. This approach made possible the integration of MED-GOLD services into existing decision supporting systems already in use in hundreds of farms.

The tools developed contribute to decision-making during the agricultural season, as well as to its long-term planning. They provide crop-specific information supporting optimal agro-management decisions and actions from sowing to harvesting. A dynamic, continuous flow of information is provided by integrating observations, as long as they are made available, with seasonal predictions reaching at any point in the season the crop-dependent maturity. Crop-specific climate risks deriving from unfavourable conditions and/or extreme events (e.g. drought, heat stress at flowering) are evaluated at any update of the information provided to offer farmers the possibility to act and minimise the impacts. MED-GOLD services do not only aim to get higher and more stable crop yields but also to grow crops sustainably. Key decisions on fertilization rate, timing, and the number of applications are supported by the information offered. Such support will be crucial to successfully initiate and complete the transition to a sustainable food system as foreseen by the Farm to Fork strategy, e.g. to reduce by 20% the use of fertilisers by 2030. MED-GOLD services also contribute to enhancing the climate performance and resilience of farms, thus addressing the climate ambition of the new Common Agricultural Policy. The services also represent concrete tools that may be used by the Member States to offer voluntary (for farmers) climate and agro-environmental schemes in their Strategic Plans. The co-developed services also support



long-term investments (e.g. on infrastructure) to cope with and socio-economic well-being and contribution to European competitiveness.

MED-GOLD services support breeders in assessing future climate risks, by providing projected conditions under which crop genotypes will be exposed and, thus identifying optimal ones. The services can be also used to test a broad range of ideotypes, sampling different key traits, to better orient current breeding programmes. Looking at the longer time scales, covering the next decades, MED-GOLD offers crop specific evaluation of climate suitability by applying innovative machine learning approaches. Information on changes in suitability support regional, national, and European stakeholders in early planning and in developing adequate policy measures to counteract the impacts of climate change, balance the internal market, and in some cases act on adapting the entire supply chain. The offered service on projected crop yield, under different assumptions and scenarios, complements the support to all levels of stakeholders.

The tools developed can also support the European Commission's agricultural activities, such as the short and medium term agricultural outlook. For instance, part of the MED-GOLD durum wheat prototype has been already implemented into the crop yield monitoring and forecasting system of the European Commission Joint Research Centre in support of the short-term agricultural outlook.

The changing climate poses challenges in the decision-making processes of olive growers and olive oil producers too, who need to adapt their irrigation, fertilisation and pesticide application strategies. It also modifies the occurrence of crop diseases, along with their potential damage, and can favour the development of new pests. Thus, anticipating future climate conditions is key for the adaptation of the olive sector, and climate services can help in this process. Furthermore, for wine producers the changing climate poses new challenges such as in defining long-term strategies, and in viticulture, oenological and stock management. Climate services, particularly predictions of climate variables and bio-climatic indices, can help in these decisions.

To these goals, MED-GOLD made a visualization tool, the dashboard, which provides an easy-to-use access to information on past climate and predictions of future climate at different time scales. The tool has been co-developed with users to ensure that it addresses their needs and expectations. Anyone can access the dashboard via the MED-GOLD website, or by visiting: <https://dashboard.med-gold.eu>.

3.2. COMMUNICATION INDICATORS AND STRATEGY

3.2.1. OBJECTIVES

Dissemination, communication and exploitation activities are essential to ensure the success of MED-GOLD and are closely coordinated among the various work packages to ensure a cohesive plan of action that will create large scale impact in the Climate Change scene and in a global perspective. In order to widen the outreach of the project's efforts and maximise the impact that MED-GOLD activities will have, the consortium pursues and ensures close coordination with the European Commission, the various ongoing Climate Change projects and other relevant initiatives in closely linked domains, such as Copernicus, CLARA, etc.

MED-GOLD has a two-fold objective. On one hand, it aims to demonstrate an innovative climate service for the agri-food sector based on the prototypes developed during the implementation of MED-GOLD. Second, the partners will develop a green communication framework for the agri-food sector based on the concept of climate traceability. The demonstrated services are expected to be potentially transferable to other agri-food value chains, involve sustainable and sustained international collaboration and provide appropriate responses to European agricultural and industrial policies. Innovation-related activities will be a major driver to achieve the aims and will include exploration and integration of stakeholders' knowledge. Innovation management in MED-GOLD follows a multidimensional, customized and impact-oriented approach, aiming to achieve optimal visibility for the project through targeted communication measures, and through structured dissemination and exploitation activities, to use the project's innovation potential and innovation capacity to the fullest. All activities to maximize the long-term impact of MED-GOLD are summarized in WP5 & 6, ensuring that:

- Professional communication measures provide targeted information to multiple audiences;
- Scientific outcomes that are disseminated at scientific conferences and in high quality peer-reviewed journals, while ensuring that IP rights are not infringed;
- Open access to scientific publications;
- Climate services are widely broadcasted;
- Stakeholders are continuously informed and invited to participate in trainings;
- Innovation management activities follow a clear strategy and are closely monitored;
- Key exploitable results are identified and effective exploitation strategies for each of them are in place and followed and they be further presented in MED-GOLD deliverable D6.10

In this respect, MED-GOLD gradually and systematically builds up and mobilises a community with major players on the Climate Change scene including innovators, researchers, big, medium and small businesses, committed to adopting and exploiting the project's outcomes in a sustainable way by embracing nationally and internationally related efforts. The



main idea is to involve a critical mass of relevant stakeholders early in the project by properly tuning promotional and marketing activities and by keeping them engaged through a continuous and dynamic approach.

3.2.2. COMMUNICATION TARGET AUDIENCE AND CHANNELS

Deliverable 7.1 segments the target audience on four separate groups:

- Upper level: Scientific and technical community or networks, Public agencies and authorities, Investments banks, Assurance companies and NGOs.
- Intermediate level: Climate service providers and purveyors, Information providers, Environmental-agriculture consultancy and advisory service companies, Engineering firms, Nongovernmental organizations and Sectorial organizations or associations.
- End-user level: Large-scale producers, local professional organizations, small agricultural business and Farmers.
- General Public.

At the same time, in MED-GOLD's communication plan and strategy a description a plethora of communication channels is already defined, in order to effectively reach the targets groups and to maximize awareness of the overall project's work and outcome. The synergy of MED-GOLD dissemination is generated through seamless connected online and offline communication activities. Both online (e.g. website and social media) and offline channels (e.g. public events) will be used to disseminate the related activities and project actions throughout Europe and beyond. In addition, all the networks and multiplier channels allow the partners of MED-GOLD to raise the visibility of the project's achievements and to reach a critical mass of stakeholders, developers, contributors, integrators, researchers and relevant key players for an efficient implementation of the project work plan. The dissemination channels used to reach each target group are detailed in Table 3.1.

Table 3-1 Dissemination activities per target group

Stakeholder	Example	Role, activities, interest	Dissemination & communication strategy & channels
Agri-food industry	DCOOP associates, clients of HORTA's Decision Support Systems MED-GOLD Dashboard	Users, end users of the MED-GOLD climate services	Direct involvement in stakeholder board food fairs, scientific publications, regular workshops organised by the project, consultations, multilingual website, newsletter, press releases, social media
Scientific community	Climate scientists, agronomists, software developers	Future users and collaborators, acquisition of follow-up funding and activities	Direct involvement in scientific advisory board Scientific publications, scientific meetings, conferences, joint events with related initiatives, multilingual website, newsletter, press releases, social media
Policy makers: Standardisation bodies & regulators	International Organisation of Vine and Wine (OIV), COPA-COGECA	Influence on climate information related working groups, Integration of recommendations in future guidelines	Provision of targeted information, policy papers, policy events, interviews, sessions & workshops, hosting of climate service tools, multilingual website, newsletter, press releases, social media

Stakeholder	Example	Role, activities, interest	Dissemination & communication strategy & channels
European Commission Services and Platforms	JRC, The agricultural European Innovation Partnership (EIP-AGRI)	Guidance, networking opportunities, Integration of recommendations in future guidelines, scientific cooperation on relevant climate service science topics, technical support, sharing of relevant climate and non-climate data.	Provision of targeted information, multilingual website, newsletter, press releases, social media
European Associations and Multiplier organizations	Comité Européen des Entreprises Vins (CEEV), International Olive Council (IOC), European Consumer Organization (BEU)	Future strategy development, Lobbying, representation of interest	Participation of project partners in public events fairs, scientific publications, workshops science-based support for sector positions on climate adaptation strategies and consumer communication, multilingual website, newsletter, press releases, social media
Related Climate Service Initiatives	C3S	Demonstration and development, future strategy development, lobbying, representation of interest, exploit synergies	Participation of project partners in events, joint organization of events multilingual website, newsletter, press releases, social media
Consumers	Civil society, slow food movements, bloggers and influencers, retail organizations	Food consumers; Amplifiers	Media, public events, food and drink fairs, via celebrity chefs and sommeliers, workshops & sessions organised by the project, multilingual website, newsletter, press releases, social media

3.2.3. COMMUNICATION AND DISSEMINATION ACTIVITIES

During the period of the project reported in this deliverable, MED-GOLD has been involved in several dissemination and communication activities. At the same time several actions have been undertaken to ensure the internal communication between the partners of the project:

- Annual General Assemblies.
- Monthly Work Package virtual meetings.
- An internal area on the Project's website, a private online workspace dedicated to project management, including reporting and nonpublic information, has been designed with the purpose to facilitate partner collaboration.

3.2.4. DISSEMINATION AND CAPACITY BUILDING MATERIAL

The dissemination and capacity building materials, as reported in details in MED-GOLD Deliverable D6.16, include scientific publications, project deliverables, poster and oral presentations in relevant events (excluding those with a communication purpose only), materials for training and workshops, info sheets, webinars and policy briefs. When possible, materials are collected and displayed in this deliverable. For materials not shown here, such as presentations or deliverables, the link to the original file is provided when publicly available. Note that a description of materials such as [newsletters](#), project [news, press releases and interviews](#) or the [MED-GOLD promo videos](#) have not been included because they are considered communication rather than dissemination materials, even though in some occasions they can also be used for dissemination purposes.



Table 3-2 presents an updated compilation of the dissemination and capacity building materials that have been developed so far in the MED-GOLD, describing the target audiences and the channels used to reach them.

Table 3-2 Dissemination and capacity building materials developed to date in MED-GOLD (as reported in Med-GOLD Deliverable D6.16)

Materials	Channels	Target Audience	Language	Link
Scientific publications (peer and non-peer reviewed)	Project website Social media Project newsletter	Research	EN (except particular cases)	List of publications
Project deliverables	Project website	Project consortium Research	EN	Public deliverables
Presentations in relevant events (including interactions with other initiatives)	Conferences, meetings	Research Industry Policy makers	EN, IT, PT, ES, GR	
Materials for trainings and workshops	Living Labs Workshops	Research, ECRs Farmers Industry and other commercial players Media	EN, IT, ES, PT, GR	Living lab 2020 sessions materials Living lab 2021 sessions materials Living lab 2020 videos on YouTube Living lab 2021 videos on YouTube
Infosheets	Project website Social media Workshops Project newsletter	Farmers Industry and other commercial players Public organisations Policy makers Research	EN, IT, ES, PT, GR, FR	Project publications
User guides (for the different services)	Project website Social media Workshops Project newsletter Presentations to target institutions MED-GOLD Dashboard	Farmers Industry and other commercial players Public organisations Policy makers Research	EN, IT, ES, PT, GR, FR	Project publications
Webinars	Webinar platform Project website Social media Project newsletter YouTube channel	Research Farmers Industry and other commercial partners Public organisations Policy-makers Media	PT, EN	Project webinars
Infographics	Project website Social media	Research Industry and other commercial partners Public organisations General society	EN, IT, ES, PT, GR, FR	Project infographics
Videos (climate services use cases)	Project website Social media YouTube channel Workshops	Farmers Industry and other commercial partners Public organisations	EN (subtitles in EN IT, ES, PT, GR, FR)	Project website Videos on YouTube

		Policy-makers Media		
Policy brief	Project website	Policy-makers Commercial players (e.g. cooperatives, trade organizations)	EN	Ongoing

3.3. EXPLOITATION INDICATORS

The exploitation plan already described in deliverable 7.1 ensures that MED-GOLD results will create the opportunity to market innovative products and services, promote new research and support policy making. The list of exploitable results of MED-GOLD per sector is presented in Table 3-3. The expected exploitation results per partner of the consortium are listed in Table 3-4.

One of the major activities involved in MED-GOLD is the exploitation of the expected outcomes. As a result, in close coordination with MED-GOLD's dissemination strategy and activities, MED-GOLD will follow an effective, solid and dynamic continuation and exploitation strategy that will be regularly reviewed and expanded as the project proceeds and new opportunities or obstacles arise.

To this end, an MED-GOLD exploitation team will be formed to deal with succession and long-term exploitation and continuation issues that arise, with a view to secure the sustainability of the project's service and dissemination scheme. All partners will nominate qualified persons as exploitation managers to coordinate the relative activities and scheme. The exploitation team will continuously try to use the stakeholders' community, and all foreseen events and engagement activities to promote the project within an active network aiming at establishing strong working relationships with key people and organisations involved in or having an interest in MED-GOLD domain of relevance.

The exploitation activities will be thoroughly planned as MED-GOLD unfolds and reviles its value and will continue throughout the entire lifecycle of MED-GOLD. Within a specific activity in the exploitation task, each partner will also develop its individual exploitation plan, documenting how it will contribute to the sustainability of MED-GOLD services or how it may exploit them directly in local, regional or international level, taking into account the IPR strategy of the consortium. A list of exploitable assets will be refined in the course of the project duration, whereas at MED-GOLD preparation time, there are already specific exploitable assets expected to be available within the project, aligned with the main project objectives, listed in the table 3.3 below.

3.3.1. EXPLOITATION OBJECTIVES AND ACTIVITIES

Exploitation Objectives: The exploitation strategy of MED-GOLD will follow three main stages of expansion with specific short-term, medium-term and long-term objectives:

- 1) **Short-term objectives:** This first stage corresponds to a period beginning with the start of MED-GOLD activities and ends in parallel with the project. During this period, the main objective is to verify and validate through the industrial demonstrators, the quality and effectiveness of the MED-GOLD results, concepts, models, tools and services.
- 2) **Medium-term objectives:** This second stage corresponds to a period beginning with the end of MED-GOLD and ending after two or three years, depending on the maturity and completion of the project results. The main objective includes the commercialization of the "to date" results and developments of semi commercial products and services, while it further relates to potential fine-tuning, or expansion of the MED-GOLD framework.
- 3) **Long-term objectives:** Corresponds to the commercialization of the MED-GOLD framework products and services derived from the first and second stage.

Exploitation Activities: MED-GOLD exploitation strategy will comprise of a bouquet of exploitation activities which include:

- 1) the **identification of the innovative exploitable assets**, which MED-GOLD will deliver through its results to its target users,
- 2) the **conduction of a thorough market analysis** (which will comprise of an initial and a final analysis) which will aim at the identification of the (huge) market towards which MED-GOLD is targeted, its segmentation, the positioning of current competitors and all corresponding emerging trends,
- 3) the **documentation of an analytical IPR management strategy** based on the principles outlined in the project CA which will guide the joint and individual exploitation capabilities of the project partners,



- 4) the **analytical definition of a risk management strategy**, aiming not only at managing research, technical, financial, management, exploitation and other related risks as they appear, but mainly at proactively acting so as to avoid the appearance of these risks,
- 5) the **analytical definition of all possible commercial and non-commercial exploitation models**,
- 6) the **analytical definition and evaluation of the sustainability and viability of possible business models** and alternative solutions that may be followed for the provision of the project solution and services to the identified stakeholders, including licensing schemes, pricing, etc., and the corresponding tactical revisions as deemed necessary throughout MED-GOLD lifecycle,
- 7) the **establishment of tactical alliances with other industrial or research organisations** that hold the potential of promoting the results,
- 8) the **establishment of relationships of trust with costumers**, who can facilitate the quicker adoption of the solution and provide valuable feedback which can be used in the commercialization phase,
- 9) the **identification of financial support** from diversified funds that can be used to support direct and/or indirect commercial transformation, ranging from additional research activities to bug fixing and to technology integration in existing or future solutions, and
- 10) the **validation of the aforementioned exploitation activities** through MED-GOLD's use cases / demonstrators.

3.3.2. POTENTIAL MED-GOLD MARKET CHARACTERISTICS

In the last couple of decades, basic climate services have become available in many countries. More recently, a full suite of climate services (i.e., climate system monitoring based on monthly seasonal, inter-annual climate predictions and long-term climate change projections) is also available but there is a lack of uptake by users. One reason is that potential users do not have the skills and experience to be able to understand these services and make the best use of them. The World Meteorological Organization (WMO) launched the process for developing the Global Framework for Climate Services (GFCS) in 2009. The Earth observation programme, Copernicus, established in 2014 and managed by the European Commission in partnership with the European Space Agency (ESA), the EU Member States and EU Agencies also contributes also to GFCS, but has enabled the EU CS sector to grow exponentially. Additionally, the open data policy uptake, for Copernicus, has promoted new data with different spatial-temporal characteristics. The availability of the observational and re-analysed data, together with the introduction of cloud-computing technologies to access data and facilitate large-volume storage and analysis, have benefited the business downstream Climate Service sector, especially Small and Medium Enterprises (SMEs), which can add customized and expert value, especially to those users who specifically require intelligence owing to the lack of technical knowledge/infrastructure for performing their own analytics. The main markets in which Climate Service have a niche are: energy, urban planning, tourism, health, water, finance, agriculture and food security. Each sector has its own characteristics such as willingness to pay (for example, agriculture is price sensitive). Independently of each sector, the market also varies by region and is not homogeneous.

Agriculture aims to continue producing food to ensure food security in a sustainable way, while trying to reduce its impact on the environment and climate, as well assuring economic profitability and caring about social aspects. These challenges have led to a push for sustainable agriculture which can take advantage of Climate Service in different perspectives:

- short and long timescales facilitate operational management and financial strategies;
- new probabilistic approaches enable quantitative risk management to assess alternative actions, manage the business and evaluate results.

Table 3-3 List of exploitable results

Sector	Climate Services Description
Olive / Olive Oil	Olive fruit fly infestation models for short and long-term time scales Olive yield modelling approaches for seasonal and projections
Grapes / Wine	Short- and long-term analysis of relevant climatic, bioclimatic and extreme climate indices affecting field management operations (choice of plantation site, grapevine variety, setting harvest dates, operational farming planning)
Durum Wheat / Pasta	Seasonal and long-time scale forecasting for yield, risk of diseases and operational farming management

Table 3-4 Exploitation result expectations by each partner (as reported in MED-GOLD Deliverable D6.2)

Partner	Expectations	Type of exploitable project result	Sector	Target market
ENEA	Establish an exploitable network for climate services in key agricultural sector for Italy	Networking / Knowledge	Public	National (Italy)
BARILLA	Implement in their operational system the climate services developed for durum wheat Develop a business plan to promote the capitalization of the results and to facilitate the application of the developed technologies at farms, storage facilities and milling plants	Knowledge / Product-Service	Private	Local (Italy)
Beetobit	Developing and maintaining large-scale cloud infrastructure	Networking / Knowledge	Private	European / Global
BSC	Extend and implement new tools related to seasonal predictions and climatic indicators	Knowledge	Public / Private	European / Global
CNR	Improve methodologies to obtain high accuracy and robust data products for seasonal forecasts	Knowledge	Public	European / Global
DCOOP	Improve their advice services to farmers and cooperatives based on climate services	Knowledge / Product-Service	Private	Local (Spain)
ec2ce	Exploit climate services innovation in their activity	Knowledge / Product-Service	Private	European / Global
GMV	Extend and exploit climate services in other regions and sector based on project experience	Knowledge / Product-Service / Networking	Private	European / Global
HORTA	Implement in their system granoduro.net@ the pilot climate service developed Exploit climate services innovation in their activity	Knowledge / Product-Service	Private	National / European
JRC	Innovate on its agro-climatic modelling systems and provide more robust, reliable and consistent evidences for the agro-climatic policy support	Dissemination / Knowledge	Public	European / Global
Met Office	Increase knowledge on climatic and bioclimatic indicators	Networking / Knowledge	Public	European / Global
NOA	Promotion of professional workshops for capacity building and participation on international conferences	Networking / Knowledge	Public	European / Global
SOGRAPE	Improve and develop climate services for its viticulture activity	Knowledge / Product-Service	Private	Local (Portugal)
UnivLeeds	Publications of peer-review articles and participation on international conferences	Dissemination	Public	European / Global
UTH	Capacity building of graduate and undergraduate studies in climate services and acquire practical experience	Knowledge / Dissemination / Networking	Public	Global

Since MED-GOLD has been building the foundations upon which scientific results are going to be produced or in some cases such results have only recently been produced, it wasn't possible to exploit those results by the partners of this consortium.

As COVID19 pandemic outbreak is still placing a burden maintaining a relevant pressure on our activities, several many planned MED-GOLD activities are producing appropriate interesting materials useful for catching policy makers' attention when face-to-face meetings are limited. Online events, videos, info-sheets and policy briefs would also allow a more effective dissemination of knowledge materials and lessons learnt during the project.

For the final period of MED-GOLD we plan to maintain a contact with several producers' associations which are known to be authoritative reference points for national and international governmental bodies to convey MED-GOLD salient information in a more effective way. Indeed, sectoral bodies, such as [COPA-COGECA](#) and Comité Européen des Entreprises Vins ([CEEV](#)), have already have established contact channels with institutional bodies at national and international levels.

A specific event is planned in the framework of the final showcasing MED-GOLD event targeting policy makers and international producers' associations with the aim of further disseminating relevant scientific knowledge developed during the project.





It is still active in an action for consolidating the policy-makers and institutional contacts database which have been collected during MED-GOLD activities, even including those bilateral meetings attended by MED-GOLD single partners. That database will represent, in the following months, a valuable platform to effectively disseminate MED-GOLD results among a tailored audience.





4. CONCLUSION

This document reports on the MED-GOLD project's dissemination and exploitation indicators and activities conducted during the first period of the Project (month 25 to month 48) and presents additions to the initial strategy that will be reinforced during the project lifetime.





END OF DOCUMENT

