H2020-SC5-01-2017

MED-GOLD

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

Deliverable 6.16

Dissemination and Capacity Building Materials no.3

This project has received funding from the European Union's Horizon 2020 research and innovation programme under gran agreement No 776467.

DOCUMENT STATUS SHEET

Deliverable Title	**Dissemination and Capacity Building Materials nº2**	
Brief Description	Description and collection of the dissemination and capacity building materials created from M37 (December 2020) to M48 (November 2021) as well as other materials planned until the end of the project in May 2022	
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REVISION HISTORY LOG

Version	Date	Created / Modified by	Pages	Comments
1.0	10-11-2021	BSC	24	Initial Draft
2.0	15-11-2021	BSC with contributions from MetOffice, Sogrape, DCOOP, GMV, ENEA and HORTA	23	Revised Draft

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.

Finally, after the peer review process, the deliverable should be modified accordingly to the comments and the reflections to the comments should be reported in the above table.

TABLE OF CONTENTS

List of tables and figures

Tables

Figures

EXECUTIVE SUMMARY

Scientific results need effective dissemination to explain the wider societal relevance of science, build support for future research and innovation funding, ensure uptake of results within the scientific community, and open up potential business opportunities for novel products or services. However, to ensure the uptake of results, building capacity within the user community is crucial, which helps to enhance their capabilities and skills and develop a dedicated understanding that can be useful for problem solving. In turn, capacity building leads to a more efficient dissemination and exchange of actionable interdisciplinary knowledge to other users and user groups, for adaptation and planning in the context of climate change.

This deliverable presents a description of the dissemination and capacity building materials that have been developed in the framework of the MED-GOLD project. These materials are designed to facilitate uptake of climate services by agricultural stakeholders, namely by user communities, principally those in the grapes/wine, olives/olive oil and durum wheat/pasta sectors, but also by other sectors. This deliverable contains dissemination materials developed from month 37 of the project (November 2020) to month 48 (November 2021), as well as other materials planned until the end of the project in May 2022. Materials are addressed to different audiences (i.e. scientific peers, farmers, cooperatives, the business sector, public organizations, policy makers), depending on the format the information is presented, the terminology used and the chosen distribution channel. Metrics to assess the impact of dissemination and capacity building activities are proposed in the final part of the document to keep track of the success of such activities.

Actions to enhance the distribution of dissemination and capacity building materials during periods with travel restrictions due to the COVID-19 pandemic have involved the organisation of and participation in online events as well as a more intensive use of social networks.

Next steps will include the diffusion of dissemination and capacity building materials already developed in the next planned project events, including participatory workshops, webinars, and in the final project event.

1. OBJECTIVES

With this deliverable, the project has contributed to the achievement of the following objectives (DOA, Part B Table 1.1):

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	
3	To ensure replicability of MED-GOLD climate services in other crops/climates (e.g., coffee) and to establish links to policy making globally	
4	To implement a comprehensive communication and commercialization plan for MED-GOLD climate services to enhance market uptake	
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

2. IMPACT

No.	Expected impact	Yes
1	Providing added-value for the decision-making process addressed by the project, in terms of effectiveness, value creation, optimised opportunities and minimised risk	
2	Enhancing the potential for market uptake of climate services demonstrated by addressing the added value	
3	Ensuring the replicability of the methodological frameworks for value added climate services in potential end-user markets	
4	To implement a comprehensive communication and commercialization plan for MED-GOLD climate services to enhance market uptake	
5	To build better informed and connected end-user communities for the global olive oil, wine, and pasta food systems and related policy making	The deliverable collects material that is useful to transfer the knowledge generated by the project to stakeholders from the target end-user communities and beyond. Effective knowledge transfer has the aim to build capacity within the end-users, increasing their understanding of the provided climate services tools. At the same time, it helps to manage users' expectations and creates trust, which are some of necessary ingredients for the uptake of the provided climate services

3. DEFINITIONS

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

Concept / Term	Definition
Dissemination	Public disclosure of the results by any appropriate means (other than resulting from protecting or exploiting the results), including by scientific publications in any medium (EC Research & Innovation Participant Portal Glossary/Reference Terms).
Communication	Process strategically planned that starts at the outset of the project and continues throughout its entire lifetime, aimed at promoting both the project and its results to multitude of audiences, including the media and the public and possibly engaging in a two-way exchange (EC Research & Innovation Participant Portal Glossary/Reference Terms).
Capacity building	Process by which people, organizations and society systematically stimulate and develop their capability over time to achieve social and economic goals, including through improvement of knowledge, skills, systems and institutions (United Nations Office for Disaster Risk Reduction).

4. ACRONYMS

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

Acronym	Definition
C3S	Copernicus Climate Change Service
CDS	Climate Data Store
CLIMALERT	Climate Alert Smart System
COPA-COGECA	Committee of Professional Agricultural Organisations - General Confederation of Agricultural Cooperatives
EASME	Executive Agency for Small and Medium-sized Enterprises
EN	English language
ES	Spanish language
FR	French language
GR	Greek language
ICT	Information and Communication Technology
IT	Italian language
MedECC	Mediterranean Experts on Climate and Environmental Change
OIV	International Organisation of Vine and Wine
PBDM	Physiologically-Based Demographic Modelling
PT	Portuguese language
SECLI-FIRM	The Added Value of Seasonal Climate Forecasting for Integrated Risk Assessment
SPIE	Society of Photographic Instrumentation Engineers
VISCA	Vineyards´ Integrated Smart Climate Application

5. REFERENCES

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]:

Ref.	Title	Code	Version	Date
[RD.1]	MED-GOLD Communication, Dissemination and Exploitation Management Plan	D7.1		2018
[RD.2]	Dissemination and Capacity Building Materials n.1	D6.3		2019
[RD.3]	Dissemination and Capacity Building Materials n.2	D6.15		2020
[RD.4]	Compilation of Publications Abstracts n.3	D6.20		2021
[RD.5]	Summary of Dissemination and Communication Activities n.4	D6.24		2021
[RD.6]	Science-based knowledge relevant for Climate related Policies no.3	D6.18		2021

6. DISSEMINATION AND CAPACITY BUILDING MATERIALS

The present deliverable constitutes an upgrade to D6.3 and D6.15. It includes relevant updates on the scientific publications, project deliverables, poster and oral presentations in relevant events, materials for training and workshops, info sheets and user guides, webinars, infographics, videos and a policy brief. 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 has not been included, since they are considered communication rather than dissemination materials (i.e. focused on spreading the project results), even though in some occasions they can also be used for dissemination purposes.

Table 6-1 presents an updated compilation of the dissemination and capacity building materials that have been developed so far in the MED-GOLD project, describing the target audiences and the channels used to reach these audiences. Upcoming sections 6.1 - 6.9 present the new materials developed from M37 (December 2020) to M48 (November 2021).

Table 6-1 Dissemination and capacity building materials developed in MED-GOLD

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	Research Farmers Industry and other commercial partners	PT, EN	Project webinars

	Project newsletter YouTube channel	Public organisations Policy-makers Media		
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 Policy-makers Media	EN (subtitles in EN IT, ES, PT, GR, FR)	Project website Videos on YouTube
Policy brief	Project website	Policy-makers Commercial players (e.g. cooperatives, trade organizations)	EN	Ongoing

6.1. SCIENTIFIC PUBLICATIONS

Scientific publications are presented in Table 6-2. During this last year (December 2020-November 2021) 11 new articles have been published. Abstracts for the different articles can be found in D6.20 [RD.4].

Table 6-2 Peer-reviewed scientific publications

#	Publications
1	Bojovic D., Lera St.Clair A., Christel I., Terrado M., Stanzel P., Gonzalez P, Palin E. (2021) Engagement, involvement and empowerment: three realms of a coproduction framework for climate services. Global Environmental Change 68, 102271.
2	Campos, M.R., Amiens-Desneux, E., Béarez, P., Soares, M.A., Ponti, L., Biondi, A., Harwood, J.D., Desneux, N. (2021) Impact of low temperature and host plant on Tuta absoluta. Entomologia Experimentalis et Applicata, 169(11), 984–996.
3	Ceglar, A., Toreti, A. (2021) Seasonal climate forecast can inform the European agricultural sector well in advance of harvesting. NPJ Climate and Atmospheric science, 4: 42.
4	Ceglar, A., Toreti, A., Zampieri, M., Royo, C. (2021) Global loss of climatically suitable areas for durum wheat growth in the future. Environmental Research Letters (accepted).
5	Fernandez-Carrillo, A., Rivas-Gonzalez, F. W., Revilla-Romero, B. (2021) Satellite imagery and climate variables suggest variations in the phenology of olive groves in Southern Spain. SPIE Remote Sensing, Remote Sensing for Agriculture, Ecosystems, and Hydrology XXIII, Madrid, Spain.
6	Gutierrez, A.P., Ponti, L., Neteler, M., Suckling, D.M., Cure, J.R. (2021) Invasive potential of tropical fruit flies in temperate regions under climate change. Communications Biology, 4(1), 1–14.
7	Perez-Zanon, N., Chou, C., Lledó, Ll., González-Reviriego, N., Marcos, R., Palma, Ll. (2021) CSIndicators: Climate Services' Indicators Based on Sub-Seasonal to Decadal Predictions. Rstats package v 0.0.1., Barcelona Supercomputing Center (BSC-CNS).
8	Ponti, L., Gutierrez, A.P., de Campos, M.R., Desneux, N., Biondi, A., Neteler, M. (2021) Biological invasion risk assessment of Tuta absoluta: Mechanistic versus correlative methods. Biological Invasions, doi:10.1007/s10530-021-02613-5.
9	Rosati, A., Marchionni, D., Mantovani, D., Ponti, L., Famiani, F. (2021) Intercepted photosynthetically active radiation (PAR) and spatial and temporal distribution of transmitted par under high-density and super high-density olive orchards. Agriculture 11(4), 351.
10	Sanderson, M. G., Teixeira, M., Fontes, N., Silva, S., Graça, A. (2021) Unprecedented rainfall in northern Portugal. International Viticulture and Enology Society (IVES).

11	Solaraju-Murali, B., González-Reviriego, N., Caron, L-P., Ceglar, A., Toreti, A., Zampieri, M., Bretonnière, P-A., Samsó-Cabré, M., Doblas-Reyes, F-J. (2021) Multi-annual prediction of drought and heat stress to support decision making in the wheat sector. Nature npj Climate and Atmospheric Science 4, 34.

6.2. PROJECT DELIVERABLES

Public deliverables are also a way to disseminate the project results, mainly among the scientific community but also other stakeholders. The list of new public deliverables is provided in Table 6-3. Once approved by the EC, the links to the deliverables are added to the project website.

Table 6-3 New public deliverables

Deliverable #	Title
D1.8	Final release of the MED-GOLD ICT platform
D2.3	Report on the tailored indicators and their quality assessment for the specific case studies
D2.4	Assessment of the added value for the decision-making process for the olives/ olive oil sector
D2.5	A handy easy-to-use manual for stakeholders and practitioners of the climate service tool. PART I: the olives/olive oil sector
D3.3	Report on the climatic, bioclimatic and extreme climate indices developed in the wine pilot services
D3.4	Assessment of the added value for the decision-making process for the wine sector
D3.5	A handy easy-to-use manual for stakeholders and practitioners of the climate service tool. PART II: the grape/ wine sector
D4.3	Evaluation of the pilot
D4.4	Assessment of the added value for the decision-making process for the durum wheat sector
D4.5	A handy easy-to-use manual for stakeholders and practitioners of the climate service tool. PART III: the durum wheat/pasta sector
D5.2	Summary of the survey questions, rationale, and dissemination
D6.13	Climate Related Initiatives Interactions Report no.4
D6.14	Co-designed Climate Services Communication and Exploitation Indicators Report no.2
D6.16	Dissemination and Capacity Building Materials no.3
D6.18	Science-based knowledge relevant for Climate related Policies no.3
D6.20	Compilation of Publications Abstracts no.3
D6.21	Summer training event no.2

6.3. PRESENTATIONS IN RELEVANT EVENTS

Presentations reporting project results in relevant events during the last 12 months are listed in Table 6-4. In the case of events with submitted abstracts, a compilation can be found in D6.20 [RD.4]. In this occasion, the major part of the presentations have been oral and delivered remotely. This obeys to travel restrictions held during the last months, which are progressively easing off.

Table 6-4 Presentations in relevant events

#	Title of the presentation, Event, Location, Dates	Presentation type
1	**Final event of the VISCA project**, Presentation of the MED-GOLD project, online, 15 December 2020	Oral

2	**Second national CLIMALERT workshop**, Water and vineyards: limits of planning and possible solutions, online, 5 March 2021 (Figure 6-1)	Oral
3	**European Geosciences Union General Assembly**, various presentations at the session about Climate services – underpinning science, online, 19-30 April 2021	Oral
4	**Andalusian Government webinar**, Models for the prediction of the olive fruit fly and prays, online, 22 April 2021	Oral
5	**C3S Conference and General Assembly,** MED-GOLD as an example of project for climate resilience, online, 18-20 May 2021 (Figure 6-2)	Oral
6	**Met Office Climate Science Conference**, Poster showing elements of the MED-GOLD dashboard, online, 11-12 May 2021	Poster
7	**SECLI-FIRM stakeholder workshop,** Presentation of the MED-GOLD dashboard as a case study for agriculture, online, 25 May 2021	Oral
8	**European Meteorological Society annual meeting,** Understanding climate and non-climate decision triggers to minimize Spring rainfall risks in vineyards, online, 6-10 September 2021	Oral
9	**SPIE Remote Sensing for Agriculture, Ecosystems, and Hydrology XXIII conference,** Satellite imagery and climate variables suggest variations in the phenology of olive groves in Southern Spain, online, 13-18 September 2021	Poster
10	**Expoliva fair 2021,** Jaén, Spain, 21-25 September 2021	Dissemination materials in booth
11	**Smart Agrifood Summit,** Málaga, Spain, 30 September - 1 October 2021	Dissemination materials in booth
12	**International Organisation of Vine and Wine (OIV) expert group meeting,** Presentation of the MED-GOLD dashboard, online, 15 October 2021 (Figure 6-3)	Oral
13	**C3S and MedECC workshop 'Data for climate action in the Mediterranean',** Presentation of the MED-GOLD project, online, 25 October 2021	Oral
14	**Copa-Cogeca meeting of the Working Party on Olives & Olive Oil,** Presentation of the MED-GOLD dashboard, online, 18 November 2021	Oral

Figure 6-1 CLIMALERT workshop with the participation of the MED-GOLD champion user for the wine sector

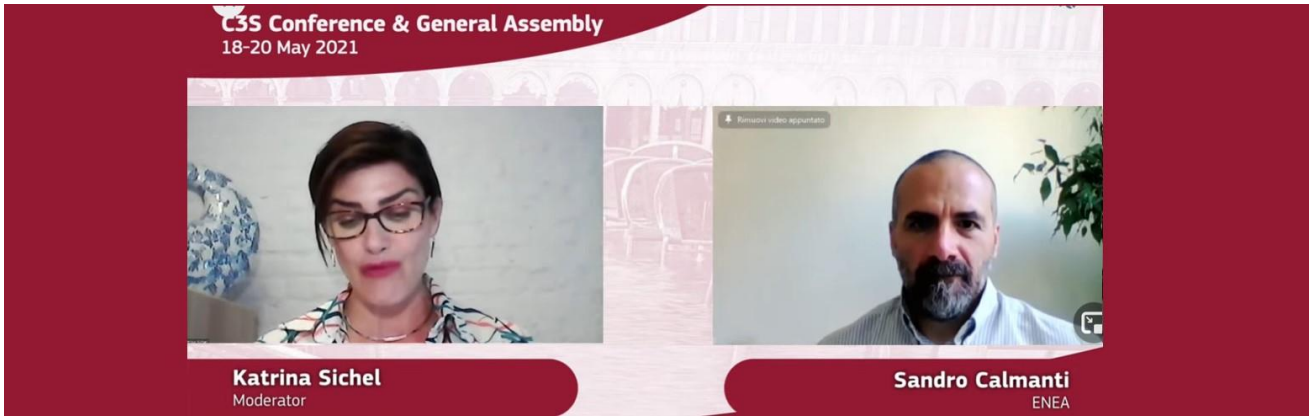

Figure 6-2 MED-GOLD presented at the C3S Conference session on climate resilience

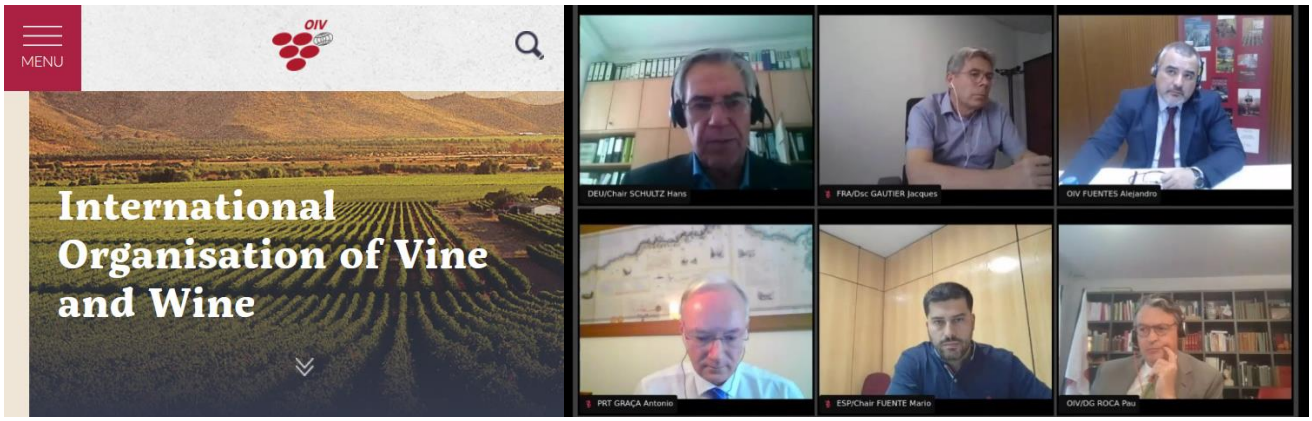

Figure 6-3 MED-GOLD dashboard presented at the OIV expert group meeting

6.4. MATERIALS FOR TRAINING AND WORKSHOPS

After the success of the first Living Lab in 2020, the MED-GOLD project organised a second edition of the Living Lab in 2021. The event was organised online, as in the previous edition, and was aimed at early career scientists and professionals in the areas of climate science, agriculture, business strategy, social sciences, and communication. However, this second edition focused more on the climate service components of user engagement, data processing and the route to market.

The Living Lab was run from 27 May to 24 June 2021 and was divided in 9 sessions: 5 plenary and 4 hands-on sessions (see Figure 6-4). A strong emphasis was put in building multidisciplinary teams supported by project scientists and stakeholders acting as mentors. Plenary sessions consisted of talks from speakers spread across many different disciplines relevant for the development and implementation of climate services for the agriculture sector. During the hands-on sessions, participants were expected to address the challenges launched by speakers, building on the knowledge and skills acquired during the Living Lab sessions.

The Living Lab 2021 learning objectives were:

- To understand the basic steps for co-developing a climate service with end-users.
- To understand the type of methods used in the co-development of a service.
- To acquire knowledge on where to obtain climate data, from the tailored datasets created by MED-GOLD to those developed in the framework of the Copernicus Climate Data Store (CDS).

MED-GOLD LIVING LAB 2021

Turning climate information into value for traditional Mediterranean agri-food systems

27 May - 24 June 2021 Programme

Plenary Session #1 Thursday 27 May 11.00-13.30 CEST	**Hand-on session #1: Monday 31 May 14.00-15.30CEST**	**Plenary session #2: Thursday 03 June 11.00-13.30 CEST**	**Hand-on session #2: Monday 07 June 14.00-15.30CEST**	**Plenary session #3: Thursday 10June 11.00-13.00 CEST**	**Hand-on session #3: Monday 14 June 14.00-15.30 CEST**	**Plenary session #4: Thursday 17 June 11.00-13.30 CEST**	**Hand-on session #4: Monday 21 June 14.00-15.30CEST**	**Plenary session #5: Thursday 24 June 11.00-13.30 CEST**
Getting to know you		**Step 1 - Assessing**		**Step 2- Developing**		**Step 3 - Testing**		**Step 4- Implementing & upscaling**
Welcome and introduction to the living lab	Presentation from problem holders	Key-note speaker on engaging and assessing users' needs: **M Bruno Soares (U Leeds)**	Parallel sessions with key experts for groups to ask questions	Key-note speakers on the development of climate services for agriculture: **F Matteoli (FAO)** and **G Nobre (WFP)**	Team work & technical support session, guided by mentors	Keynote Speaker on Visualising Climate services: **I Jiménez (BSC)**	Team work & technical support session, guided by mentors	Keynote Speaker on commercial exploitation of climate services **F.Larosa (CMCC)**
Who is who in the room	Discussion of teams with their mentors, identification of the problem of interest	Approach to ASSESS the Med-gold pilot services	Team work & technical support session, guided by mentors			Approach to TEST the Med-Gold Pilot Services		IMPLEMENTING a climate service: the MED-GOLD legacy **F.Caboni (Lutech)**
Structure of the living lab, ground rules for the event,		Q&A from groups with the problem-holders		MED-GOLD Pilot Services - DEVELOP data flow to meet user needs		Intermediate sprint presentation by the students teams of the work planned/done feedback from experts		Presentation of group ideas to the problem holders and feedback
Key-note speakers on climate services: **C Hewitt (MetOffice)** and **S. Dessai (U Leeds)**								Wrap up and goodbyes

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*This project has received funding from the European Union's **Horizon 2020** Research and Innovation programme under Grant agreement No. **776467***

Figure 6-4 Program from the MED-GOLD Living Lab 2021

Some existing project dissemination and capacity building materials (project deliverables, publications, info sheets, videos) as well as other useful materials created outside of the project were used as background information for students to start familiarizing with the project topics. At the same time, additional materials resulted from the activity, mainly consisting of presentations and video recordings that could be accessed online on the Living Lab webpage on the project website.

Participants in the living lab were challenged by real users of climate information, who were referred to as problem-holders during the training, to develop climate services for the agri-food sector. With this purpose, students worked in three groups - the GREEN, RED and FELICIDADES teams - to meet the challenges presented by the problem-holders. Students' works can also be accessed on the Living Lab 2021 webpage.

6.5. INFO SHEETS

Additional info sheets have been developed during this last year, this time in the form of user guides aimed at facilitating the users' journey when navigating through the different climate services tools developed or used in the MED-GOLD project. A total of 5 concise and handy user guides have been prepared, co-developed in close collaboration with stakeholders involved in the project:

- MED-GOLD dashboard for wine sector users: User guide on the MED-GOLD dashboard addressed to users from the grape and wine sector, containing a summary of the main functionalities of the tool illustrated through different use cases in the Iberian Peninsula.
- MED-GOLD dashboard for olive sector users: User guide on the MED-GOLD dashboard addressed to users from the olive and olive oil sector, containing a summary of the main functionalities of the tool illustrated through different use cases in Andalusia, in the South of Spain.
- MED-GOLD dashboard for durum wheat sector users: User guide on the MED-GOLD dashboard addressed to users from the durum wheat sector, containing a summary of the main functionalities of the tool illustrated through different use cases in Italy.
- Olivia platform for olive sector users: User guide on the Olivia platform, an external decision-making tool upgraded in the framework of the MED-GOLD project and addressed to users from the olive and olive oil sector, containing a summary of the main functionalities of the tool illustrated through different use cases in the Andalusia, Spain.
- Granoduro.net platform for durum wheat sector users: User guide on Granoduro.net, a commercial decision support system for the sustainable management of the durum wheat crop, illustrating the newly added functionality using seasonal forecasts through different use cases in Italy.

The user guides are available through the project website and newsletter and have been disseminated through social media. They can be downloaded in different languages (EN, PT, ES, IT, GR and FR). In the case of the guides for the MED-GOLD dashboard, they can also be accessed from the tool's interface, as supporting and capacity building material guiding users in their interpretation and use of the information available on the platform (Figure 6-5).

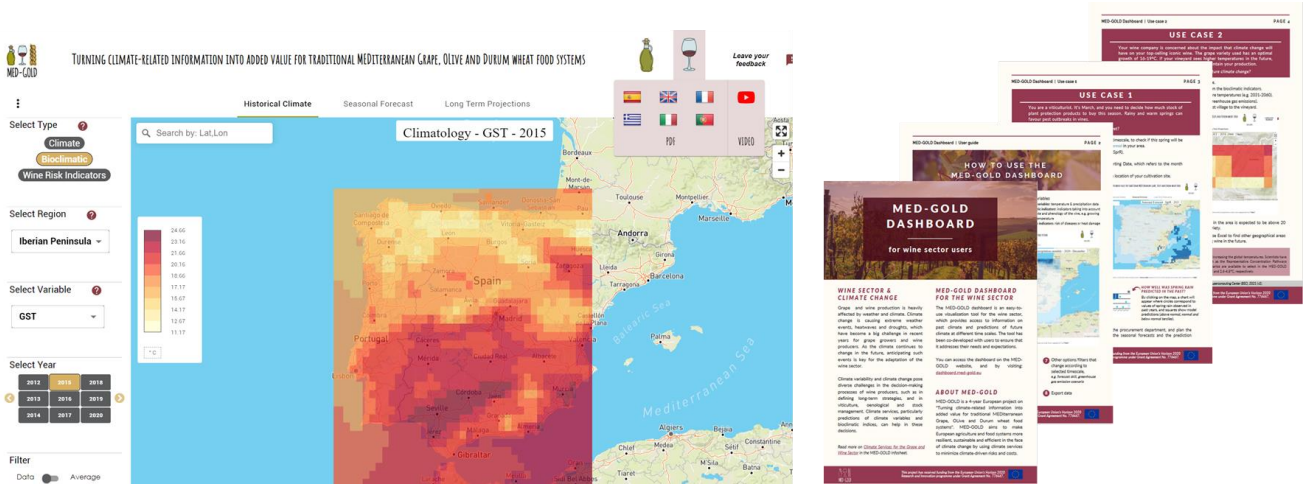

Figure 6-5 Example of user guides available on the MED-GOLD dashboard

6.6. WEBINARS

No additional webinars have been organised during the last year. However, two more webinars are planned before the end of the project:

- Assessment of the value of climate services for decision making in the agriculture sector (beginning of 2022, tbd)

- Showcasing MED-GOLD's success stories (organised as part of the project final event, 29 March 2022)

The webinars will be advertised on the project website and, in the case of the final event, we will try to make use of the dissemination channels from other networks (e.g. Climateurope). Materials, including a summary of the webinar, the recording and presentations used will be uploaded to the project website and on the YouTube channel.

6.7. INFOGRAPHICS

Acknowledging that it may not be straightforward for everyone to navigate through the ecosystem of climate services included in the MED-GOLD project, several infographics were developed to describe the services and their relationship with the project ICT Platform (see Figure 6-6). The aim of the infographics was to enhance societal understanding of what the project does, communicating it in a more appealing way for general audiences, often less interested in the details but willing to have an overview of what the project aims to deliver and how.

Figure 6-6 Infographic illustrating the relationship between the MED-GOLD ICT platform and the sectoral climate services

Infographics emphasized the process of co-development of climate services together with users, and the use of state-of-the-art climate data, either to build on existing tools with reputation in their respective sectors (e.g. Granoduro.net decision support tool, CASAS PBDM) or to create new tools from scratch (e.g. MED-GOLD ICT Platform with the capacity to enable various services, MED-GOLD Dashboard). Infographics also stressed the capacity to solve real problems, reaching different users and adopting particular solutions (see Figure 6-7).

Infographics have been translated into all the languages considered in the project and have been made available through the project communication channels (website, Twitter account and newsletters).

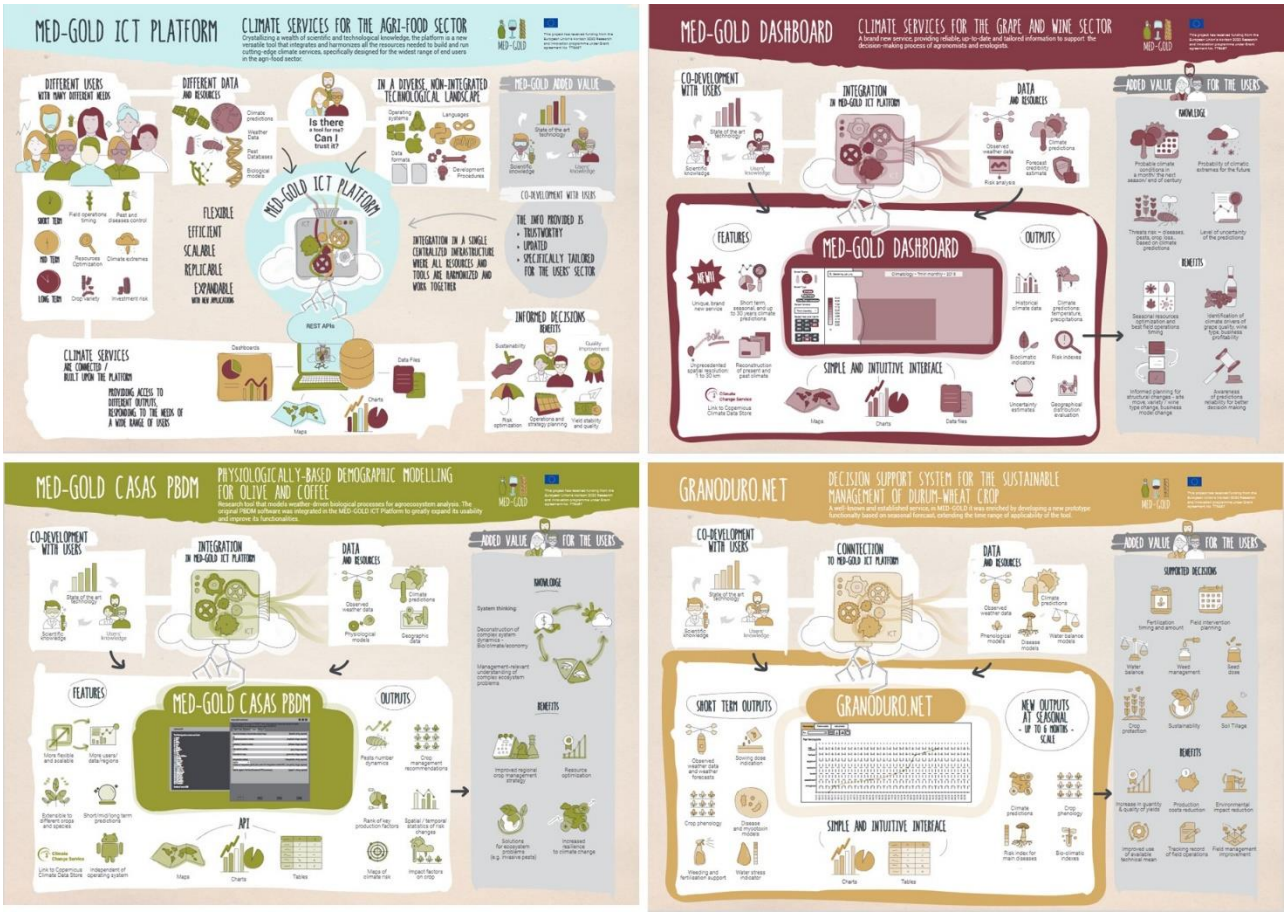

Figure 6-7 Infographics on (from left to right, from upper to lower row): the MED-GOLD ICT Platform, the MED-GOLD dashboard for the grape and wine sector, the CASAS PBDM for the olive and coffee sectors, the Granoduro.net decision support system for the durum wheat crop

6.8. VIDEOS

In addition to the MED-GOLD promo videos launched at the beginning of the project, new videos have been prepared to disseminate the climate services tools developed and used in the project and to build capacity among the users' community. Having such videos has been crucial during the last year, since all the planned participatory activities in the project had to be run virtually due to the COVID19 pandemics. Upcoming workshops have also been planned as online events.

The idea of showing the tool's application for decision making in a video format originated during the preparations for the policy event on 'Climate services for a climate-resilient Europe' organised by the European Commission and the Climateurope project (see more information on the event in the section 6.9 below). The original video about the MED-GOLD dashboard shown at the event received a lot of attention, which provided us ideas for an effective way to convey the tool's functionalities through use cases, which are easily understandable by a wide range of users, independently of their level of knowledge on climate science.

Professional videos were then developed to present the different climate services tools to users, including the MED-GOLD dashboard for the wine sector and the olive sector, the Olivia platform and the Granoduro.net decision support tool (Figure 6-8). The video scripts followed a hands-on format (i.e. guiding the users through the different steps to follow when using the tools in order to obtain information relevant for a specific decision). Four videos lasting between 6-7 minutes each were

recorded. Videos were originally prepared in English and subtitles were added in the different languages covered in the project (EN, FR, IT, ES, PT and GR). The videos can be accessed on the project YouTube channel (under the climate services – use cases list) as well as on the project website. They were also disseminated through the Twitter channel and newsletters. Finally, the videos were shown during the participatory workshops organised by the project, working as a first introduction to the tools for users external to the project.

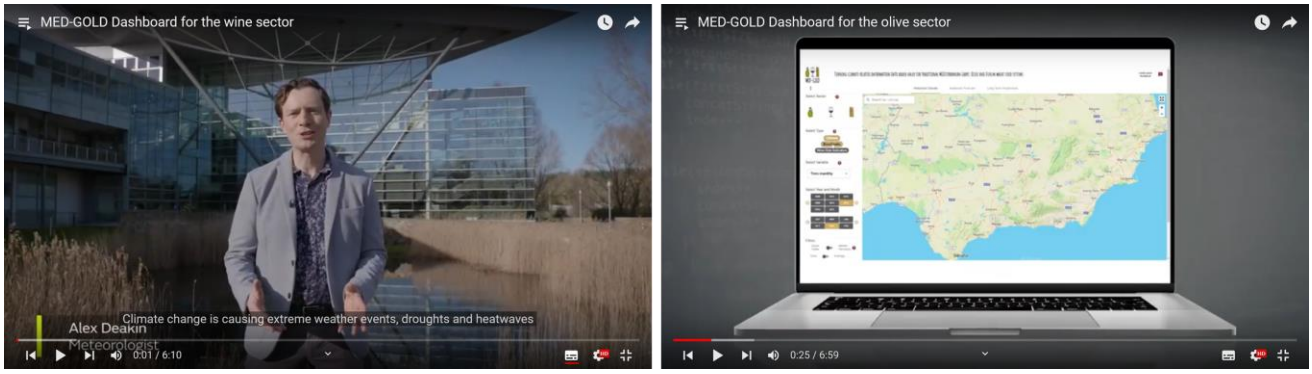

Figure 6-8 Example of video on use cases

6.9. POLICY MATERIALS

In December 2020, a session on 'How can climate services support adaptation to climate change in agriculture?' was jointly hosted by the MED-GOLD and VISCA projects during **a policy event organised by the European Commission, EASME Executive Agency and the Climateurope project**. The event, entitled 'Climate services for a climate-resilient Europe: Success stories, lessons learnt and remaining challenges', was attended by 190 participants. More than 60 attendants joined the agriculture session, whose objectives included (i) showcasing the added value of climate services in agriculture, with a focus on the wine, olive oil and pasta industries, (ii) identifying barriers for the full deployment of climate services and ways to overcome them, and (iii) sharing lessons learnt and good practices. Additional information can be found in the news item about the event available on the project website and in the agenda of the session.

The MED-GOLD project was also flagged by the European Commission as one of the Horizon 2020 Research and Innovation contributors in shaping the newly adopted EU Climate Adaptation Strategy adopted on 24 February 2021. The project was selected on the basis of working for a sustainable and resilient agricultural production by developing a climate service prototype that can be extended to additional crops. Additional information can be found as a news item on the project website and in the document Research & Innovation – Key contributor to the new EU Climate Adaptation Strategy (see Figure 6-9).

In October 2021, the MED-GOLD dashboard was showcased by the project champion for the wine sector at a meeting of experts of the International Organisation of Vine and Wine (OIV) and was very well received. More information about the presentation and feedback from participants can be found at the dedicated news item on the project website. Following this interaction, the General Director of OIV, Pau Roca, mentioned the MED-GOLD project during the 2021 OIV Press Conference on the state of the vitivinicultural world. A view of the last policy-relevant news from the project is provided in Figure 6-10.

In November 2021, the dashboard was showcased by the project coordination team at a meeting of the Copa-Cogeca Working Party on Olives and Olive Oil.

A policy brief entitled 'Sectoral climate services for a sustainable adaptation in agriculture' is under preparation. More details about it can be found in D6.18 [RD.6]

Figure 6-9 MED-GOLD as contributor to the new EU Climate Adaptation Strategy

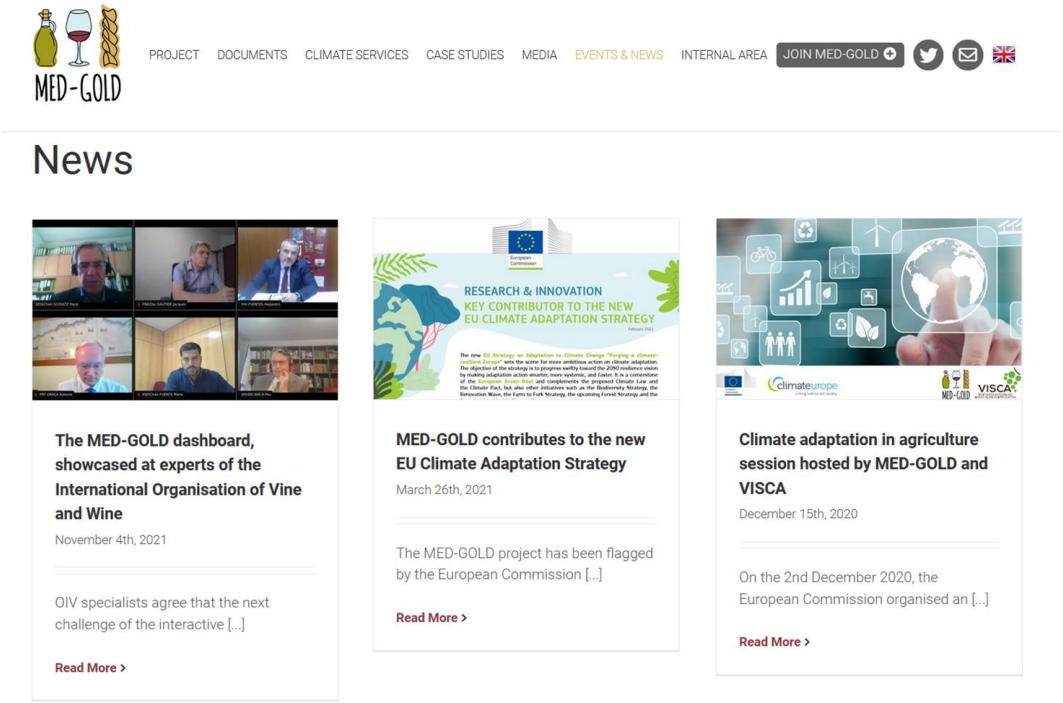

Figure 6-10 Policy-relevant activities with participation of MED-GOLD

7. ACTIONS TO ENHANCE THE IMPACT OF DISSEMINATION AND CAPACITY BUILDING MATERIALS

During the second project review, the importance of having a clear strategy for the diffusion of dissemination and capacity building materials generated in the project was highlighted. It was also stressed that there was a need to assess the impact of those materials in terms of stakeholder uptake.

Occasions to disseminate dissemination and capacity building materials include specifically-organised stakeholder events (e.g. distributing info sheets in face-to-face events for past interactions, but relying more on digital formats at present), particular sectorial events attended by partners (where sectoral promo videos and use case videos can be displayed) and through the project online channels (where newsletters, webinars and living lab recordings, publications, etc. are made available). In addition, a compilation of newly-developed materials is sent twice a year through e-mail to the MED-GOLD community members that agree to receive project newsletters. The next newsletter is planned for December 2021 and a finalone will be prepared at the end of the project.

With the aim to enhance mutual understanding between climate scientists, farmers and other sectoral stakeholders and policy makers, a multi-language glossary has been developed and is available on the project website.

In the previous version of this deliverable [RD.3] a list of objectives was identified to enhance the impact of dissemination and capacity building materials. In Table 7-1, the actions that have been put in place are described:

Table 7-1 Objectives and actions applied to enhance impact

Objectives	Actions applied
Give more visibility to the dissemination and capacity building materials	• New videos on use cases have been used to showcase the project climate services to users from the MED-GOLD community during participatory workshops • New user guides have been developed to support users in appropriately interpreting and using the information for decision-making available on the climate services tools • Diffusion of dissemination and capacity building materials in the next planned project events, including participatory workshops, webinars, and the final project event
Facilitate the discovery of dissemination materials	• New user guides and videos have been uploaded to the interface of the MED-GOLD dashboard • New webpage was set up to host the materials from the Living Lab 2021 • More efforts have been directed to the translation of all materials to IT, ES, PT, FR and GR
Increase materials visibility on social media	• New infographics designed to introduce the ecosystem of climate services developed and used in the project were published • 1-min short videos prepared for the last project general assembly were published • New videos, infosheets, publications and user guides were published • Reuse of previously developed material has been promoted to increase its impact.
Use materials to engage with the policy community	• A policy brief has been developed

Knowing the stakeholder uptake of dissemination and capacity building materials is key to assess the impact of dissemination. This can be assessed for many of the developed activities. In Table 7-, there is a list of potential metrics to be used and their value to date.

Table 7-2 User uptake metrics

Metric	Value
Number of newsletters opened (sent by e-mail to community members that agreed to receive them)	Newsletter #1: 27, Newsletter #2: 46, Newsletter #3: 68, Newsletter #4: 65, Newsletter #5: 71, Newsletter #6: 69

Number of attendants to webinars	Webinar #1: 18, Webinar #2: 90
Number of online views of webinar recordings	Webinar #1: 185, Webinar #2: 111
Number of info sheets distributed at stakeholder events	Cagliari workshop: 40 people; Living lab: 19 people
Number of online views of promo videos	Olive/olive oil: 137, Grape/wine: 189, Durum wheat/pasta: 204
Number of online views of dashboard use cases videos	Olive/olive oil: 137, Grape/wine: 264
Number of online views of Olivia and Granoduro.net use case videos	Olivia: 65, Granoduro.net: 87

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