EMS Annual Meeting Abstracts
Vol. 15, EMS2018-180, 2018

Voices from the field: climate prediction requirements in the agricultural sector from the MED-GOLD initiative

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The EU funded Horizon 2020 MED-GOLD project (https://www.med-gold.eu/) will demonstrate the proof-of-concept for climate services in agriculture by developing case studies for three staples of the Mediterranean food system: grape, olive and durum wheat.
MED-GOLD benefits from the contribution of world leaders in the production of wine, olive oil and pasta (SOGRAPE, DCOOP, and Barilla, respectively) who are playing the role of problem-holders in the co-design of climate services for the three pilot services. The participation of those three champions in the co-design process will also catalyze and speed up the engagement of a wider community of users in these sectors across Europe.
Initial hypotheses of each sectorial needs have already been identified in the proposal phase in cooperation with the industrial partners. MED-GOLD adopts a seamless approach whereby innovative climate service tools for the management of climate risks build upon existing ones, and will benefit from the existence of seasonal climate predictions and long-term climate change projections. The new climate service tools will first be evaluated by applying them retrospectively to recent adverse climate events for testing their added value to the users' decision-making processes.
Each pilot service will deal with specific questions and associated decisions identified with the MED-GOLD industrial partners. A coordinated and crosscutting mapping of the overall agricultural sector will allow the consortium to identify, from the outset of the project, the more representative players to be engaged in the MED-GOLD community for the validation and up-scaling of the pilot services. A key aspect in the co-development of the pilot services is to manage the expectation of end-users.
A user-driven methodological framework has been developed in the early stages of the project and is being adopted to co-develop the MED-GOLD pilot services for the three main crops of interest. In particular, a preliminary analysis of each pilot will be pursued through scoping workshops as well as interviews, starting from the specific needs of the MED-GOLD industrial partners and the assessment of vulnerability and opportunities for each specific MED-GOLD pilot service. Particular attention will be devoted to key decision-making processes that underlie each case, to better identify how and when the outcomes of the pilot services to be developed can better support and inform those decisions
Subsequently, the methodological issues for each of the MED-GOLD pilot services will be addressed by: (i) collecting the various data required; (ii) analysing the climate data of interest from available data stores and from the concomitant initiatives through the MED-GOLD Information and Communications Technology (ICT) platform ; (iii) assessment of the quality of the observational data available along with the skills of climate predictions/projections required for the variables of interest.