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An advisory platform for small-scale farmers based on Copernicus data: the APOLLO project

Sustainably increasing Europe's agricultural productivity is a challenge which Earth Observation (EO) data and related services can help to address, introducing improvements in resource efficiency whilst improving yields. EO is already embedded in commercial farm management products, which are generally aimed at larger holdings. Whilst most farms in the EU are small (< 5ha), the vast majority do not take advantage of the huge potential of EO in. Small-scale farmers often encounter difficulties in the procurement of modern technologies because of the high cost and greater risk involved. Copernicus data offers an unprecedented opportunity for developing new, low-cost EO downstream services in agriculture addressing their needs. The APOLLO project will develop and test affordable and user-friendly agricultural advisory services based on Copernicus data, targeted at small farmers.

APOLLO, a Horizon2020 project starting in May 2016 (Grant No: 687412), is led by Draxis Environmental Technologies and includes partners from Greece, Spain, Austria, Serbia and Belgium. The project will use free and open EO data from Copernicus and other sources to feed agronomic models, in order to produce a suite of farm management advisory services: tillage and irrigation scheduling, crop growth monitoring, and crop yield estimation. APOLLO services will be cost-effective and affordable, thanks to the use of free and open data and an automated processing chain, independence from the need for ground sensors, and the pioneering use of Sentinel-1 data for estimating soil moisture.

BIO

Dimitrios Papadakis is Co-founder and Director of Evenflow, a start-up consultancy focused on commercialising space and other high technology applications and bringing them to a wider audience. He has seven years' experience in European space programmes, especially Copernicus, and expertise in economic, cost-benefit and market studies for space applications. He has participated in numerous Copernicus projects, including: BOSS4GMES, GMOSAIC, BRIDGES, GNEXT and GSEXTANT.