

COMMUNICATION

Belgium puts spotlight on remote sensing in support of agriculture at the Milan world expo

Workshop Space4Food - Belgian Pavilion at the Milan world expo - June 11th 2015

A joint organisation by BELSPO, EWI and WBI

On June 11th 2015, during a workshop in the Belgian Pavilion entitled Space4Food, the contribution of remote sensing to food security and sustainable agriculture took centre stage.



The meeting was opened by the Belgian Ambassador to Italy and the FAO (Food and Agricultural Organisation of the United Nations) who stressed the need to manage our agricultural resources in a more efficient and sustainable way. Lieven Bydekerke (EUMETSAT) chaired the meeting.

For a largely Italian audience, representatives from the European Commission, ESA (European Space Agency) and FAO then set the scene and outlined the challenges facing global agriculture and assistance remote sensing could offer whereafter Belgian scientists showcased the wide-ranging Belgian scientific competences and technologies in the field of remote sensing for agriculture.

Belgium indeed has a long tradition of agricultural innovation and was one of the first countries to start investigating the use of remote sensing in agriculture, over 30 years ago. These efforts have continued ever since and culminated in the launch of ESA's all Belgian satellite PROBA-V in 2013, which is now a primary information source for global agricultural monitoring and the Copernicus' (the European Programme for the establishment of a European capacity for Earth Observation) Global Land Service. It was therefore fitting that a real size model of the satellite took a prominent place in the venue.

By combining data from sensors not only aboard satellites, but also on manned aircraft and drones, with GIS (geographic information system) and ICT, specific information products and services are being generated targeting different types of users worldwide. These products range from mapping of shrinking arable land areas, crop types or orchards, over monitoring or early warning of drought stress, locust risks, diseases or field anomalies to highly valued yield predictions.

The inspiring academic part of the day ended with a lively **round table discussion**, moderated by the Workshop Chair, where scientists, data providers and food producers debated how research and technology developments meet the agricultural users' expectations

It was recognized that EO datasets are a very valuable source of information which allow improving efficient management of agricultural resources. The critical aspects pinpointed related to open data access, accessibility of remote sensing based data by non-remote sensing experts and managers, and the need for bringing the technology to the market and society. Dedicated communication and delivery of user-friendly interfaces is asked for. ESA's Sentinel-1 and Sentinel-2 satellites on the one hand are expected to give a boost to operational agricultural monitoring at local scale. *"A large avenue of new opportunities for*

science, development and innovative products and services seems to be ahead of us" stated the representatives of the agricultural sector. On the other hand, it was stressed that PROBA-V is an indispensable data source for monitoring global environment and agriculture, and as such important for cooperation with Africa and China.

Finally, while drones are not yet considered as game changers, the huge potential for diversified precision agriculture and agro-consultancy was underlined.

The day concluded with a reception featuring two of Belgium's iconic foods, i.e. beer and potato fries, during which all participants could continue their networking.

For additional information, the programme and the presentations, please visit:

<http://eo.belspo.be/Directory/Resources/PresentationDetail.aspx?resID=504>

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