



# COPERNICUS4REGIONS

A selection of user stories portraying the ever growing use of Copernicus across Europe's regions



**Agriculture, food, forestry and fisheries** are key components of our biosphere and constitute key economic sectors for most European regions playing also a crucial role in employment. However, sustainable food production and resources exploitation are increasingly being subject to various threats, linked to anthropogenic pressure, climate change and intensive exploitation practices. As population increases and climatic patterns change, so does the spatial distribution of ecological zones, habitats, plant diseases and pests, with significant impacts on agriculture and food production. Innovative solutions are needed to help tackle these increasingly global challenges

and Copernicus can support these in manifold ways. For instance, data from Sentinel-2 and from the Copernicus Land Monitoring Service can help to monitor the health status of forests and highlight clearcuts, whilst the Marine Environment Monitoring Service forecasts can help in modelling fish habitats to support both wild fishery and aquaculture. An example of significant strategic importance is reflected by the Common Agriculture Policy (CAP), one of the most prominent and oldest EU policies. Data from the Sentinel-1 and Sentinel-2 satellites can support the setup of more efficient and environment-friendly agricultural practices for public authorities, companies and farmers alike.



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# An ever growing use of Copernicus in regional ecosystems

Be it spatial planning, civil protection, water management or environmental monitoring, public authorities face a wide range of common challenges. Copernicus is increasingly being used to find solutions to address these challenges, as it is showcased within many Copernicus4Regions user stories.

The rich geographical and structural diversity of the stories demonstrates that, from brownfield mapping in Wallonia to afforestation monitoring in Thuringia, from public utility management in Denmark to farmland monitoring in Lithuania, Copernicus is truly a shared system producing common benefits across Europe.

*"This work has many useful applications across departments, agencies and administrations. At Cefas, we have seen immediate uptake for monitoring and observing UK waters."*

Lauren Biermann, CEFAS, UK Department for Environment, Food and Rural Affairs  
(Maritime monitoring for the conservation of UK marine resources - p.82)

*"The successfully implemented afforestation monitoring system is a timesaving tool for foresters."*

Sergej Chmara, ThüringenForst Institute under Public Law  
(Operational afforestation monitoring - p.96)

*"This application is revolutionary in forestry sector and is a great advance in the way how decision-making could be done in forest management."*

Ángel Fernandez, Director Garajonay National Park  
(Remote sensing for Garajonay national park management - p.98)

*"Earth Observation and change products suitable for a mountain region like South Tyrol is revolutionizing our forest monitoring."*

Günther Unterthiner, Forest Service of Bolzano  
(Forest monitoring service for South Tyrol - p.92)

*"Gaiasense helps the producers of our Regions to reduce the use of agrochemicals, leading to the production of safer food"*

Kostas Apostolopoulos and Theofanis Papas, Vice-Governors,  
Rural Economy of the Central Greece Region / Rural Economy of the Central Macedonia  
(Earth Observation for Smart Farming and CAP performance - p.52)

*"Damage maps can substitute a large number of on-the-spot checks, leading to substantial cost reductions for authorities and clients likewise."*

Hungarian Paying Agency  
(Agricultural damage mapping in Hungary - p.44)

*"With Copernicus satellite data, farmers will no longer spend time on declarations, but will receive fair payments for their hard work."*

Erikas Bėrnotas, Lithuanian Paying Agency Director  
(Agricultural CAP subsidies control - p.42)

*"This satellite-based application can help us to manage the remote forest in the mountains."*

Local administration in Nowy Targ, Poland  
(EO based service for forest management. - p.88)

## AGRICULTURE, FOOD, FORESTRY AND FISHERIES

**99** User stories

**72** Regions of Application

**177** Authoring Entities

**24** European Countries