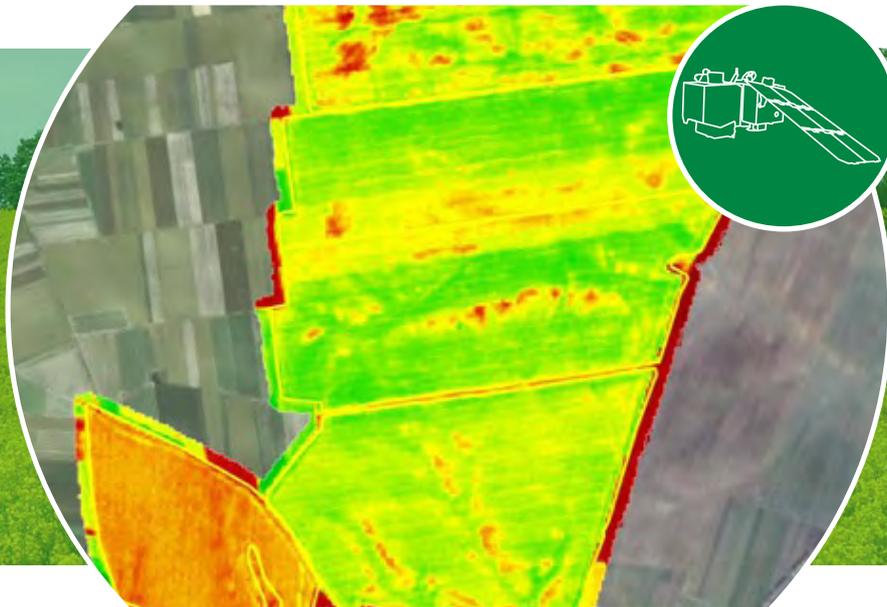


# FARM MANAGEMENT SUPPORT IN POLAND

## What it's all about

Farmers in the 21st century are called upon to strive towards efficient productivity while simultaneously reducing their environmental impact. They can exploit a range of data – from Earth Observation satellites to drones or ground-based sensors in order to help guide the application of appropriate amounts of farming inputs (fertilisers, pesticides, water) at a precise time and/or location. These Variable Rate Application (VRA) solutions are today an integral component of modern

agricultural techniques. Thanks to the free, full and open access to Copernicus Sentinel data, VRA-enabling services are steadily proliferating across Europe. An example of such a service in Poland is SatAgro. Recently, Poland has become a leading producer and exporter of a range of horticultural as well as commodity crops. Thanks to Sentinel-2 data, SatAgro allows Polish farmers to increase their yield and productivity, while reducing their impact on the environment.



## What we found

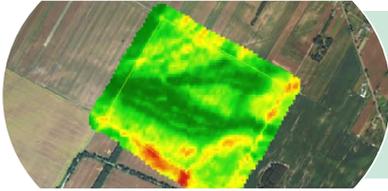
- Farmers benefit in multiple ways from the use of Sentinel-enabled services. They are able to perform VRA of fertilisers and pesticides resulting in significant cost savings. In parallel, they benefit from a potential increase in yield, which, with time, will be substantial.
- The service delivered by SatAgro brings significant value to Grupa Azoty, a major agro-fertiliser company. This is primarily associated with the ability to respond to market pressure and diversify its portfolio of services by promoting Sentinel-enabled services to its clients.
- Public authorities and citizens benefit from the more rational use of fertilisers and pesticides.

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### The Satellite Data

Copernicus Sentinel-2 provides free-of-charge frequent wide-swath, high-resolution multispectral imagery with 13 spectral bands.



### The Service Provider

SatAgro's service uses Sentinel data, along with other data sources, to assist farmers in the implementation of precision farming activities. The viability of SatAgro's business model is directly tied to the availability of world-class Sentinel data in a free, full and open manner.

€291k - €1.8m pa 



### The Primary User

Grupa Azoty, an agrochemicals heavyweight partnered with SatAgro to offer Sentinel-based services to its clients. In doing so it could react to increased competition in the agrochemicals sector, strengthen its corporate profile and expand into new markets.

€338k pa 



### Other Direct Users

The services provided by SatAgro & Grupa Azoty enable significant financial benefits for farmers, including savings from the reduced use of fertilisers, but also increased yield, fuel savings and better time management.

€443k - €3.5m pa 



### Secondary Beneficiary

Governmental agencies responsible for the effective implementation of the Common Agricultural Policy (CAP) and adherence to environmental regulations benefit from the use of Sentinel-enabled services.



### End Use Beneficiary

The reduced use of pesticides and fertilisers has a positive impact on the environment and on public health.



**Total benefits: €1.1m-€5.3m pa**

## About the project

Through a series of case studies, EARSC aims to gather quantitative evidence that the usage of Copernicus Sentinel data provides an effective and convenient support to various market applications. These studies are undertaken in the frame of the project "Showcasing the benefits brought by the usage of Sentinels data to society, environment and

economy: a bottom-up assessment based on traceable impacts along selected value chains", under an assignment from the European Space Agency (ESA) funded by the European Union as part of the Copernicus Programme.

Download the full report from the project website 

<http://earscl.org/sebs>

