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HOW COULD COPERNICUS DATA SUPPORT GRASSLAND CONSERVATION?

>>> A few years later

In the past few years, an approach for mapping grasslands in the whole of Latvia has been developed. The results were further used for grassland connectivity analysis as well as change detection within the EU funded GrassLife project. Gained know-how in Sentinel satellite data processing is now used for other environmental monitoring activities.

Dainis Jakovels, Institute for Environmental Solutions (IES)



BENEFICIARIES	Institute for Environmental Solutions (IES)	Latvian Fund of Nature; State Regional Development Agency (Republic of Latvia)	Habitat experts	Citizens and society
SERVICES	TIER 1: SERVICE PROVIDER Sentinel-1 Sentinel-2	TIER 2 PRIMARY USER Mapping of grasslands based on spectral signature analysis; Tracking grassland management events (e.g. ploughing and mowing).	TIER 3 SECONDARY USER Improved and more cost-effective resource management (e.g. targeted field visits); Specific activities that allow to maintain habitat biodiversity; Facilitated regulatory commitments.	TIER 4 END USER BENEFICIARIES Improved protection of grasslands and biodiversity

Value chain definition following SeBS Methodology - <https://earsc.org/sebs>

The space-based solution

This Copernicus-based solution was produced by a commercial company for a Public Administration. From technical perspective, in the past few years, there have been no noticeable modification and the solution is the same as it was.

The Usage Maturity Level

In the past few years, the solutions remained more or less at the same UML.

Thematic Area



BIODIVERSITY AND ENVIRONMENTAL PROTECTION

Region of Application



LATVIA VIDZEME REGION

Sentinel mission used



S1, S2

Copernicus Service used



-

Usage Maturity Level



2/3

Overall benefits

ECONOMIC



No noticeable additional modification/impact on the functioning of the public administration nor on the lives of the citizens since 2018.

ENVIRONMENTAL



No noticeable additional modification/impact on the functioning of the public administration nor on the lives of the citizens since 2018.

REGULATORY



No noticeable additional modification/impact on the functioning of the public administration nor on the lives of the citizens since 2018.

INNOVATION



No noticeable additional modification/impact on the functioning of the public administration nor on the lives of the citizens since 2018.

SCIENCE



No noticeable additional modification/impact on the functioning of the public administration nor on the lives of the citizens since 2018.

SOCIETAL



No noticeable additional modification/impact on the functioning of the public administration nor on the lives of the citizens since 2018.

Benefits classification following SeBS Methodology - <https://earsc.org/sebs>

Interesting facts...

Recently, IES has started a collaboration with a non-profit organisation "Preferred by Nature" for a development of a rice management practice monitoring approach based on Sentinel satellite data. This novel methodology will have as an objective to discriminate between conventional management practices and those more sustainable ones, to support auditing process conducted in Vietnam.

Outlook to the future

Authors expect that Sentinel satellite data-based monitoring will be introduced in an increasing number of monitoring programs. Therefore, it will be possible to thrive on gained "know-how" and perform quick adaptations responding to new tasks and potential needs of novel end-user in order to provide fully customised solutions.

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Contacts

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