Identification of synergetic SDGs using heterogeneous data and deep learning models

Summary

Earth Observation service for SDGs indicators assessment (2.4.1 and 15.3.1) based on our methodology of 10 m agricultural land productivity and crop type mapping on Sentinel-2 data as well as Sen-4-CAP.

Sponsor	Project	Soluti
 The e-shape project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement 82085	e-shape	

Taxonomy

- Agriculture
- Land use / Land cover
- Biodiversity / Land Ecosystem

User profile

Ministry of Environmental Protection and Natural Resources of Ukraine

Ukrainian Hydrometeorological Center of the State Emergency Service

Service description

Customer experience

Need

Challenges

The biggest technical challenge in this project consist in the extension of the existing methodology from the pilot area to the country level products. For solving this challenge, we will use Sen4CAP software, however run it for Ukraine and some of EU country could still be a challenge. Another challenge is implementation of custom field boundaries on vector-based products offering for neighboring countries with the use of Sen-4-CAP.

Results

- SDGs indicators monitoring (15.3.1, 2.4.1);
- Providing land cover and in-season crop specific maps on regular basis;
- Crop area estimation and land cover change detection;
- Estimation of land productivity based on time-series of satellite data

References

Learn more about the service: Due to the Russia-Ukrain war, the Ukraine Food Security will be presented.

Learn more about e-shape: www.e-shape.eu

A question? Contact the Helpdesk: https://helpdesk.e-shape.eu