

Today, 1/3 of all agricultural soil is degraded, threatening global food supplies and increasing carbon emissions. **Understanding and managing soil health** is key to achieving sustainable agriculture and a food system that respects nature.

SoilHive is a digital platform developed by Varda that facilitates access to public and private soil data on a global scale. A useful tool for many users: soil scientists, researchers, non-profits organizations, and governments and more.

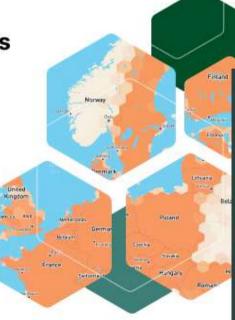
Soil needs a shared solution

SoilHive functionalities

Visualization of data gaps

In SoilHive, the landmass has been divided in 9 billion cells with an approximate size of 1.5 hectares.

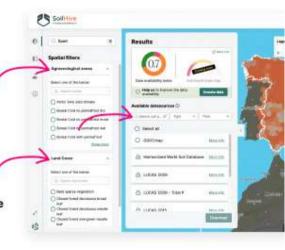
Soil data availability is calculated in each of these cells based on data driven and multidimensional framework that defines the density of soil data across geographies, supporting in the identification of underserved areas.



Data Discoverability

SoilHive is a user friendly platform allowing multiple users to discover and download soil data and metadata in various ways in just a few clicks.

Users can filter this data based on specific parameters of interest, data types, and time series.





Data Comparison

SoilHive users can select one or two points on a global map for a detailed comparison of soil properties.

The platform helps users assessing possible variations of soil properties over time and space (e.g. monitoring the quantity of soil organic carbon in a given field).

The way forward? Donate Soil Data!

As the majority of soil data is generated and managed by private users, SoilHive seeks to enable them to safely share and exchange their data.

Private users can share their data in any file format and the SoilHive team will harmonize it and make it available to the general public under open licenses (Creative Commons CC-BY 4.0), while protecting data provenance and privacy.