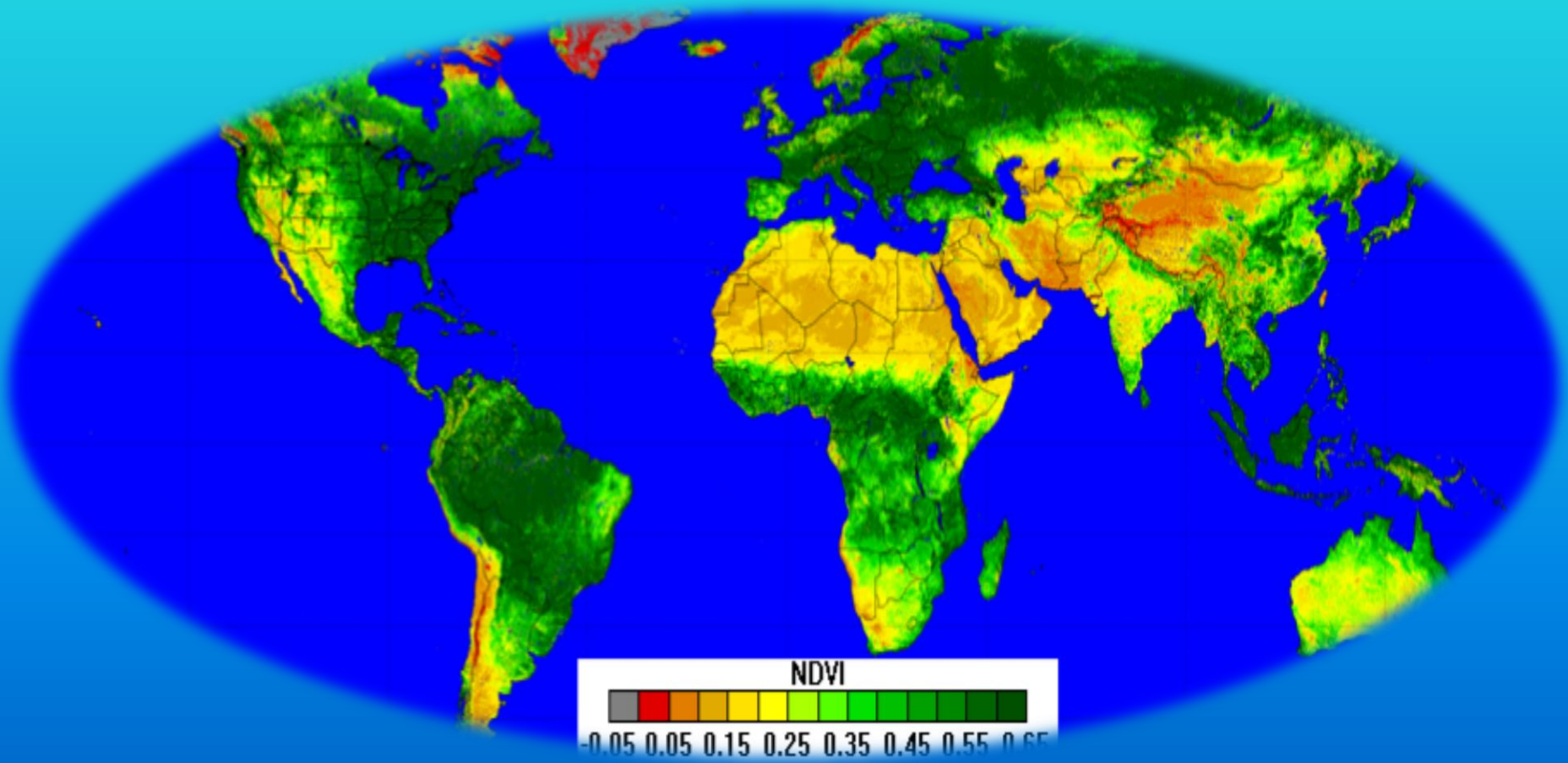
USING EARTH OBSERVING SYSTEM TO CONTROL THE AGRICULTURAL CROPS NDVI



Timeliness

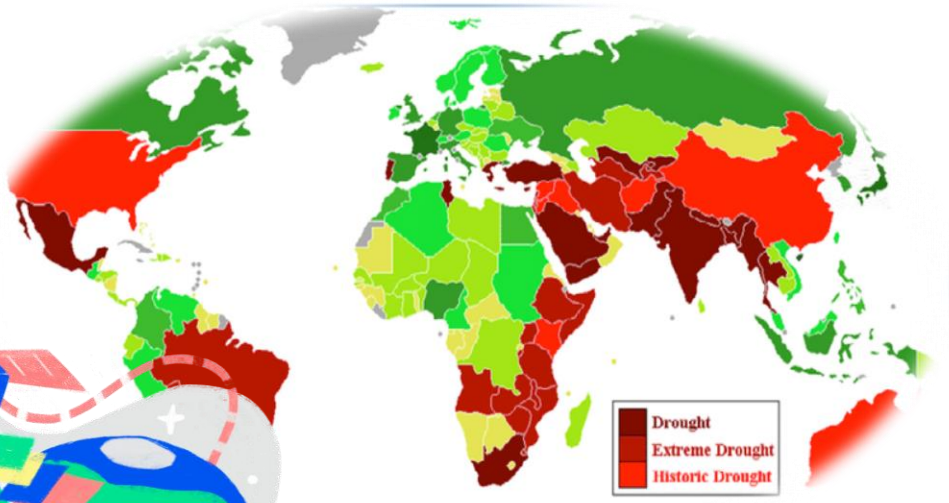
Detecting

IDEA

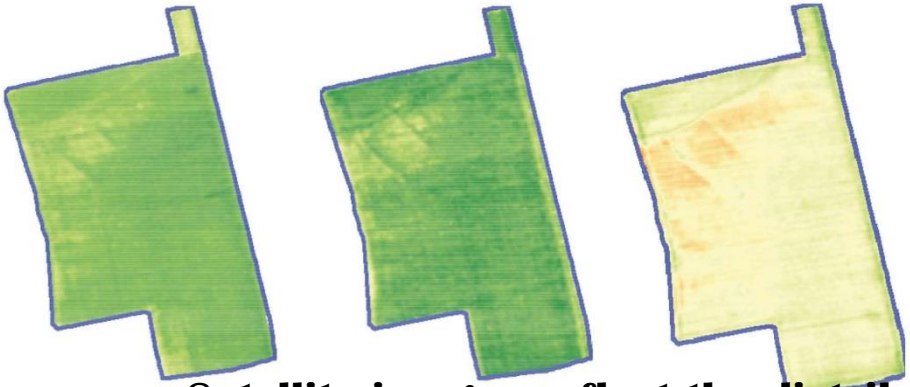
making the appropriate management decisions

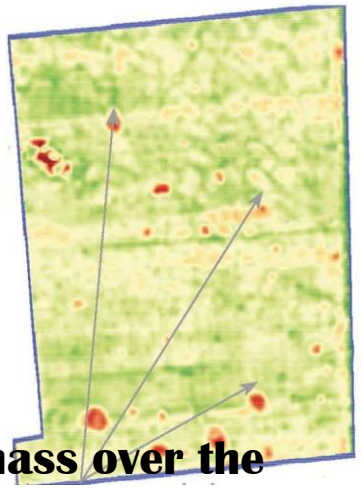
TARGETS

- *Identification of problem areas, shortage of power elements.*
- *Assessment of the general condition of crops, ranking and comparison of fields.*
- *Prediction of yield, evaluation of options on experimental fields.*

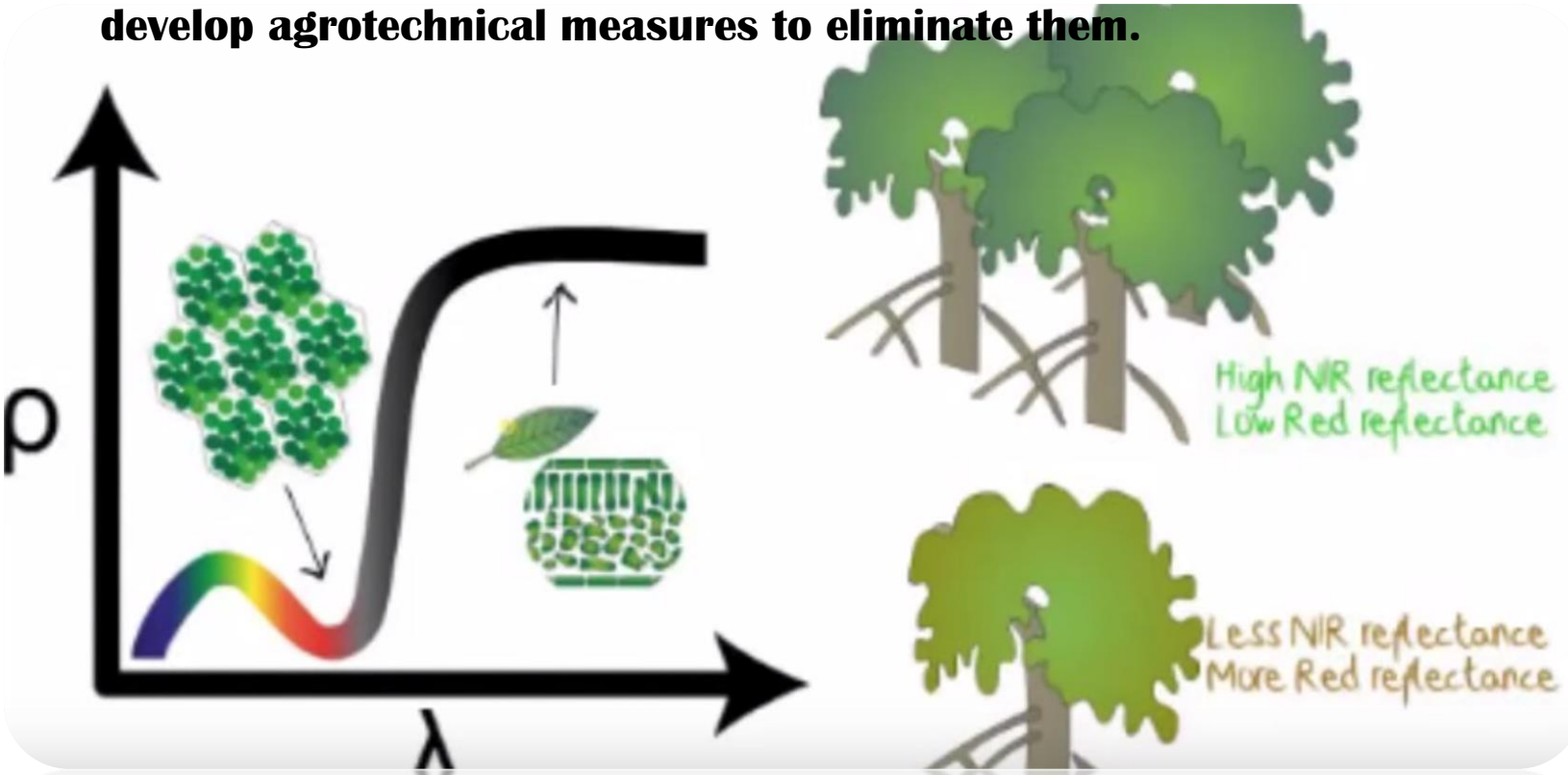


NDVI is often used around the world to monitor drought, predict agricultural production, aid in fire zone prediction and desert offensive maps, which is especially relevant in today's global warming and climate change environment.





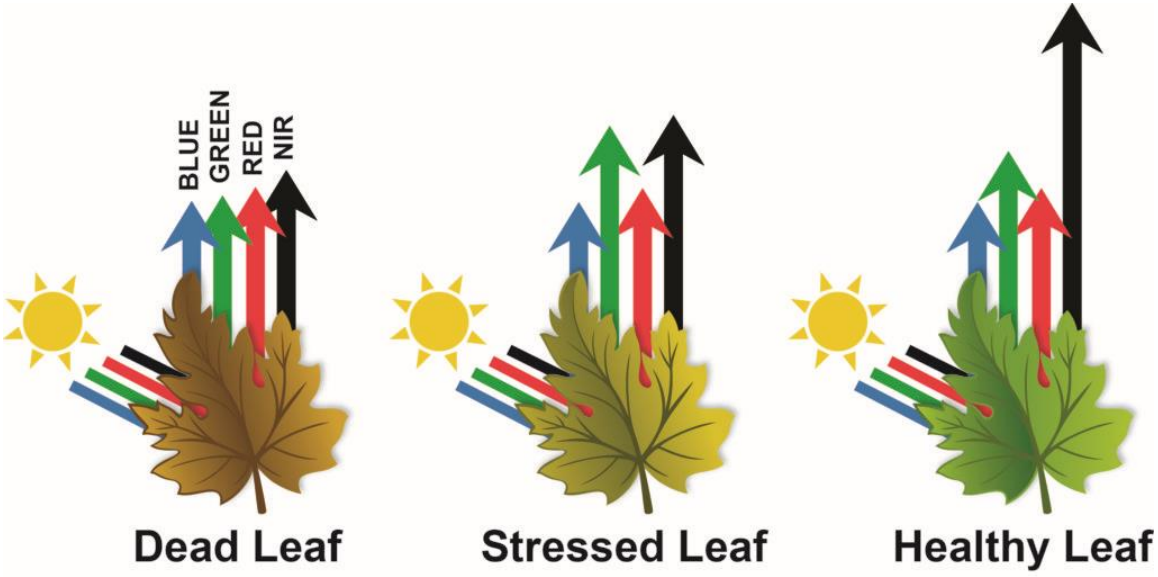
Satellite images reflect the distribution of vegetation mass over the field, which makes it possible to identify areas with low vegetation and develop agrotechnical measures to eliminate them.



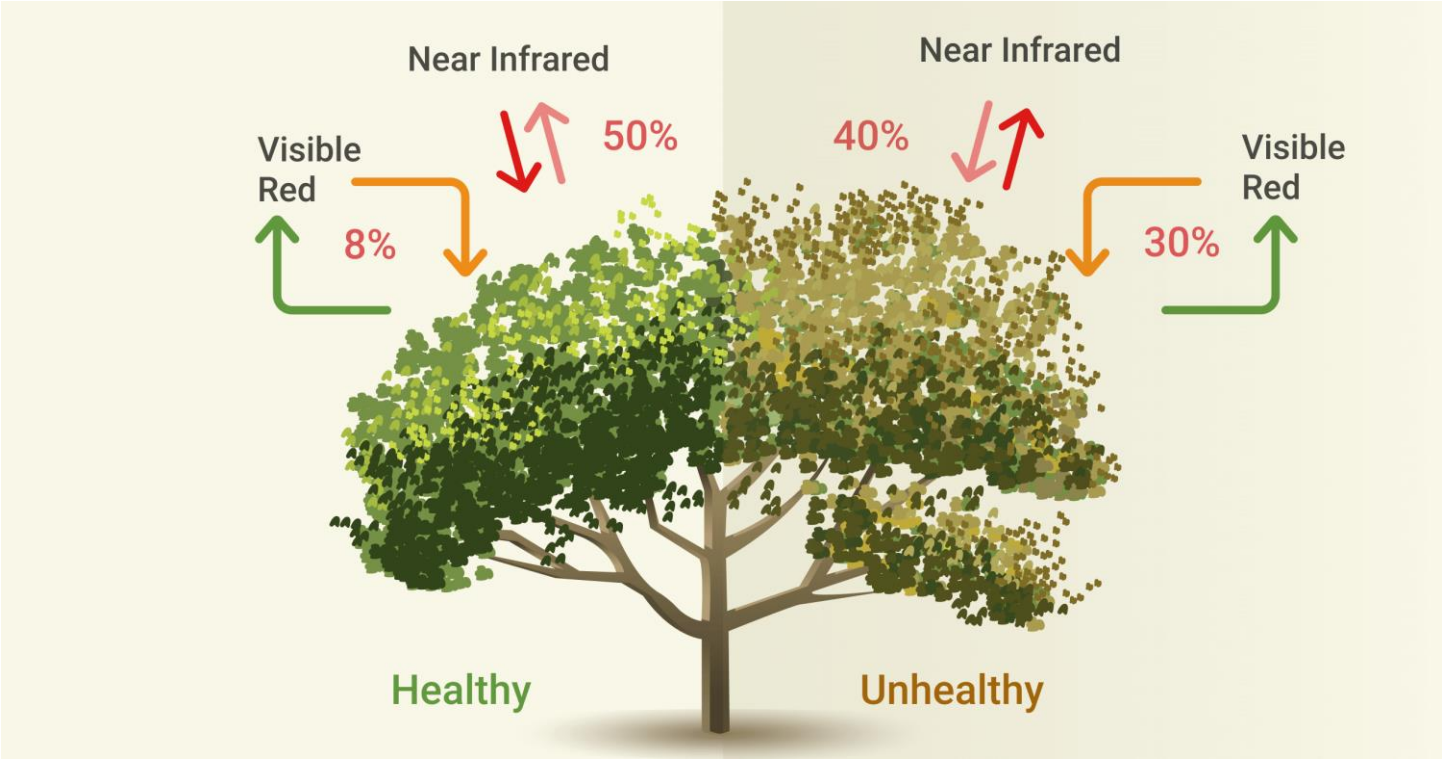
PROBLEM DEFINITION

The main question of agronomists in the spring: "How did winter crops survive the winter: winter rapeseed, winter wheat?“ There is no opportunity to get to the fields, and work must be planned based on the current state of crops.

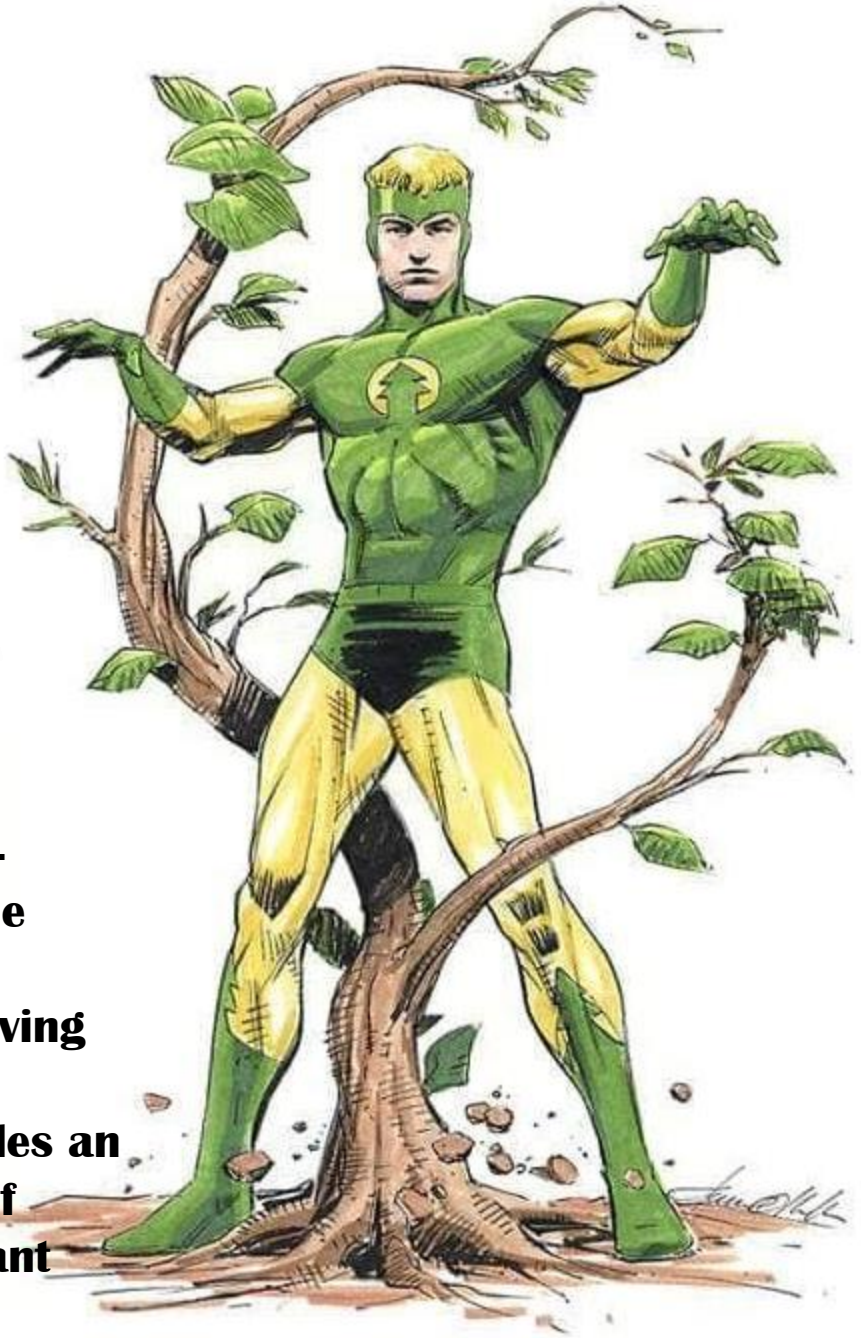
An indispensable tool for solving this problem is satellite monitoring of the NDVI index in the Earth Observing System.



Simply put, NDVI is an indicator of plant health based on how a plant reflects light at specific frequencies (some waves are absorbed and others are reflected).



Chlorophyll



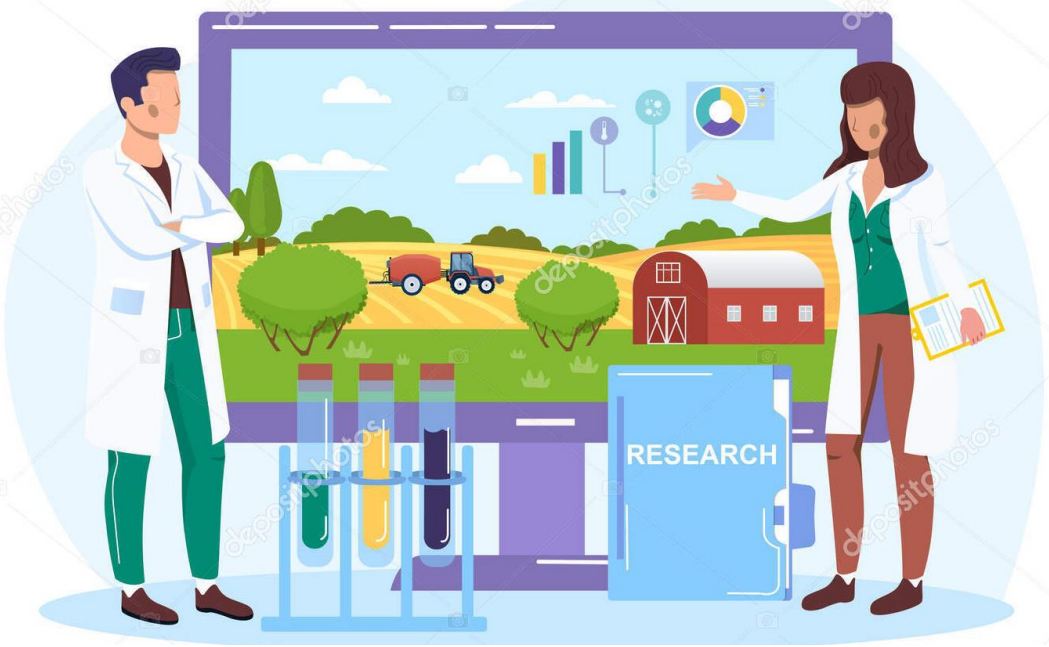
Chlorophyll – an indicator of health – intensely absorbs visible light, and the cellular structure of leaves strongly reflects near-infrared light. So, observing how NIR (near-infrared reflectance) changes compared to red light provides an accurate indication of the presence of chlorophyll, which correlates with plant health.

SOLUTIONS OFFERED BY THE PROJECT

The Earth Observing System provides access to applications such as Land Viewer and Crop Monitoring. This allows you to monitor plant health and calculate the NDVI index on the fly.

MARKETS

Our markets could be all agricultural enterprises, regardless of the form of ownership and cultivated area, individual farmers' associations, and young scientists who are engaged in agronomic research.



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