

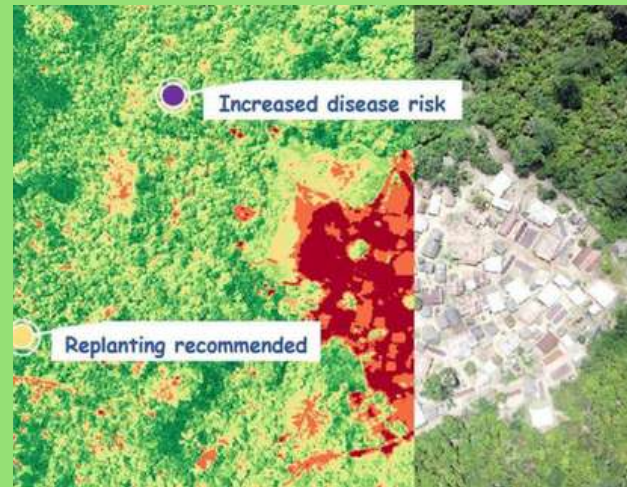
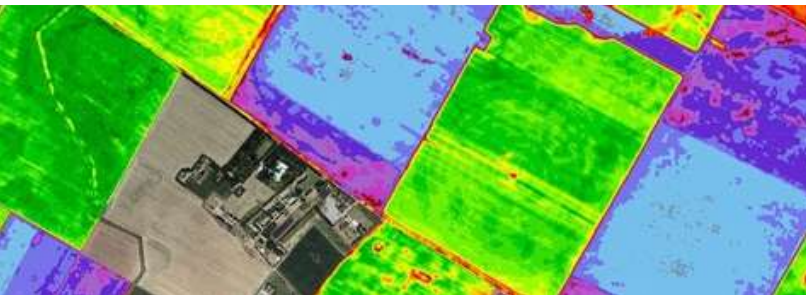
SATELLITE IMAGERY FOR AGRICULTURE

Now Satellite imagery is seen as a key component in planning and maintaining large agriculture projects due to its ability to gather information from spatial, temporal, spectral and radiometric resolutions. Below are some of its uses.

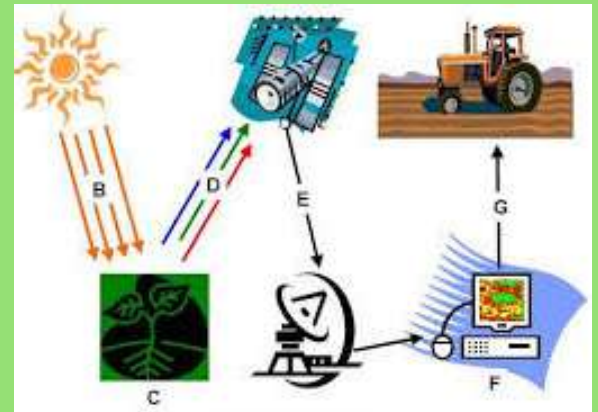


Vegetation Indices

- These indices are derived by using the reflective properties of vegetation and are used to identify vegetation by their type, stage of growth and, health
- NDVI (Normalized Difference Vegetation Index) is a popular index used in modern agriculture. This measures the difference in reflectance between red and near-infrared wavelength ranges indicating the type, health and age of vegetation as seen below.



Different vegetation indices applied to high-resolution satellite imagery help farmers to identify the healthiness of their farmlands which enables them to adopt necessary development measures as required.



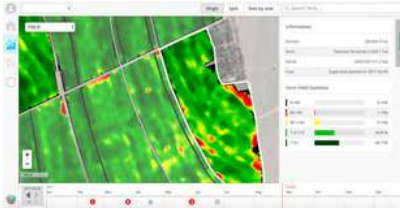
Advantages	Reduces resource consumption
	Able to view the whole farming area in a single image
	Identify healthy or unhealthy vegetation
	Identify different growing stages of crops
	Identify crop types
	Quantify crop areas
	Mitigate losses by proper land management
	Monitor growth and estimated yield.



Satellite imagery gives a big picture of farmlands which enables farmers to identify and differentiate their patterns and extent and it greatly helps in the decision-making process especially when it comes to the development of the field.



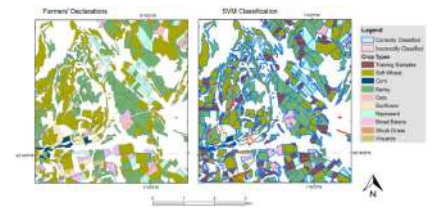
Crop yield forecasting



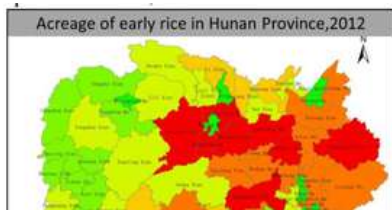
Assessment of crop damage and crop progress



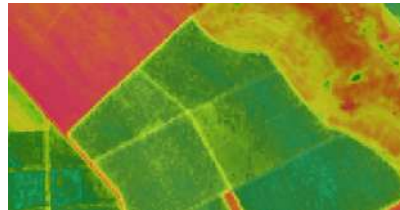
Crop type Identification



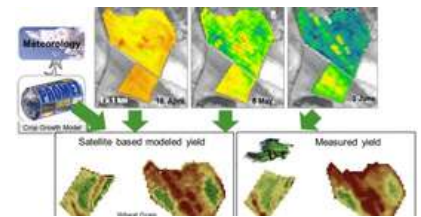
Crop area estimation



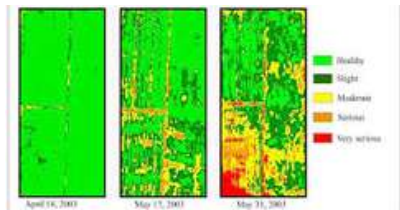
Crop health analysis



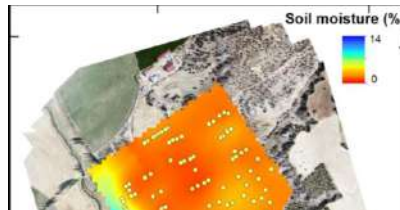
Crop yield modelling and estimation



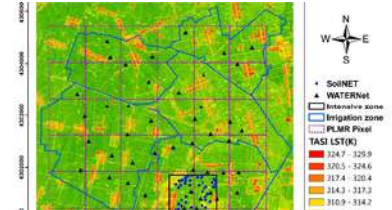
Identification of pests and disease infestation



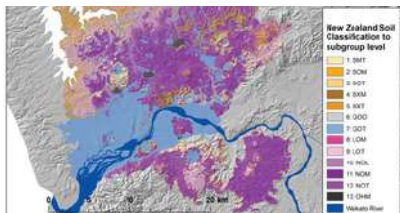
Soil moisture estimation



Irrigation monitoring and management



Soil mapping



Land cover mapping



Water resources mapping

