# CLFMA OF INDIA

**RMSI Cropalytics**

**NASSCOM®**

*India's Most Innovative & Emerging Software Product Companies*

**FICCI**

*Best Agri Start-up in Application of Digital Technologies*

# *Crop Map, a tech solution to optimize business across Livestock Agriculture value chain*

The Core to **ANIMAL AGRICULTURE** is **ANIMAL FEED**

NUTRITION, GROWTH, IMMUNITY, REPRODUCTION ….

QUALITY, PRICE, COST, SUSTAINABILITY …

# There is no agricultural (crop) map that exists

What is the acreage of maize & soybean?
Should I set up my procurement?



**Near real-time updates on crop health monitoring, estimate yield & harvest estimate date**

**Volatility in Agri commodity supply and prices**

**Availability of timely and credible acreage & production estimates at the granule level**

**Identifying the right geographies for procurement of maize & soybean**

**The shift in cropping pattern (farmers shifting from maize/soybean)**

**Strategizing on procurement sources – like APMC market, Aarthiyas, FPOs**

PRESENTING - INDIA's FIRST EVER

REAL TIME CROP MAP - SOYBEAN & MAIZE

# [VIDEO – CROP MAP](#)

# Digital Crop Map of Maize & Soybean

Creating & updating the agriculture map for maize & soybean for Kharif & Rabi

Making the data available at a click of a button (while the crop is standing in the field)
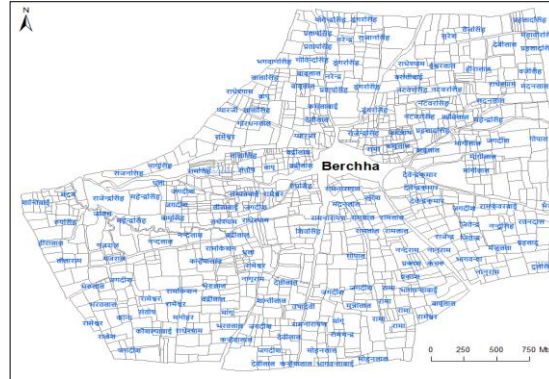
Analysis and aggregation based on client requirements (tehsil/ district)

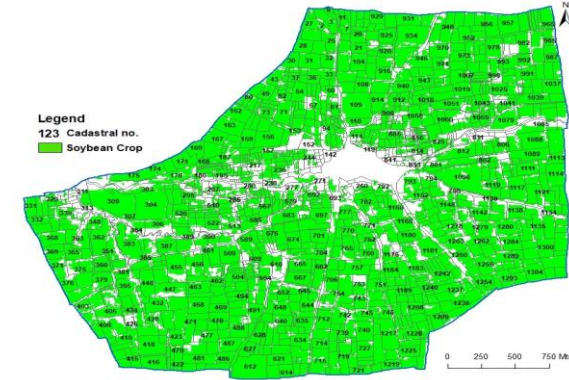Data democratization and availability to multiple stakeholders across the value chain
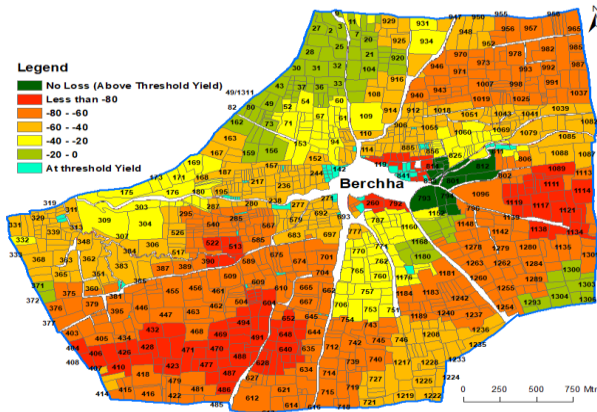
# BACKGEND ENGINE
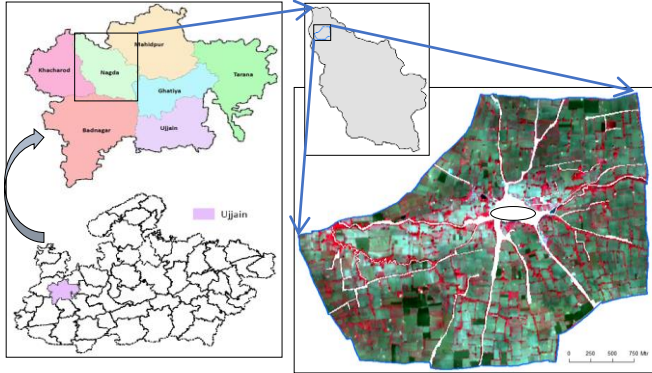


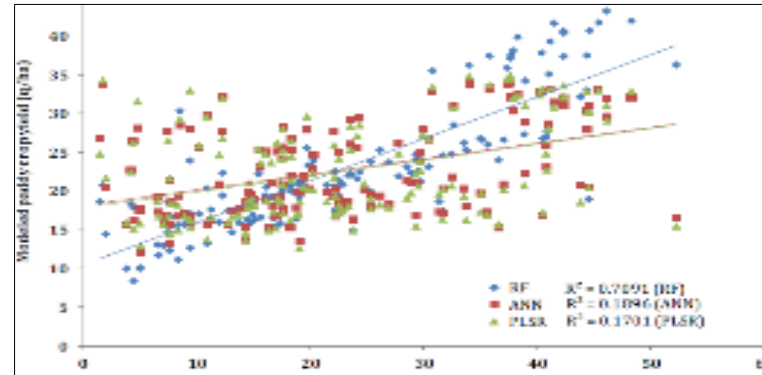Procurement of Satellite images
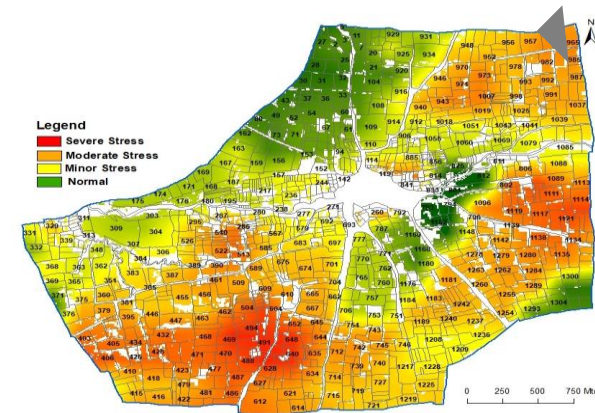


Geo Fenced Plots/Cadastral Maps



Crop Classification



Yield & Loss Estimation



AIML Modelling



Crop health determination

*Refer to Appendix for more details*

## Dataset

Large sets of *historical data* available including weather, crop signatures, soil map, CCEs/GCPs data, processed satellite imageries (SAR/Optical)

## Technology

Leveraging latest AI/ML methodologies using open source platforms to derive precise results available via APIs & portal

## Skillset & Talent

*Right mix of talent with rich experience*: Remote sensing, GIS, Agronomy, Hazard vulnerability, Modelling skills, AI/ML modelling & Meteorology

***First Indian company to introduce the application of Remote sensing in Agriculture***

CROP HEALTH

Accumulated Precipitation
MM

Daily Temperature
35 C

P&D Alerts

NDMI
0.2

NDVI
0.96

Procurement planning at the tehsil/GP level. Price advantage and purchase forwarding across commodities

Analyze the crop cultivation patterns at the PAN-India level. Impacting government policy to evaluate seed technology (GM etc.) for doubling farmers' income

Assisting Government of India and the animal agriculture industry in realizing its full potential based on data

Export, import and government procurement planning in case of surplus production

Risk mitigation in the event of weather disparity or pest & disease infestation

# DEMO TIME

# Sneak Peak – Soybean Kharif 2022

❖ Soybean for 2022 have shown overall reduction in crop acreage by **10%** as compare to year 2021

❖ The maximum negative deviation was recorded in the state of Maharashtra (where the shortfall is **10%**) followed by Madhya Pradesh **(9%)** when compared with 2021 data

❖ The negative deviation in both the states can be attributed to erratic and **excess rainfall recorded in the current Kharif season 2022**.

❖ Rajasthan is the only state which have recorded a positive deviation in the **crop spread acreage by 8%**

❖ The erratic rainfall as recorded by IMD in many districts have impacted the crop health and same was reflected in many locations where crop condition was found deteriorated

❖ Acreage of soybean in top 50 districts estimated to be **91,69,628** hectares

❖ The poor health condition of soybean crops in many district is expected to affect the final yield of the crop.

Thank you!

Kumarjit Mazumder : September 30, 2022

For any queries, please drop us a mail at info@rmsicropalytics.com