



# प्रक्षेप > Prakshep

Live Autonomous Smallholding  
Farm Surveillance

## India, Earth & Beyond

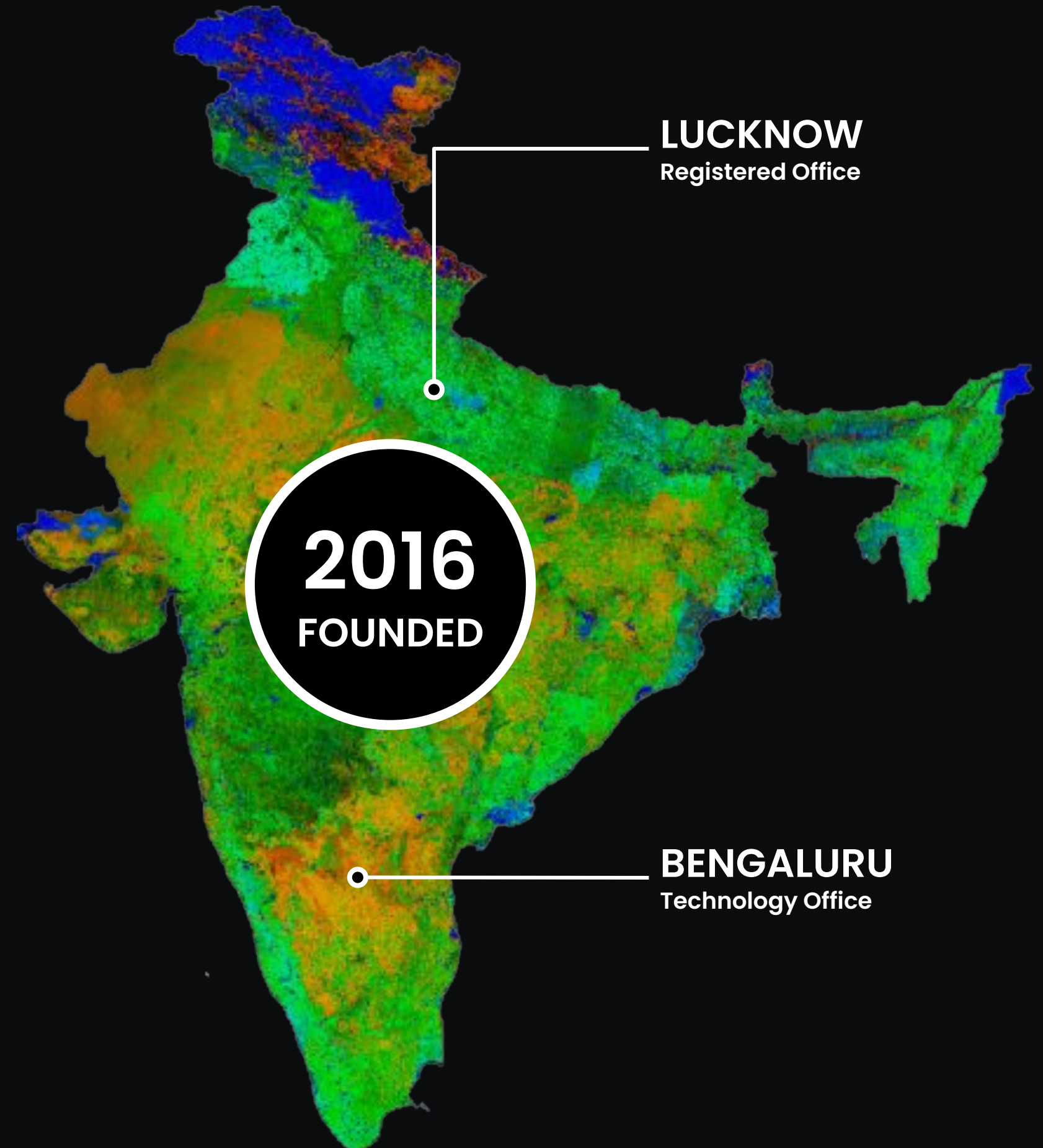
2021

About

# Prakshep

Agribusinesses are the backbone of **our economies**, Prakshep enables them **Grow Informed & Better.**

Now monitoring **1.6+ Million farms** in real time, helping farmers and farming businesses to **autonomously** assess risk, plan operations, increase productivity, and save resources across **India & USA.**

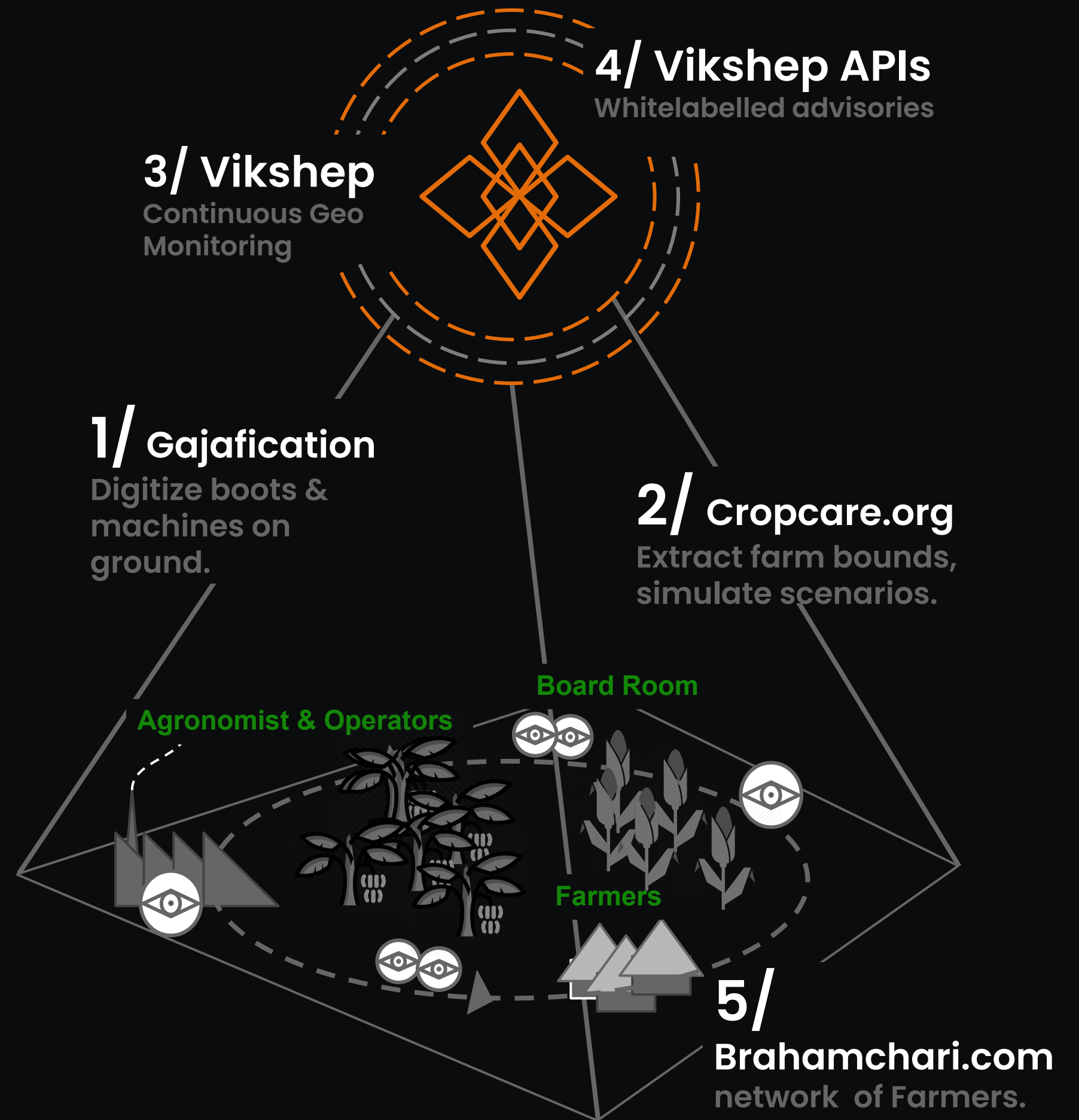


Prakshep Services enable

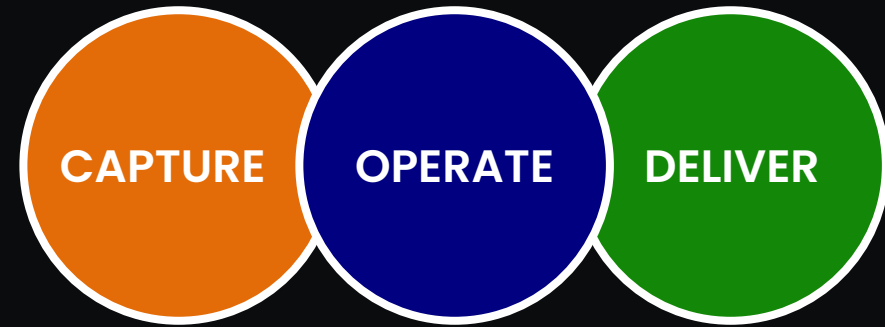
# Confidence

AgriBusinesses utilizing neural networks to automate efforts at scale

Early Detection & Delivery of AgData helps businesses in



# Autonomous Offerings



## Cropcare.org

Create farmers' farm profiles.

- Automatic advisories.
- Customised marketing.
- 100% Private, NO DATA leaves client's cloud.



## Gajafication

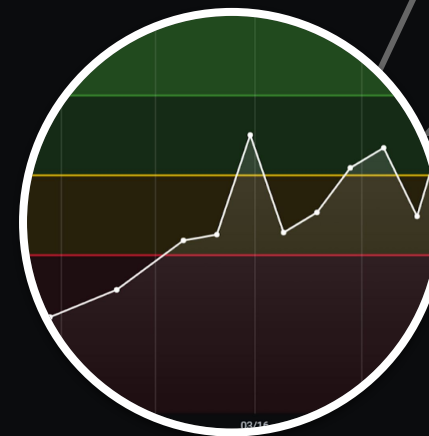
Solid evidence as GAJA.



## Vikshep.com

Farm Management

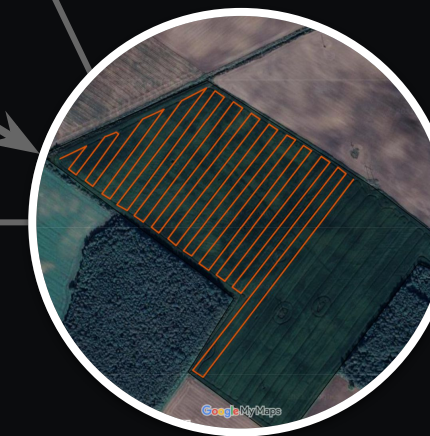
- Irrigation Advisory
- Spraying Advisory
- Farm Risk Mitigation



## Brahamchari.com

Comprehensive Maps

- Maps of Farmers.
- Maps as News.
- Maps for CXOs..



# Understandable Farm Surveillance

# Vikshep.com

<b>70%</b> SCOUT TIME	<b>25%</b> CHEMICALS	<b>15%</b> YIELD	<b>40%</b> EXPORTABILITY
<b>SAVE</b>		<b>ENHANCE</b>	



	min	max	avg	current
— Biotic Stress	5.7%	31.4%	18.2%	31.4%
— Abiotic Stress	0%	22.9%	9.1%	14.3%
— Nutrient Stress	0%	20.0%	11.9%	5.7%

Dashboard & Visualization

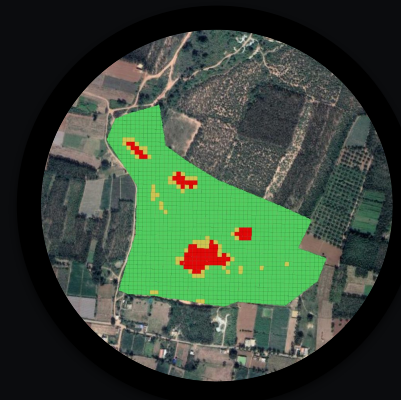
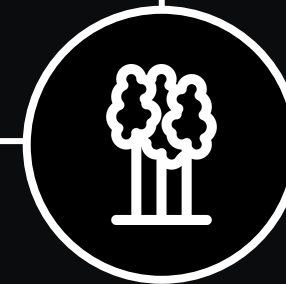
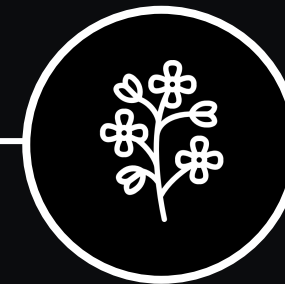
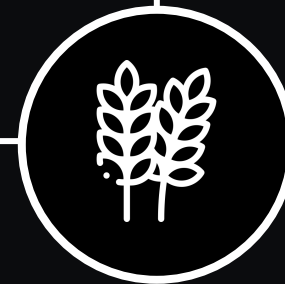
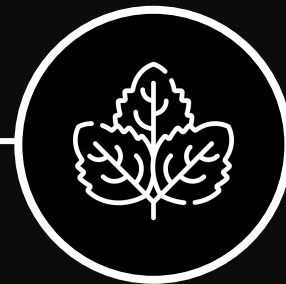
# Data as APIs

2-5 days

SATELLITE REVISIT

SOWN

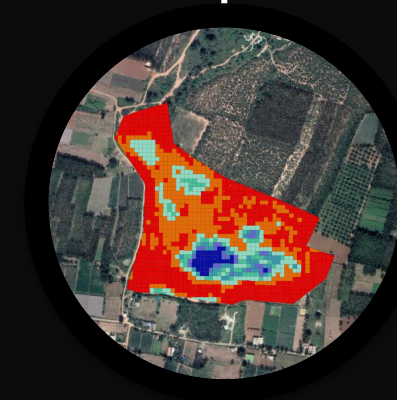
HARVEST



Stress Maps & **Spread**  
Biotic, Abiotic, Nutrient



Vegetation & Growth **Stages**



Moisture & Irrigation **Triggers**

Details Around the Products

# PrakshepVerse

Manage Multiple

# Crop Portfolios



Flowers



Tobacco



Horticulture



Paddy



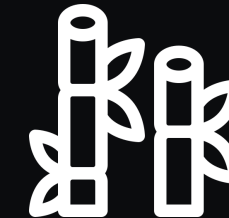
Wheat



Maize



Cotton



Sugarcane



Soyabean



Potato



Mango



Pomegranate



Orange



Grape



Onion



Chilli



Tomato



Hemp



Groundnut



Turmeric



Eucalyptus



Makhana



Banana

**50+**  
CROPS



For companies within larger demographics

# Scout Farms

Save More !!

70-90%  
Time

10-30%  
Chemical

40-60%  
Cost

High  
PRIORITY

The dashboard displays a map titled "Cumulative Stress View" for the village of "Indapur" on "2021-06-08". The map shows various farms with colored circles representing their stress levels. A table on the right lists "Stressed Farms" with columns for Village, Field Name, and Stress Percent. Summary statistics at the bottom show: Biotic Stress % (14), Stress Acre (226), Damaged % (3.4), Damaged Acre (47), Healthy % (83), and Healthy Acres (1346).

Village	Field Name	Stress Percent
Gokhali	POM102INPF99	7.6
Gokhali	POM102INPF98	13
Gokhali	POM102INPF97	8.2
Gokhali	POM102INPF96	3.1
Gokhali	POM102INPF95	1.8
Gokhali	POM102INPF94	3.2
Gokhali	POM102INPF93	18
Gokhali	POM102INPF92	16
Gokhali	POM102INPF91	20
Gokhali	POM102INPF90	8.2

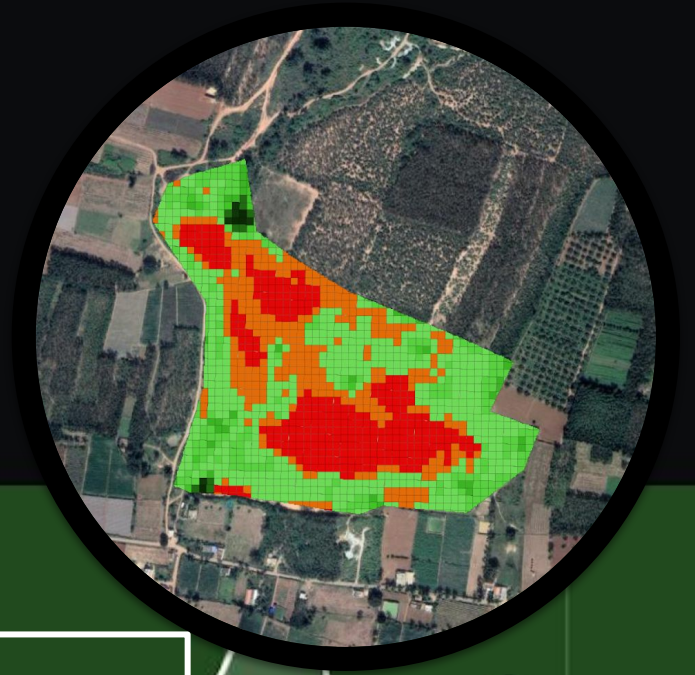
Biotic Stress %	Stress Acre	Damaged %	Damaged Acre	Healthy %	Healthy Acres
14	226	3.4	47	83	1346

Notify  
GROWER

Visit  
FARM

# Autonomous Activity & Stage Tracking

## Sowing to Harvest & activities in between



Fruit Growth

Fruit Setting

Flowering

Vegetative

Activity Maps are designed to assess photosynthetic activity, leaf intensity and canopy structural variations across the farm.

01/01

01/16

02/01

02/15

03/01

03/16

04/01

04/16

05/01

05/16

06/01

Track

# Activities

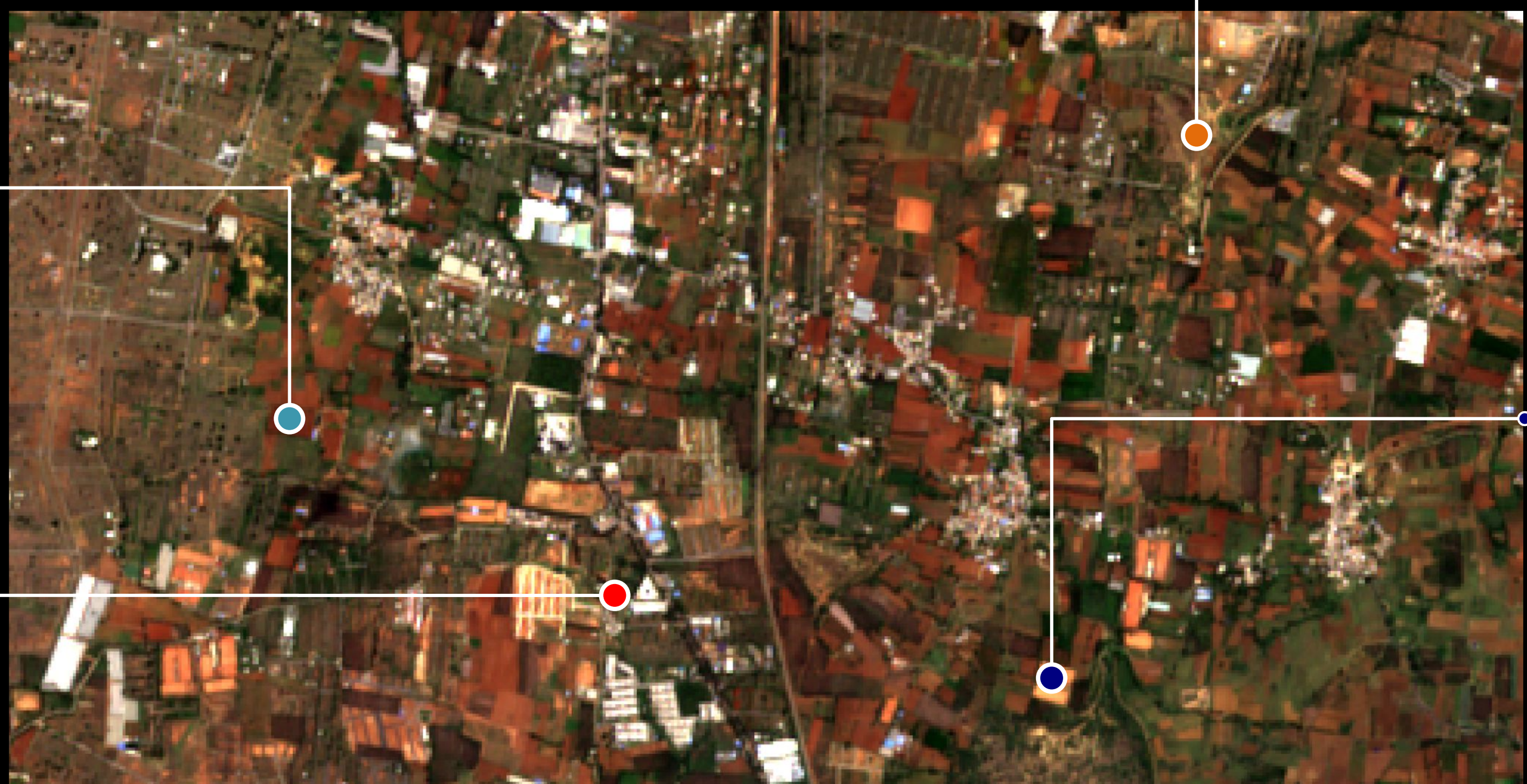
**Harvested**

2021-06-01

**Land**  
PREPARATION

**Crop**  
RESTING

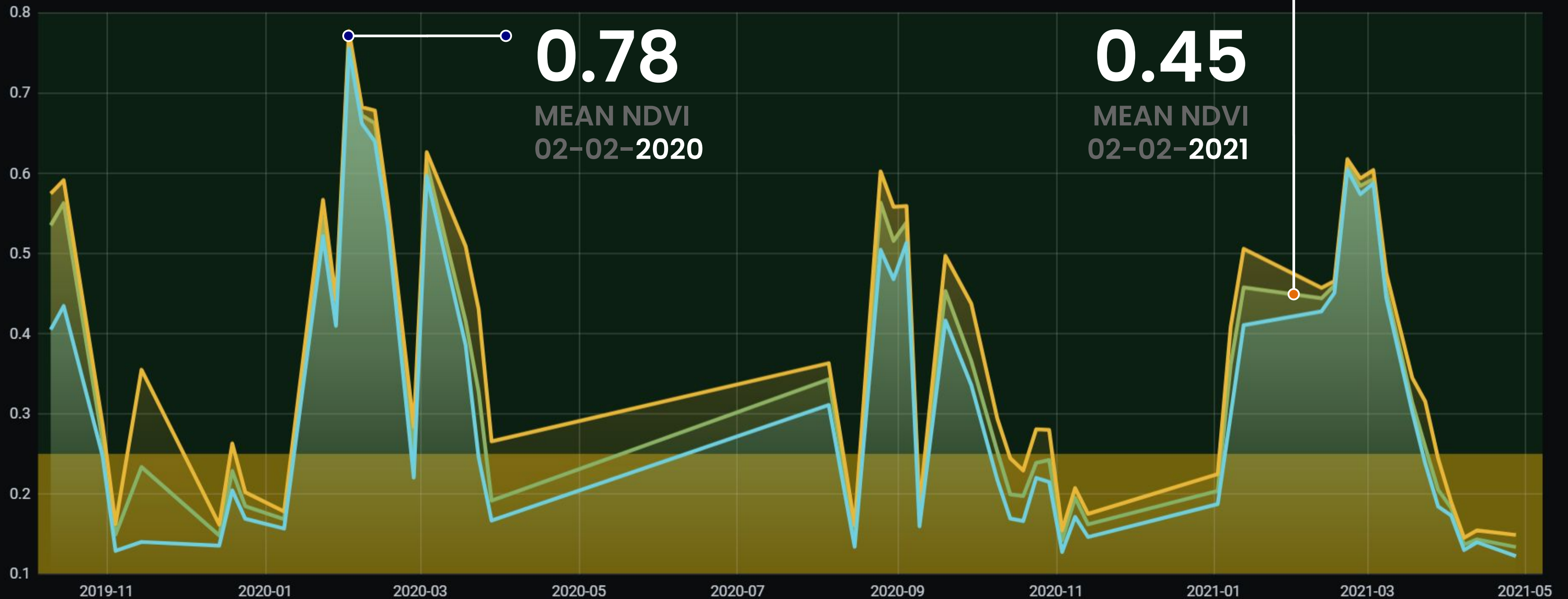
**Sown**  
2021-02-05



# Year-On-Year Change **Visibility**

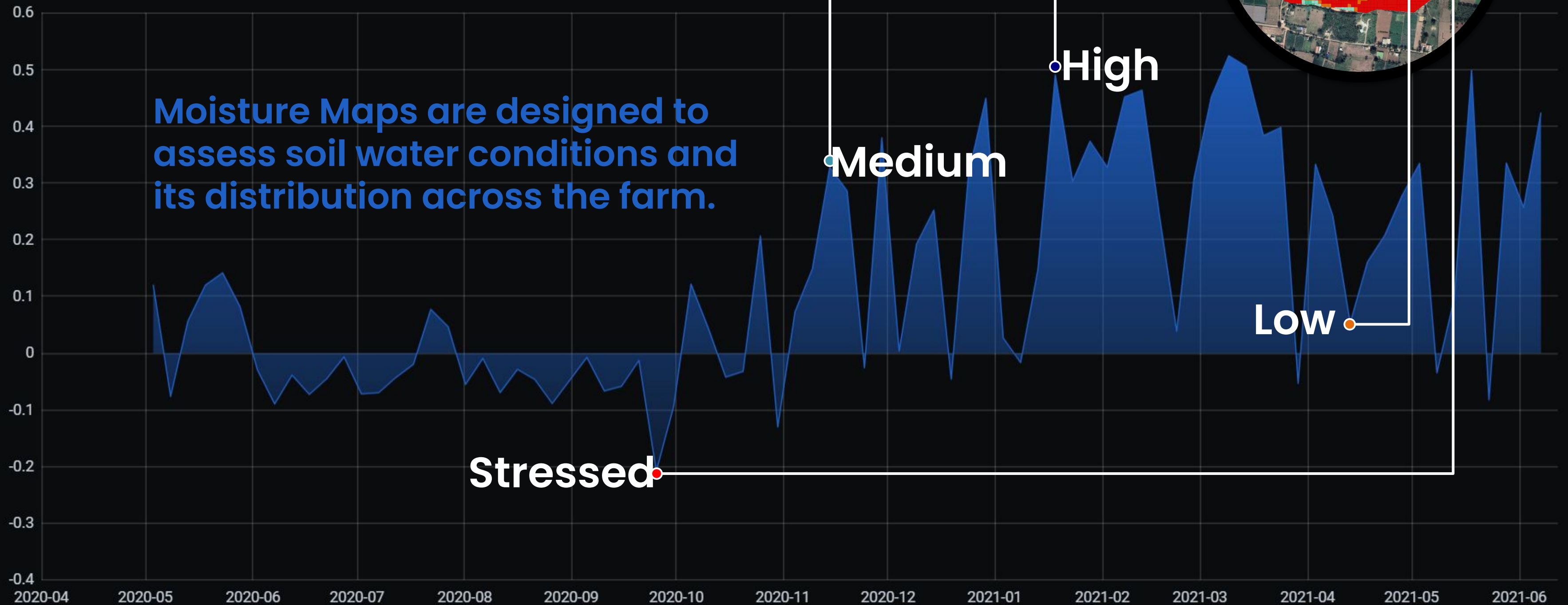
LATE  
SOWN

DELAYED  
HARVEST



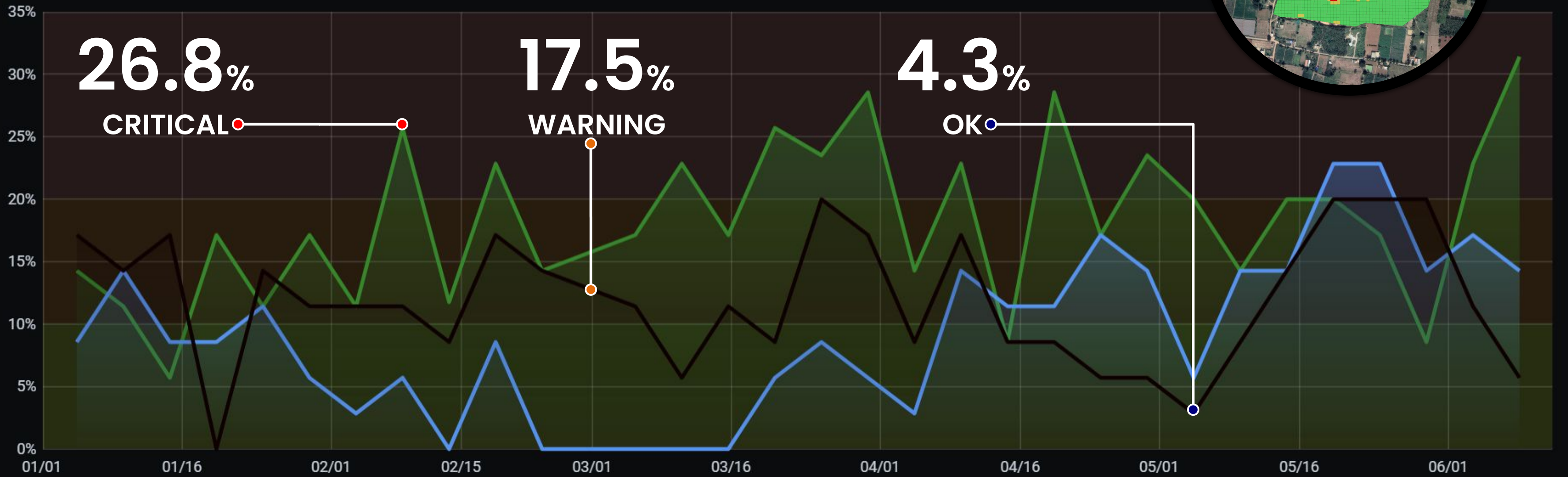
# Manage Irrigation with Daily Triggers

Moisture Maps are designed to assess soil water conditions and its distribution across the farm.



Early Stress Detection to

# Maximize Quality



	min	max	avg	current
— Biotic Stress	5.7%	31.4%	18.2%	31.4%
— Abiotic Stress	0%	22.9%	9.1%	14.3%
— Nutrient Stress	0%	20.0%	11.9%	5.7%

# Biotic Stresses

- Biotic Stress Maps are designed to assess damages done to crop by other living organism such as bacteria, viruses, fungi, parasites, beneficial and harmful insects, weeds etc
- Targeted Survey for early Control : To survey which plots & the locations within.

 DAMAGED

 STRESSED

 HEALTHY



# Abiotic Stresses

- Abiotic Stress Maps are designed to assess negative impact of non-living factors on the living organisms in a farm.
- Proper Irrigation management : Check Irrigation of the Plots at Stressed locations



● DAMAGED

● STRESSED

● HEALTHY



# Nutrient Stresses

- Nutrient Stress Maps are designed to assess deficiency of nutrients in soil
- Soil Sampling Locations : To check for deviations within plots' soil.



DAMAGED



STRESSED



HEALTHY

Crop

# Classification

**S-I**  
FIELD CROPS

**S-II**  
FRUITS

**S-III**  
VEGETABLE



**S-VI**  
PLUSES

**S-VII**  
SPICES

**S-IV**  
PLANTATION

**S-V**  
OIL SEEDS

# All data is available via **APIs for integration** into business projects

**Vehicle Current speed**  
N/A

**Target Acreage**  
64 m<sup>2</sup>

**Last Known Speed**  
46 km/h

**On-Field Speed**  
3.5 km/h

**Hours Engine On Today**  
8.9 min

**Transit Distance**  
12 km

**completed trips**  
45

**Invoices**

Time
2021-03-08 20:33:29
2021-03-08 20:33:59
2021-03-08 20:34:29
2021-03-08 20:34:59

**QDIC | Plot Stress Analytics**

Farm: QD001\_Ag\_C002\_20\_10  
Farmer Name:   
Address: Angar...

Scout the red pixels within the plot when stress is greater than 10%

	min	max	avg
Biotic Stress	0%	15.6%	9.8%
Abiotic Stress	5.6%	15.9%	11.5%
Nutrient Stress	3.6%	21.5%	14.9%

Biotic Stress %	Stress Acre	Damaged %	Damaged Acre	Healthy %	Healthy Acres
11	0.84	5.3	0.39	83	6.2

GET farm geojson for vegetation, moisture, biotic stress, abiotic stress & micronutrient stress

GET http://plots.prakshp.com/myplots/geojsonview/prakshp\_id=BA001\_14292&season\_id=A2020&date\_of\_analysis=2019-10-12&...

KEY	VALUE	DESCRIPTION
prakshp_id	BA001_14292	
season_id	A2020	
date_of_analysis	2019-10-12	
index_id	1001	

```
{
  "status": 200,
  "data": [
    {
      "prakshp_id": "BA001_14292",
      "season_id": "A2020",
      "index_id": "1001",
      "date_of_analysis": "2019-10-12",
      "index_geojson_url": "https://myplots-1t.s3.amazonaws.com/sharatar1/geojson/BA001_14292_sharatar1_2019-10-12_vegetation_geojson"
    }
  ]
}
```



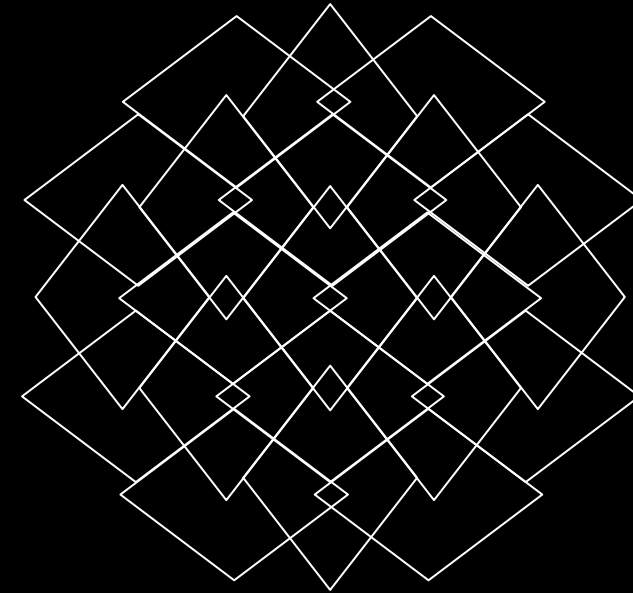
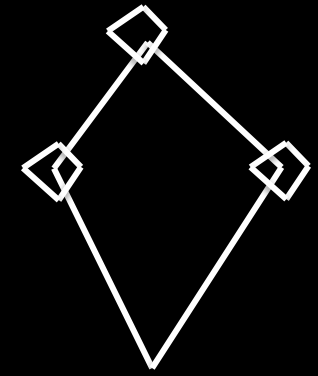
/ The People on field for **collection of precise training data.**



# /The Machines for **Accurate Trainings**



**Prakshep** is Mapping the Story of Food



**THANK YOU FOR YOUR TIME.**

**Inviting for further discussion**

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