LIMS MONITORING & REPORTING

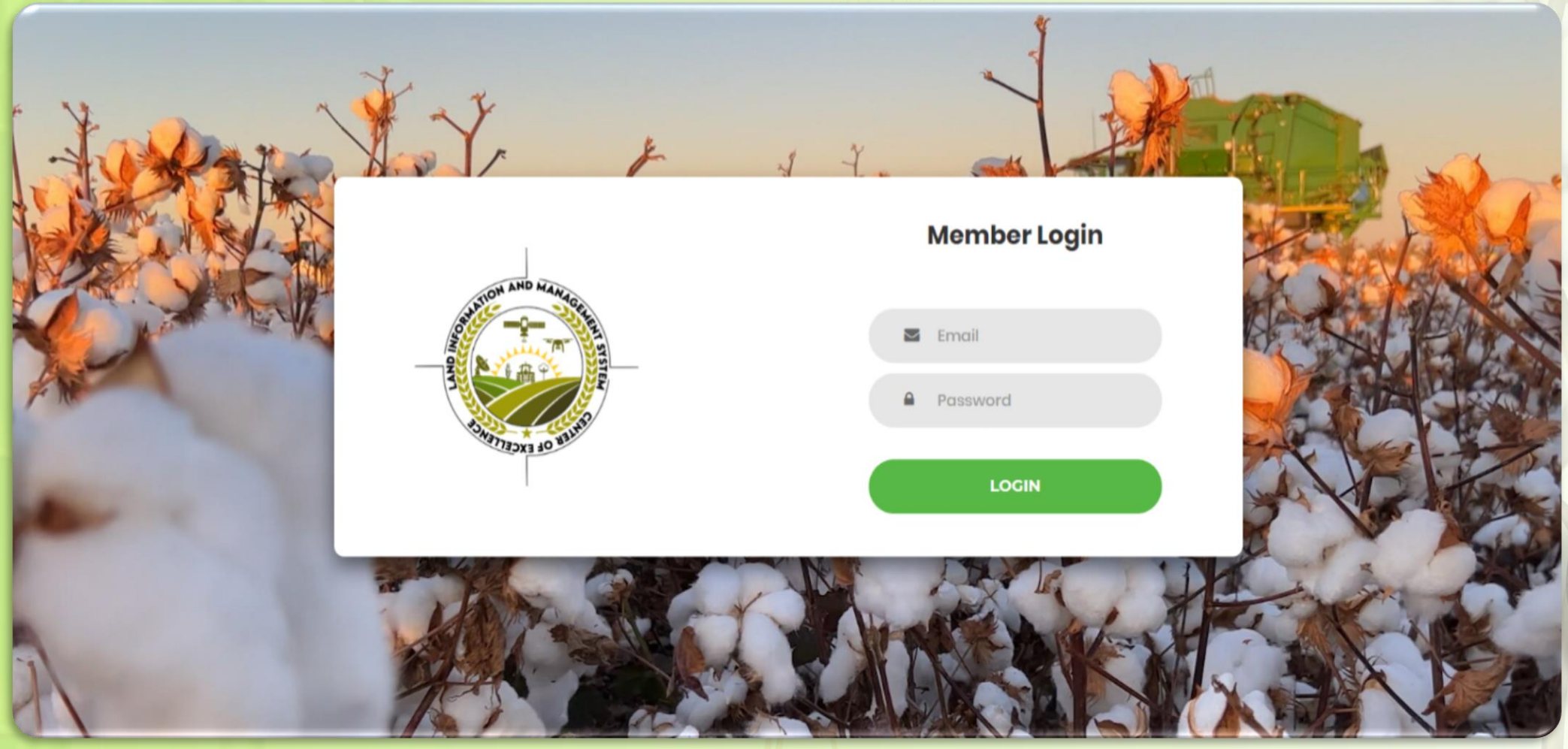
USER MANUAL

Quick overview

- ❑ Login to LIMS Monitoring Tool.
- ❑ Mark farm after geo locating.
- ❑ Enter farm name.
- ❑ Go to monitoring dashboard.
- ❑ Start monitoring.

Login to LIMS Monitoring Tool

Step 1: Go to https://limspakistan.com/agrimonitoring and login using credentials shared at your email.

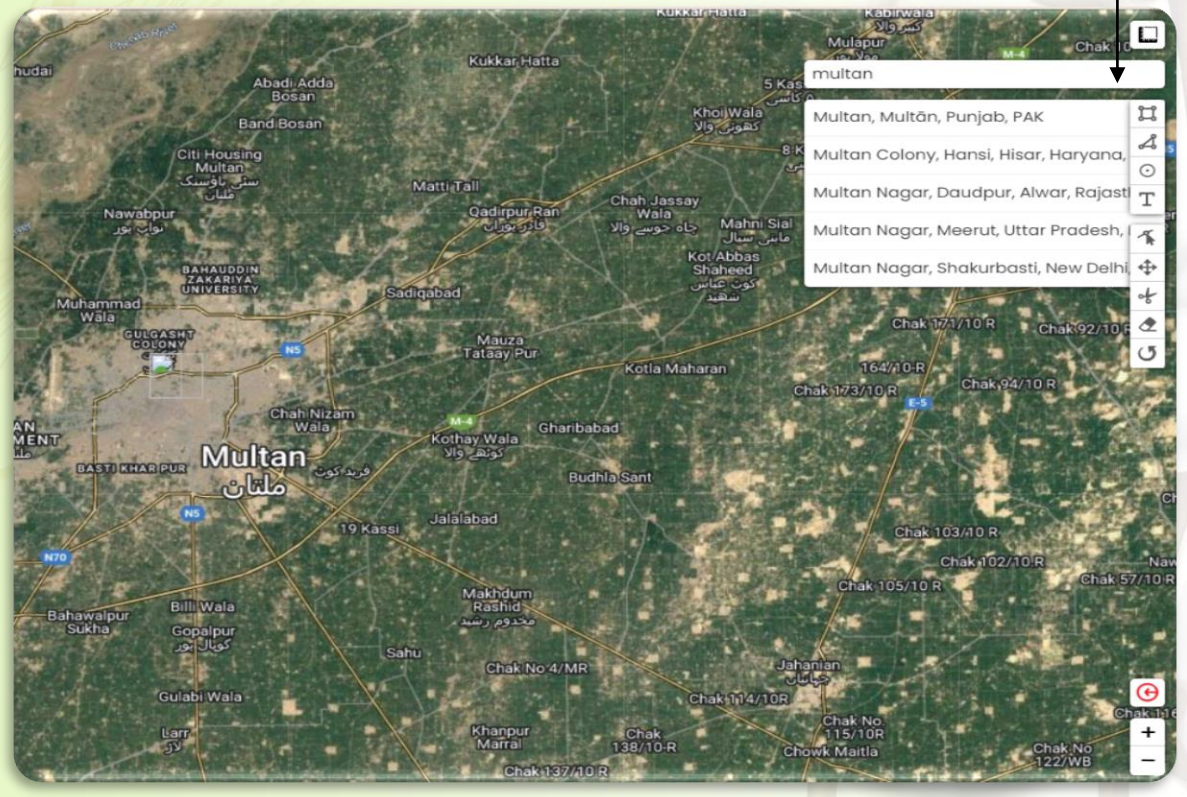


Geo Locate Farm

There are two ways to geo locate farm:

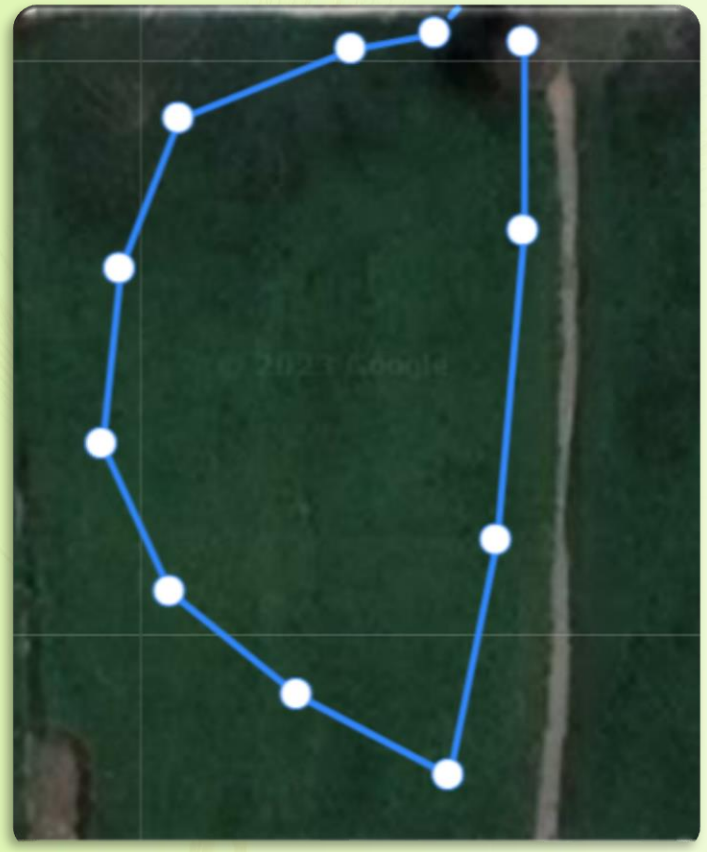
Enter Latitude and Longitude in search box.

Enter district name and manually navigate to farm.



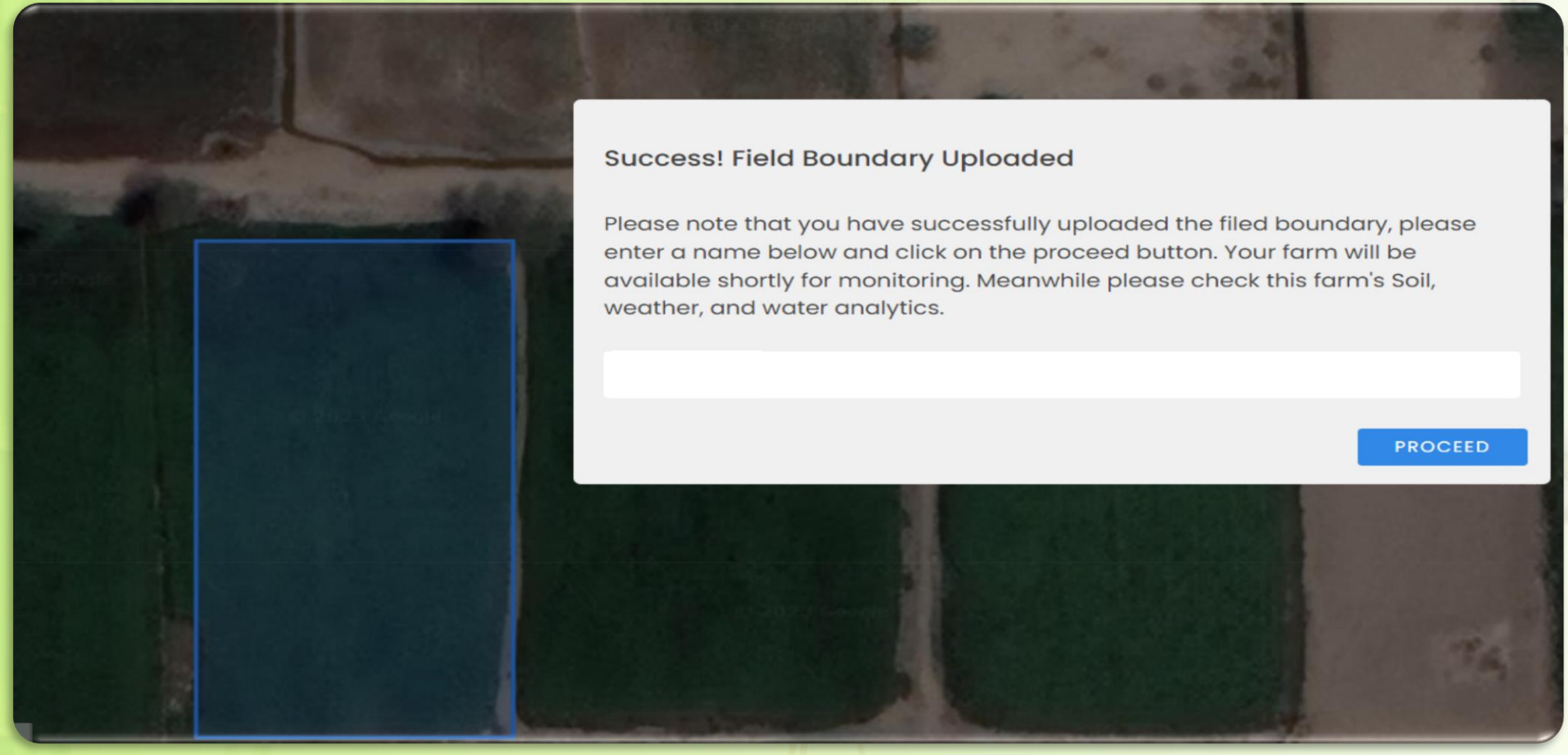
Draw farm boundary

Step3: After geo locating the farm, user need to indicate farm area by drawing map boundaries (Tools to draw map boundary are highlighted below).



Upload Farm

Step 4: After finish marking the area, prompt will appear to ask user to give your farm a name. User can enter any custom name so that it can be easily retrieved.
After entering farm name, user need to press proceed button and it will initiate farm uploading.



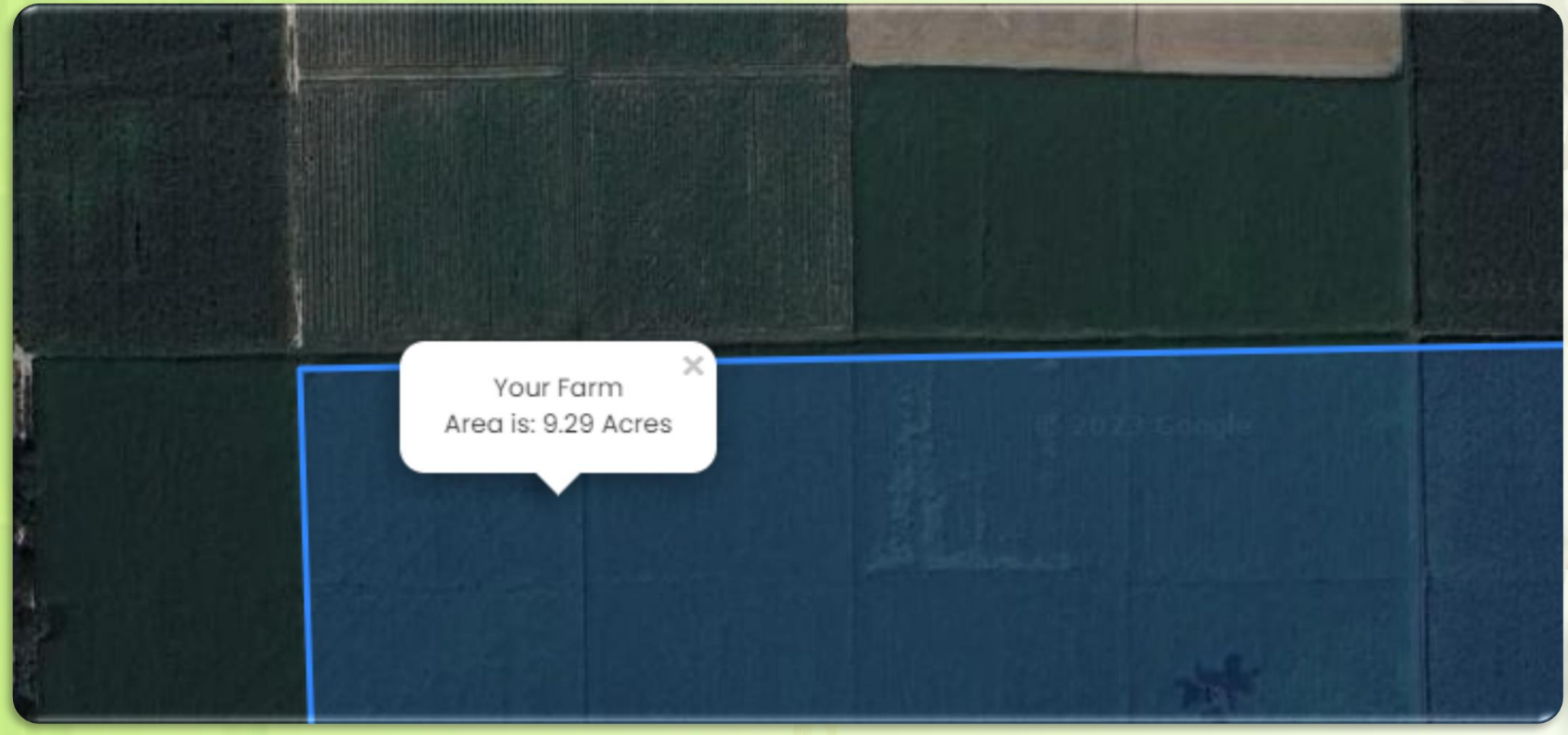
Farm’s parameters

While Farm upload is in progress, user can check:

- Area of marked farm in acers.
- Agrometeorology data.
  - Current conditions.
  - 14 – Days forecast.
- Soil attributes.
- Crop water requirements.
  - Including time to irrigate area.
- Ground water attributes.

Area of Farm

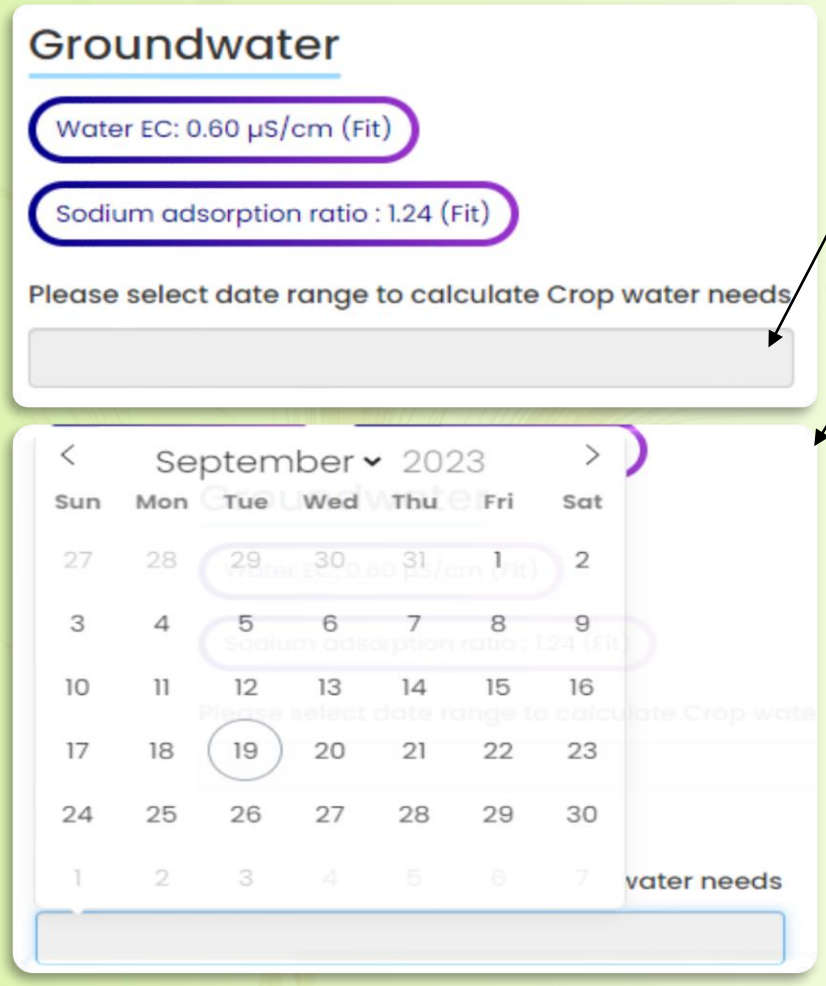
User can check above mentioned parameters by clicking anywhere on the farm



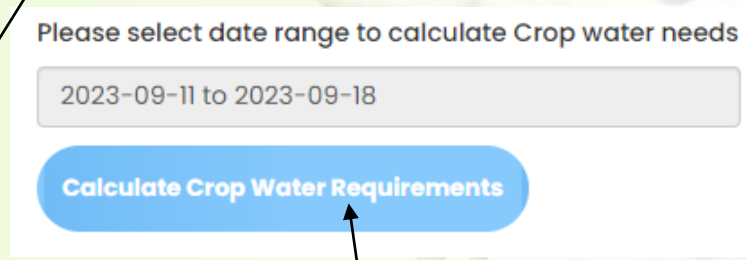
Weather forecast

32 °C	Windpseed: 7 (Miles) Rainfall: 0.0 mm Humidity: 63 % Cloudcover: 75% Current Observations
33 °C	Windpseed: 12 (Miles) Rainfall: 0.2 mm Humidity: 50 % Patchy rain possible Observations for: 2023-09-20
36 °C	Windpseed: 15 (Miles) Rainfall: 0.0 mm Humidity: 39 % Sunny Observations for: 2023-09-21
37 °C	Wind Speed: 17 (Miles) Rainfall: 0.0 mm Humidity: 36 % Sunny Observations for: 2023-09-22
36 °C	Wind Speed: 15 (Miles) Rainfall: 0.5 mm Humidity: 35 % Patchy rain possible Observations for: 2023-09-23
34 °C	Wind Speed: 14 (Miles) Rainfall: 0.0 mm Humidity: 40 % Sunny Observations for: 2023-09-24
31 °C	Wind Speed: 13 (Miles) Rainfall: 1.7 mm Humidity: 50 % Patchy rain possible Observations for: 2023-09-25
30 °C	Wind Speed: 10 (Miles) Rainfall: 0.2 mm Humidity: 51 % Patchy rain possible Observations for: 2023-09-26
32 °C	Wind Speed: 13 (Miles) Rainfall: 0.1 mm Humidity: 42 % Patchy rain possible Observations for: 2023-09-27
31 °C	Wind Speed: 9 (Miles) Rainfall: 1.1 mm Humidity: 46 % Patchy rain possible Observations for: 2023-09-28
29 °C	Wind Speed: 20 (Miles) Rainfall: 2.1 mm Humidity: 53 % Patchy rain possible Observations for: 2023-09-29
31 °C	Wind Speed: 6 (Miles) Rainfall: 0.0 mm Humidity: 40 % Sunny Observations for: 2023-09-30
33 °C	Wind Speed: 8 (Miles) Rainfall: 0.0 mm Humidity: 30 % Sunny Observations for: 2023-10-01
33 °C	Wind Speed: 8 (Miles) Rainfall: 0.0 mm Humidity: 25 % Sunny Observations for: 2023-10-02

Soil, Groundwater and Crop water requirements



For calculations of Crop water requirements, user need to click on the area and select the dates interval



After selecting dates, click on calculate button

Crop water requirements

Enter area in acres and press calculate button

Select Crop(s)

Cultivated Area

Calculate Crop Water Requirement

Export to xls | Export to csv | Export to txt

Date	Et0 (mm)	Temprature	Humidity	Sunshine	Wind	Altitude
2023-09-11	9.35mm	36 C	29%	12.7	9 m/s	125
2023-09-12	8.93mm	37 C	27%	12.7	8 m/s	125
2023-09-13	9.56mm	37 C	24%	12.7	9 m/s	125
2023-09-14	9.39mm	37 C	26%	12.6	9 m/s	125
2023-09-15	7.99mm	38 C	24%	12.6	6 m/s	125
2023-09-16	8.2mm	38 C	30%	12.6	7 m/s	125
2023-09-17	8.28mm	35 C	44%	12.6	9 m/s	125
2023-09-18	7.79mm	31 C	53%	12.2	9 m/s	125

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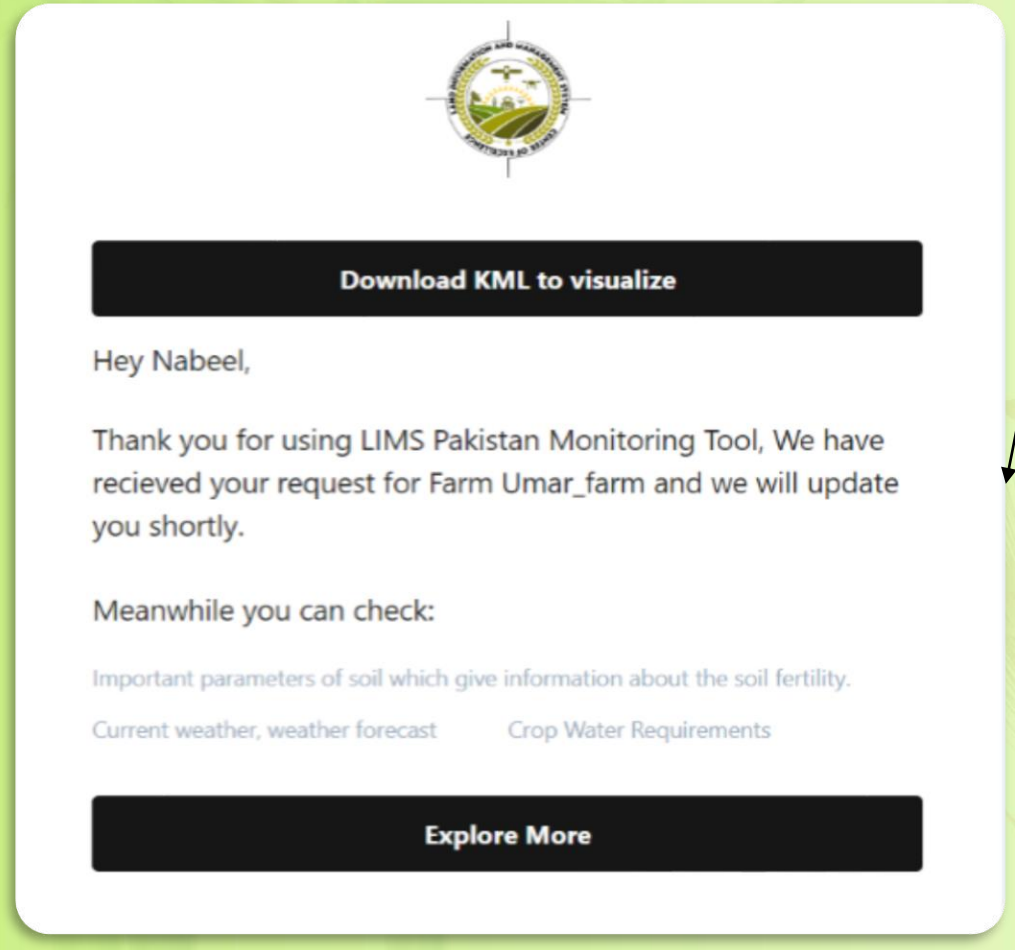
Crop water requirements

After clicking calculate button, user will be able to view irrigation values.

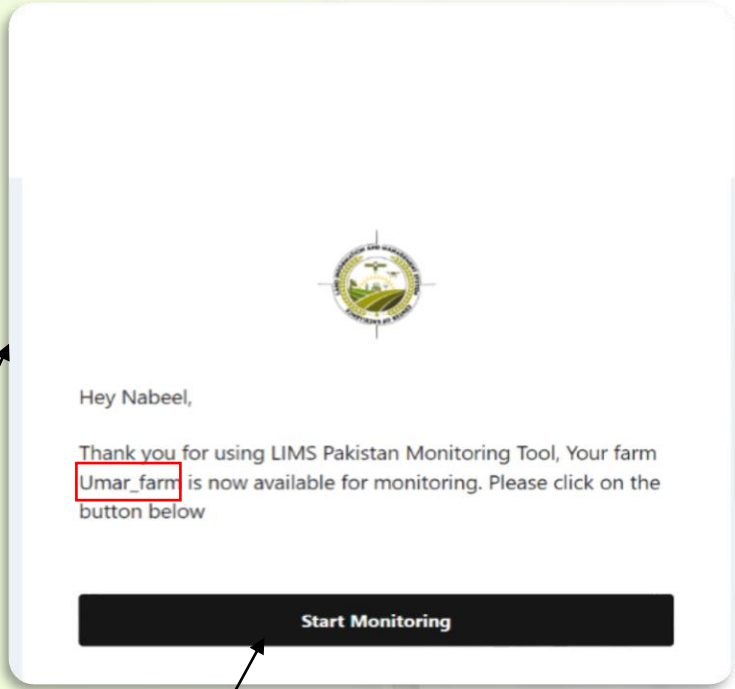
Date	Et0 (mm)	CWR (Cubic Meter)	(Inches)	Temprature	Humidity	Sunshine	Wind	Altitude
15-09-2023	7.99	cotton = 333.44	0.35	38 C	24%	12.6	6 m/s	125
16-09-2023	8.2	cotton = 342.2	0.36	38 C	30%	12.6	7 m/s	125
17-09-2023	8.28	cotton = 345.54	0.36	35 C	44%	12.6	9 m/s	125
18-09-2023	7.79	cotton = 325.09	0.34	31 C	53%	12.2	9 m/s	125
Cubic meter volume of water needed: 2899.97								
Inches volume of water needed: 3.04								
Cubic feet volume of water needed: 102412.44								
Seconds per acre of irrigation: 128015.55								
Time to Irrigate: 21.34								

Email alerts



After user has pressed proceed button, it will initiate farm uploading so that user can start the monitoring.

User will also receive email alert that farm upload is in progress in the start and when farm is uploaded, user will simply press the Start Monitoring button and it will take user to monitoring dashboard. Please note that user can see farm name entered in Step 4, same will be used to search the farm on monitoring dashboard.



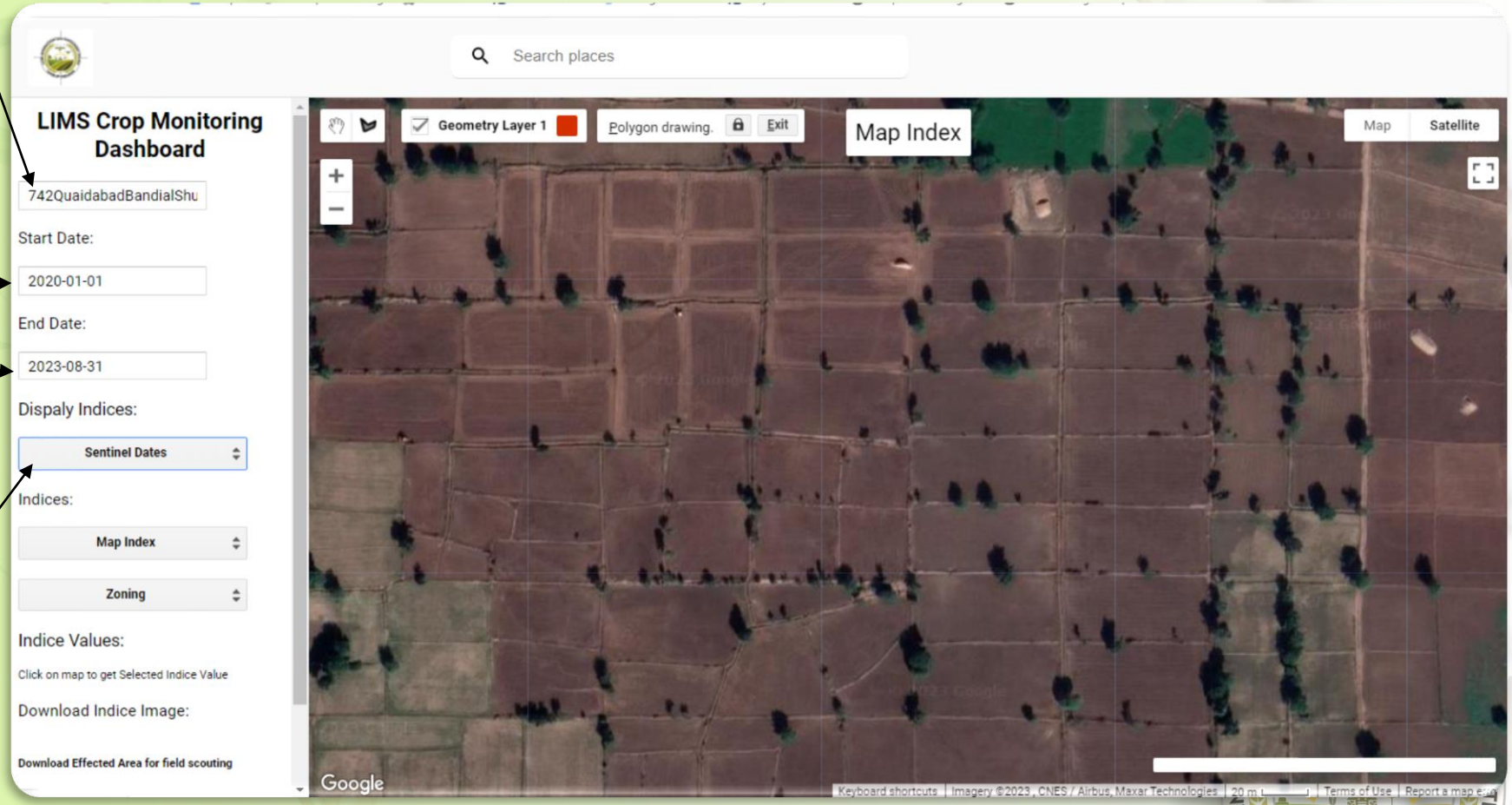
Start Monitoring button will take you right to monitoring dashboard.

Monitoring dashboard

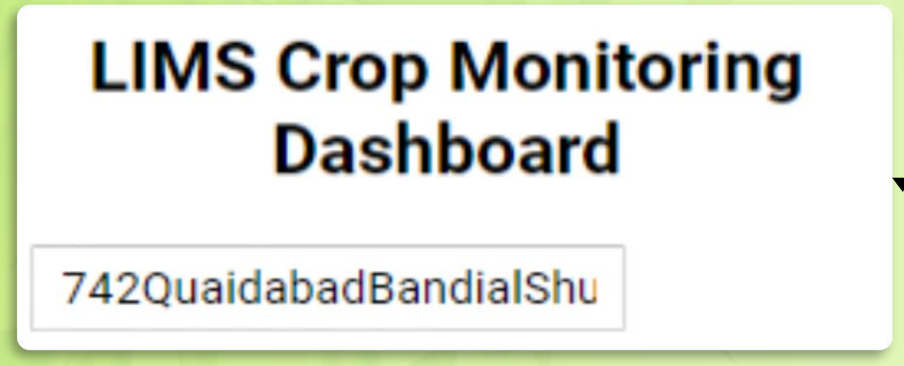
User need to enter farm name received on mail / entered in step 4, in the search area

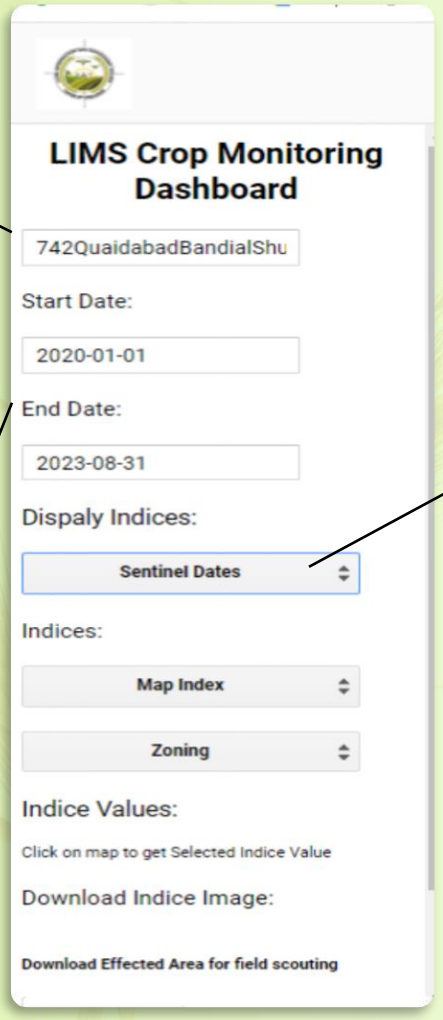
further add Start Date (2020-01-01) and end date (Current date)

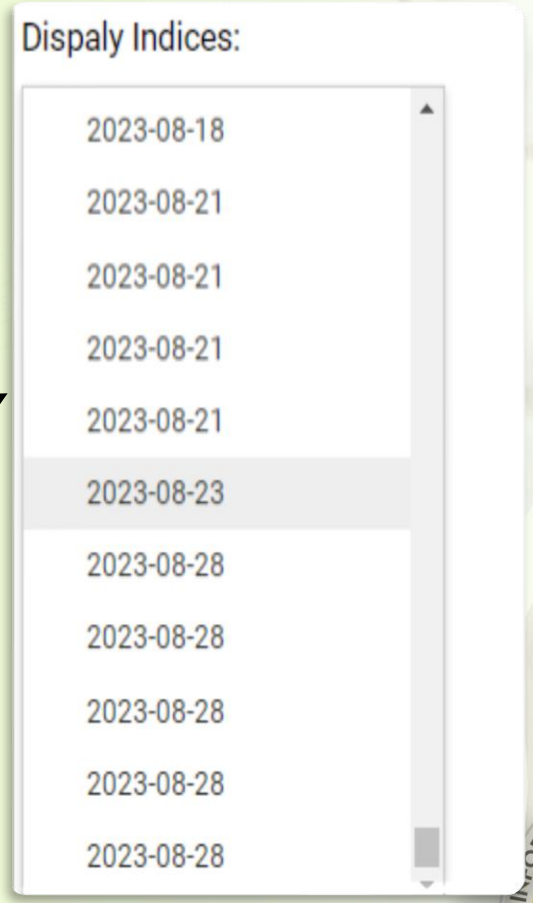
Now Choose Date from display indices (Try to choose latest date and it should not exceed from 10 days prior to current date).

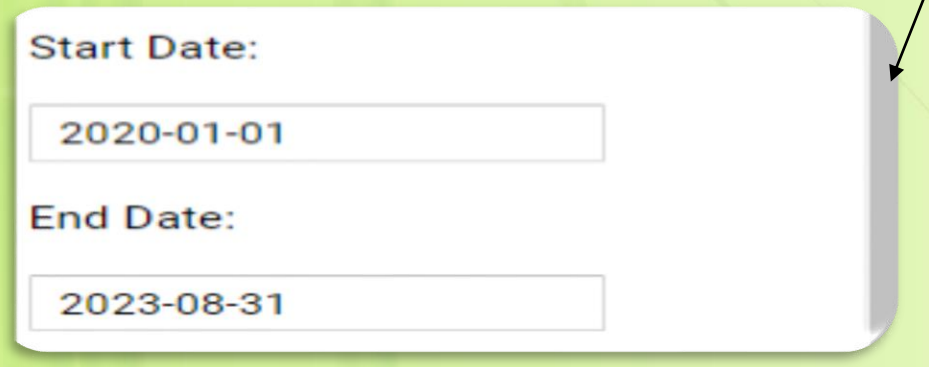


Monitoring dashboard expended view









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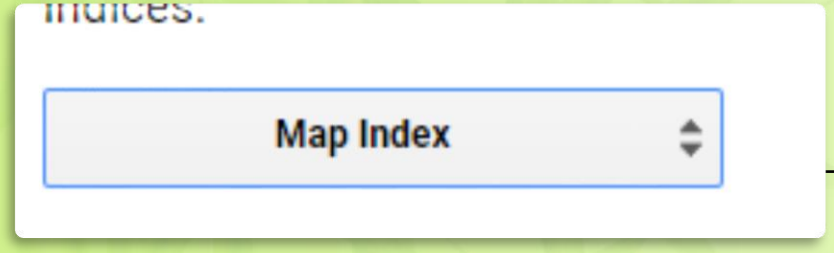
Monitoring dashboard Indices



Now select Map index from indices, a list will appear, select **Crop Stress Insect and Diseases**.
User can check other indices too.

Map will start to load layers data on screen. Wait for complete upload of layer and monitor based on values mentioned on the right side of layer

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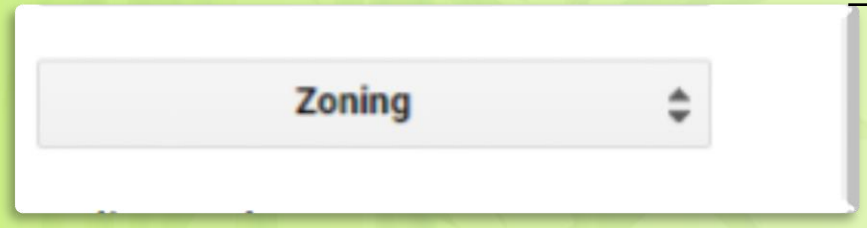
Monitoring dashboard Zones



Now select Map Zones from zones, a list will appear, select **Crop Stress Insect and Diseases**.
User can check other indices too.

Map will start to load layers data on screen. Wait for complete upload of layer and monitor based on values mentioned on the right side of layer

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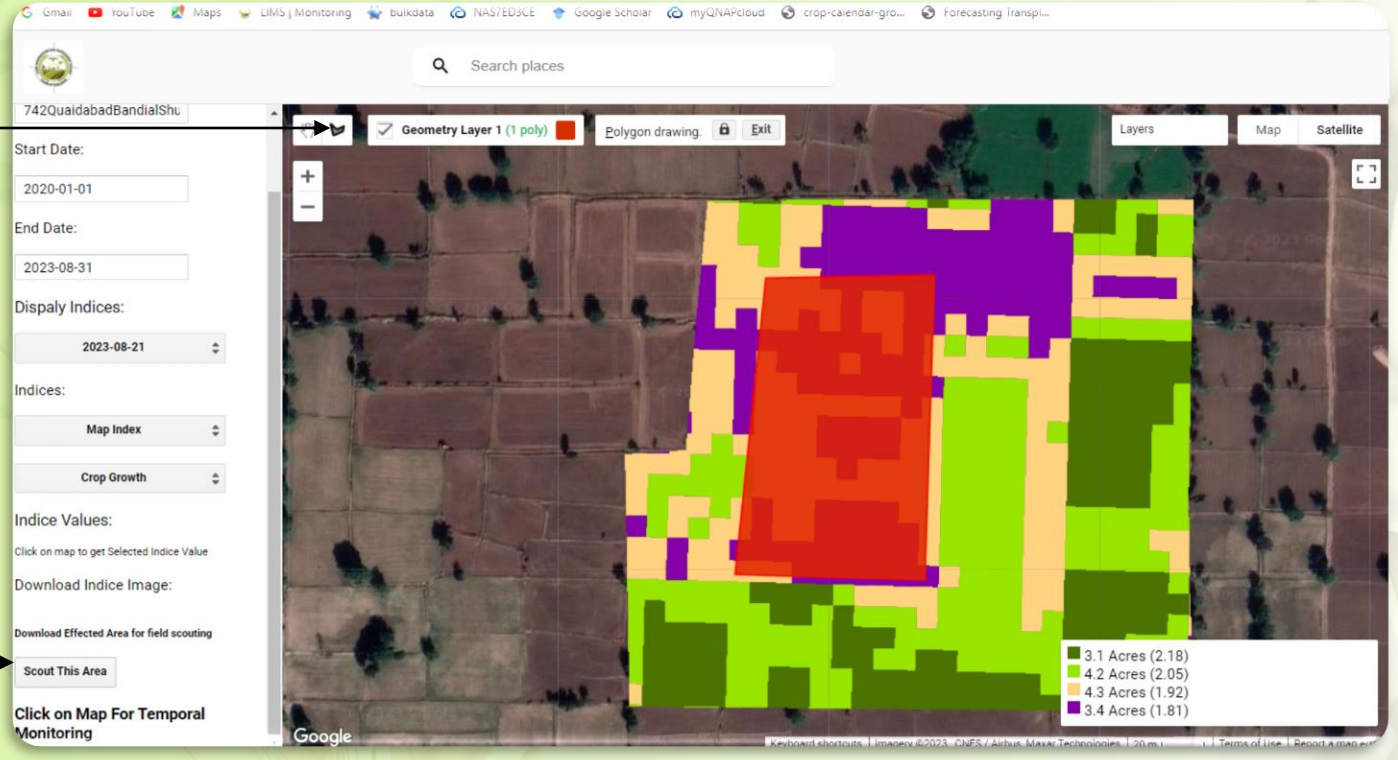
Monitoring dashboard Scouting

Draw polygon using polygon tool

After drawing press, scout this area button, it will download the **KML** file for the user



On the basis of data monitored from **Crop Stress Insect and Diseases**, **Crop Moisture**, **Nitrogen** and **Crop Growth** from zoning, make polygons for effected areas that should be checked and treated for any stress including water, fertilizer or insect pest attack

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