Carbon Credit Report

1 Property details

Particulars	Details
Village	Gadhar
District	Gadhar
State	Karnataka
Area	2.38 acre's
Crop	Paddy
Sowing date	2023-07-31

2 Location of area

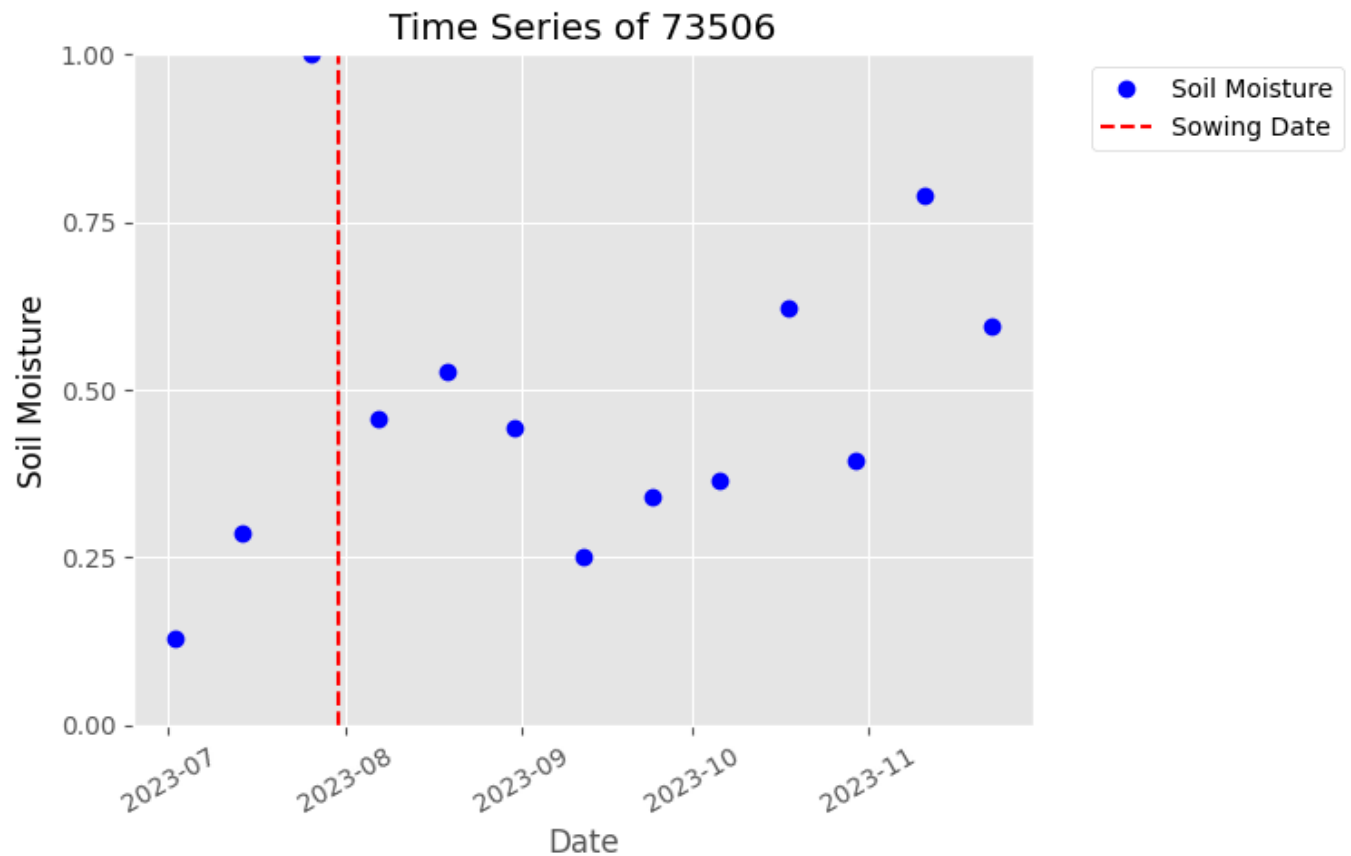*Figure 1:* **Location of farm displayed over the satellite image**

3   Alternate wetting and drying (AWD)

Figure 2: **Soil Moisture**

NOTE -   **Alternate Wetting and Drying (AWD) is a smart way of managing water in rice cultivation. Instead of keeping the field flooded all the time, which is the traditional method, AWD allows for more efficient use of water.It involves periodically wetting and then drying of the rice field. The soil moisture values ranges from 0 to 1 where 0 having low soil moisture values and 1 represents high soil moisture values.**
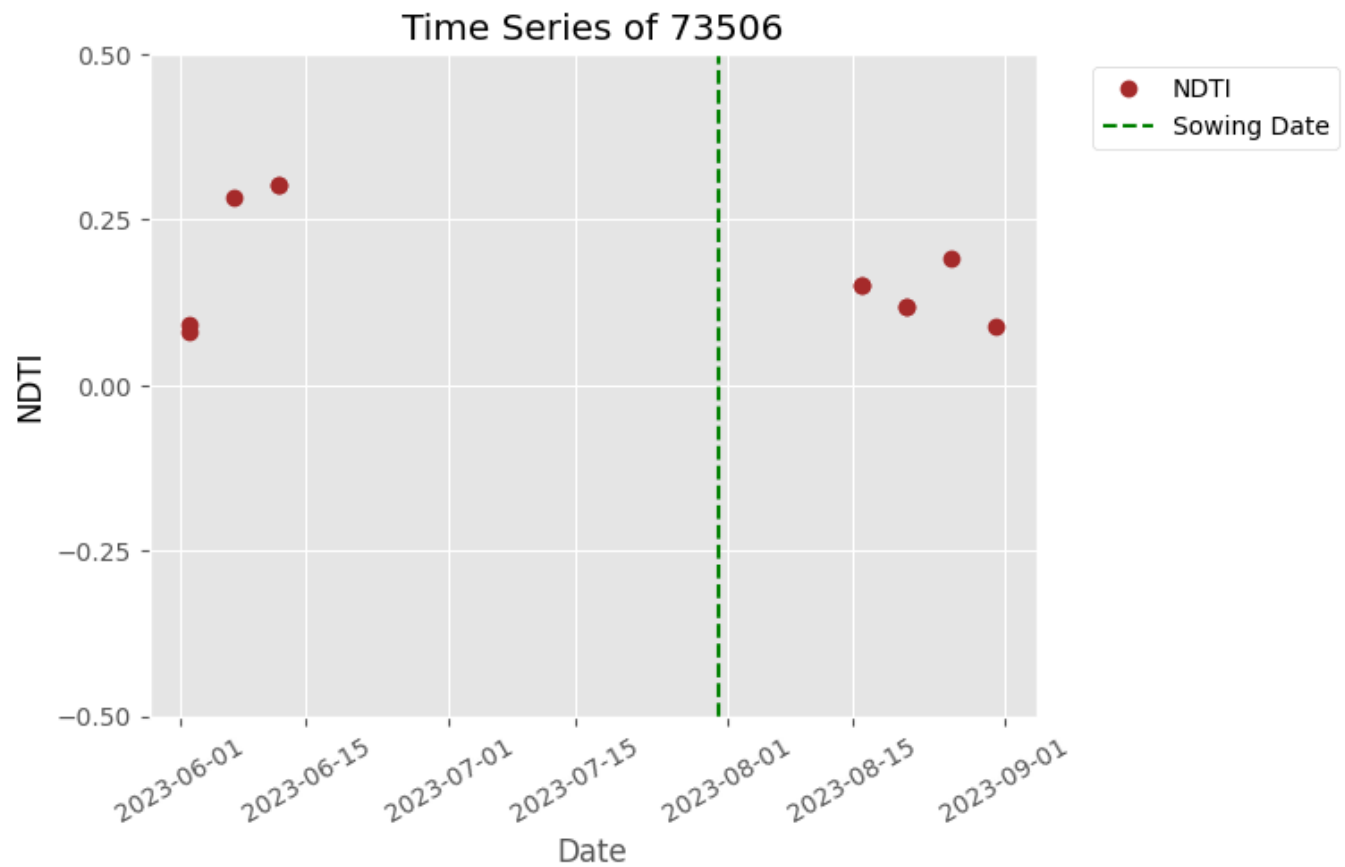
4 Intensity of tillage

Figure 3: **Conventional tillage**

NOTE - **The intensity of tillage is classified based on Normalized Difference Tillage Index (NDTI) and it refers to how much we disturb the soil when preparing it for planting. The NDTI is sensitive to changes in soil cover and residue distribution resulting from tillage practices. Lower values indicates tilled or disturbed soil whereas higher values indicates untilled or undisturbed soil.**
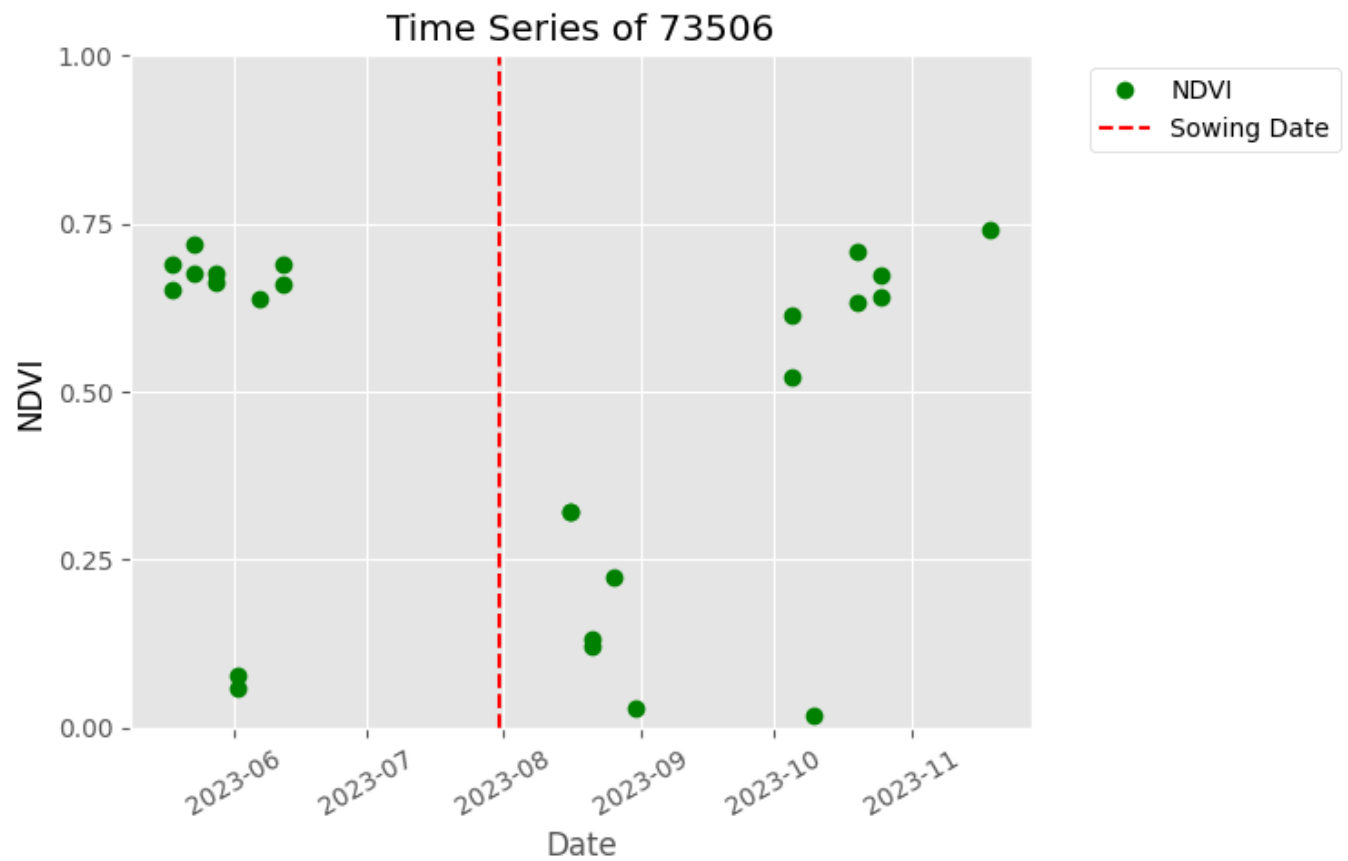
5 Cover crop

Figure 4: **Normalised Difference Vegetation Index (NDVI)**

NOTE - A cover crop is a type of plant grown primarily for the protection and improvement of the soil rather than for harvesting. These crops are usually grown during the off-season or alongside main cash crops. The cover crop is classified based on Normalised Difference Vegetation Index (NDVI). The NDVI values ranges from 0 to 1 indicating the presence of cover crop.
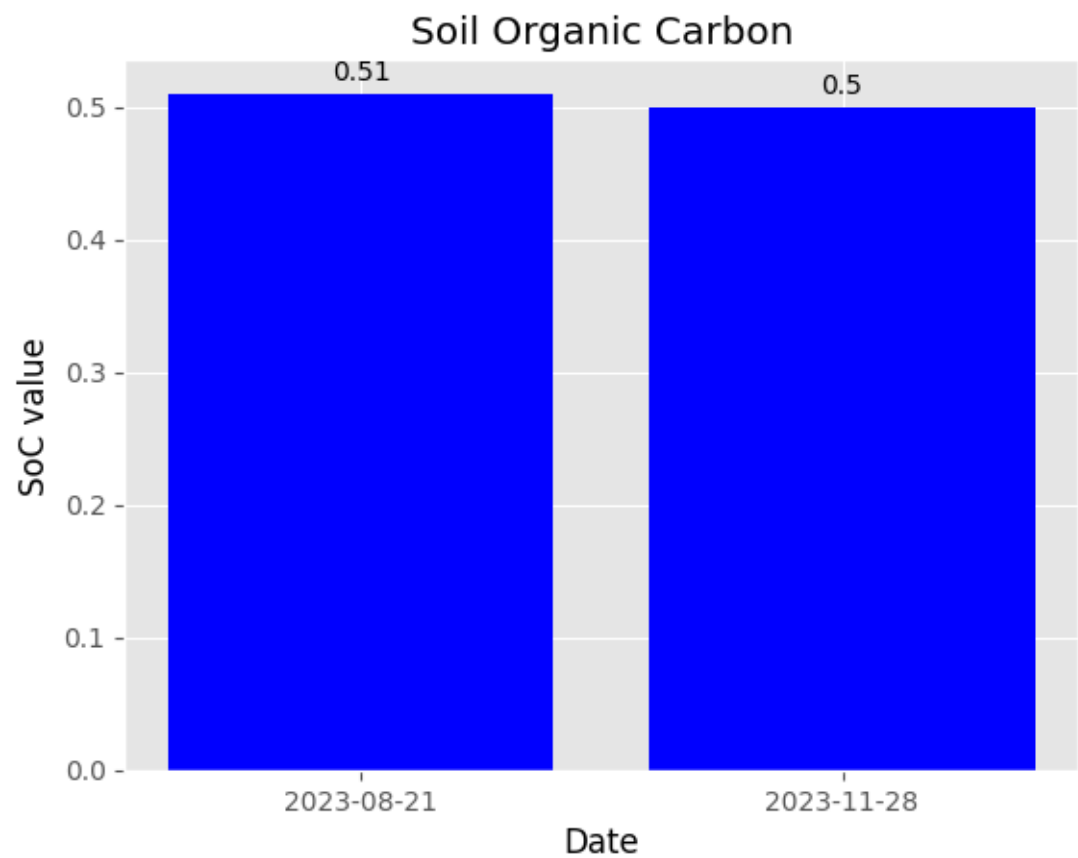
6 Change in Soil organic carbon (SoC)

Figure 5: **SoC before and after the season**

NOTE - **Soil organic carbon (SoC) is a critical component of soil organic matter. Adequate SoC levels are associated with improved crop productivity. The change in soil organic carbon at the begining and end of the season is shown above.**