

Field data points description (WB Part 1 and Odisha)

For a systematic way of data collection, a 0.25 degree grid was prepared. Surveyors tried to collect the data from each individual grid. The data entered as NA in the data table for the field photos where data is not available. The Latitude, Longitude of each data collection point is mentioned with corresponding date and time (hrs) of data collection.

Rice is the only crop used to be cultivated in monsoon season in all around the southern West Bengal. Data points were only taken at the agricultural fields. All information collected regarding the rice cultivation.

Information about others crops during crop 2 and crop 3, are not collected. Available information about crop 2 and crop 3 for the data points are very limited, given as "Yes" or null. Null corresponds data is not available or not cultivated.

Transplanting method of rice cultivation is observed at all data the points in West Bengal.

At first stage of data collection at WB, only one photo per data points was collected which are not geo-tagged. Geo-tagged photos are available for second part of data collection at West Bengal. For a data point, there is a corresponding photo no., and the next three photos also corresponds to that data point, except one data point (OID:138) at Birbhum district, having no photo. For each data points collected at Odisha, multiple photos were collected. Photos are numbered as 2_1, 2_2, 2_3 and 2_4 corresponds to data point 2 and 4 photos were collected. NA is written for those points for which photos are not available. Null is written for no data in the table.

Field data collection West Bengal part1

Date of planting and estimated date of harvesting found to vary from mid July to mid Aug and November last respectively. Photo no. 7 and next three points (data table), the date of plantation and estimated date of harvesting shifted towards the end of the year. The reason of this shifting was temporary flood due to heavy rainfall over nearly flat and low laying areas during monsoon. The crop canopy cover data is given in percentage. All the data points are collected for those croplands which were more than 1 km² in area mostly laid along the state and national highway. Thus the crop canopy cover is less than 100%, and varies from minimum 60% to maximum 90%. Remaining land cover (other land) were mostly roads and bushes etc varying with minimum 0% to maximum 30%. For photo no. 6, 7 and next three points which were affected by temporary flood, having some water cover varying from 25% to 30%. For other points water cover was low or null. The height of plants varies in between 55 to 90 cm. The crop growth was found to be in peak stage at most of the points and mixed stage (showing peak stage and flowering stage) at few points. Crop health was observed as 4 and 5, corresponds to healthy and very healthy at time of

data collection. Crop intensity varies from 1 to 3, where crop 1 was rain fed, and for crop 2 and 3, ground water (GW) and canal irrigation is used.

Field data collection West Bengal stage 2

Birbhum: In Birbhum district, second time rice cultivation was observed at only eight points. No any points have been found, where rice is cultivated thrice. Ground water is the only source of water for crop 2.

Bardwan: The western part of Bardwan is industrial area, thus comprises of very small agricultural fields avoided for data collections. At Bardwan, out of 42 data points, only 5 points have been observed where rice is cultivated for crop 2, by the use of ground water.

Purulia: Due to water management plans, in this district is cultivated for only one time during the monsoon season.

