Farmer’s necessity for real-time and remotely detecting images of harvesting crop and soil

Abstract

Indian farmers repeatedly face a wide range of challenges to access the right and necessary information on real-time crops and soil during crop harvesting. Information required by farmers such as crop selection and seed selection, land conversion, seed sowing, irrigation, crop harvesting etc. Consequences of any disease arising from previous planting and judgment desired to mitigate this effect. Fertilizer you wish to ensure soil fertility, field formation in relation to good irrigation plants. The cost and quantity of seed required per hectare, yield rate, crop germination rate, local suitability and climate. The need for timely watering, the right time to sow seeds. This forum provides an analysis of plant and soil images. In this case study we have collected and processed data sets of 30 different fields of 30 farmers' crops with 10 site boundaries considered in this case and presented the crop monitoring case in real time. Selected parameters like Farmer's name, Crop location, Harvesting year, Monthly harvest, Day of the month, Minimum temperature, Maximum temperature, Soil temperature, Latitude, Longitude, This can be analyzed with the help of the RStudio "raster" package and photo captured through IoT based drone. Further assigned a date code to each photo captured and assign a variable raster package and the raster can visualize the data through the layout function. Agricultural farmers can therefore collect, compile and analyze images of real-time physical plants from a distance. Finally to compute the soil temperature in order to estimate the appropriate amount of water usage pattern for respective selected crop harvesting.