

Estimate the Crop Yield using Data Analytics

Project members: M Vimal Khanna; Mohamed Fayaz S; Visnukanth M S; Yogesh J.

Data analytics can help farmers monitor the health of crops in real-time, create predictive analytics related to future yields and help farmers make resource management decisions based on proven trends. Reducing waste and improving profits Big data offers opportunities for smart and precise pesticides application, helping the farmer to easily make decisions on what pesticide to apply, when, and where. Such monitoring helps food producers to avoid the overuse of chemicals. Properly integrated, predictive analytics enables the farmer to not only conduct better practices but also to be able to make predictions and extemporaneous adjustments due to factors such as weather, as well as more accurate calculations regarding product and fertilizer type, amounts, and application rates.

The uniqueness of our proposed project is Big data provides farmers granular data on rainfall patterns, water cycles, fertilizer requirements, and more. This enables them to make smart decisions, such as what crops to plant for better profitability and when to harvest. The right decisions ultimately improve farm yields. Using this project, Analytics in agriculture are informing how farmers should manage pests. Digital tools and data analysis in agriculture are being utilized to scientifically deal with harmful insects. Agricultural pests can quickly cut into a farmer's profits. The main advantage of this project is its scalability it is crucial to understand the current nutrient levels of the soil to be able to ascertain which areas require improvement. Our Laqua Twin range of portable meters can provide in-field analysis in your pocket.