# Estimate the Crop Yield using Data Analytics

## Literature survey

Fuzzy Interference Systems for Crop Forecasting, M. A. Jayaram and Netra Marat, Journal of Intelligent Systems, 2012, 21(4), pp.363-372 [1]. For precise market demand fulfillment and effective management of agricultural activities aimed at increasing yield, crop yield prediction is crucial. When determining yield, a number of factors, including the climate, pests, and morphological and biophysical characteristics, should be taken into account. The precise yield is approximate because these variables are by their very nature ambiguous.

In this situation, fuzzy logic is useful. The attempt to create fuzzy inference algorithms for crop yield prediction is described in this study. Corn's physiological characteristics were taken into account.

For the creation of the model, a sizable database (about 1000 records) of physiological morphological characteristics was taken into account, including days until 50th flowering, percentage of dead heart, plant height, panicle length, panicle weight, number of primordia, and associated yield. One-to-one, two-to-one, and three-to-one combinations of input and output were taken into consideration in order to determine the sensitivity of the parameters.

As there was practically a one-to-one connection between anticipated yield and actual value, panicle length, panicle length, and panicle weight seemed to play the most significant roles in influencing yield. demonstrates an extremely low RMS value with precise prediction.

Anna University, Trichy, Tamil Nadu, India, "Agricultural Analytics for Data Mining in Next Generation Hi-Tech Agriculture," May 5, 2015[2]. Crop yield prediction is now a fascinating research topic as a result of recent advancements in information technology in agriculture [1].