Problem Statement :

Indian Agriculture sector requires innumerable types of data analytics in various sectors such as crop productivity prediction models, economic models, pest and crop disease prediction models, crop price forecasting models, etc.
The frequent changes in climate conditions are acting more in cotton production. Most of the forecasts are seasonal and are available around 1-2 months before the crop harvesting.
Farmers are benefited if recommendation and forecast of particular crop are available before sowing of crop.
Contribution of this research is to improve the agricultural productivity and provide the crop recommendation to farmers in North Gujarat region.

The objectives of this research are:
1. Weather indices based Regression Analysis { To analyses relationship of crop yield ,monthly average temperature and monthly average rainfall.
2. Seasonal Analysis {To analyses crop yield with respect to seasonal weather parameters.}
3. Time Series Analysis {To analyses and forecast the wholesale monthly market price of cotton crop.