

## **PROBLEM STATEMENT:**

In order to overcome the problem, various issues in this field need to be addressed. The soil type, fertilizer recommendation, diseases in plants and leaves. All these features need to be considered. Our proposed system was organized in such a way, to analyze the soil type, diseases in the leaves and finally to recommend the appropriate fertilizer to the farmers, that may be of great help to them. Plant disease, especially on leaves, is one of the major factors that reduce the yield in both quality and quantity of the food crops. Finding the leaf disease is an important role to preserve agriculture. Smart analysis and comprehensive prediction model in agriculture helps the farmer to yield right crop at the right time. This venture is extremely valuable to farmer to pick the right fertilizer toward the start of product cycle and amplify the yield. Provide nutrients available in the soil. Replace nutrients removed at harvest. Balance nutrients for better produce quality and higher yield. The proposed methodologies comprise of four stages: Soil analysis, Data preprocessing, Data analysis and Recommendation.