

**Team id: PNT2022TMID08085**

**Title : Fertilizer Recommendation System for Disease Prediction**

## **PROJECT OBJECTIVES**

Agriculture is the most important sector in today's life.

Most plants are affected by a wide variety of bacterial and fungal diseases. Diseases on plants placed a major constraint on the production and a major threat to food security. Hence, early and accurate identification of plant diseases is essential to ensure high quantity and best quality. In recent years, the number of diseases on plants and the degree of harm caused has increased due to the variation in pathogen varieties, changes in cultivation methods, and inadequate plant protection techniques.

An automated system is introduced to identify different diseases on plants by checking the symptoms shown on the leaves of the plant. Deep learning techniques are used to identify the diseases and suggest the precautions that can be taken for those diseases.

- ★ The proposed method **uses SVM to classify tree leaves, identify the disease and suggest the fertilizer.**
- ★ The proposed method is compared with the existing CNN based leaf disease prediction.
- ★ The proposed SVM technique gives a better result when compared to existing CNN.

