# AI BASED FERTILIZATION RECOMMENDATION SYSTEM PROPOSED SOLUTION

## **PROBLEM STATEMENT:**

Farmers are unware of the diseases of the plants and its solution.

Difficult to analyse the types of diseases affects the plants and the best solution to overcome it.

Farmers pay more attension to pest or diseases that can limit plants growth.

Choosing the wrong fertilization affects the plants growth and causes soil erosion.

## **IDEA/SOLUTION DESCRIPTION:**

Using the image processing techniques to effectively analyses the diseases of the plants.

Artificial intelligence techniques to suggest the best fertilization required for the crops growth.

These techniques will give the farmers the accurate result about the crops and fertilizers required for increased plants production.

## **UNIQUENESS:**

Usage of CNN algorithms for processing the images of the affected leaves, this technique is a effective process.

Provide the quick and accurate results.

User friendly, anyone can access the system for analysing purpose.

System, which serves the farmers for preventing pests and crops diseases for betterment of production.

## SOCIAL IMPACT/CUSTOMER SATISFACTION:

Agriculture is the most important aspect of the country's development. Many people make a living from agriculture, which is fully related to agricultural products.

Plant diseases, especially on foliage, are one of the main factors in reducing both the quality and quantity of food crops.

The present work is to analyse the diseases of the plant by Image processing methods and recommend the fertilizer for prevention and to get the right crop yield.

This helps Farmers increase their production rate.

#### **DESIGN MODEL:**

From an agricultural point of view, if the plant is affected by a leaf disease, it will reduce the growth of the agricultural level.

Detecting the leaf disease plays an important role in agricultural conservation.

In order to make this field more profitable for farmers, it is necessary to grow suitable crops on their fields.

As our system, it user friendly, as anyone can access. Produce best result.

The image processing techniques and Artificial Intelligence, the best algorithm is used for analyzing.

## **SCALABILITY OF SOLLUTION:**

The application of image processing and image processing strategies supports farmers in all agricultural regions.

The characteristic symptoms are generated based on the distinction between normal physiological functionalities and abnormal physiological functionalities of the plants.

These different leaf symptoms and diseases are predicted in image processing. Through the use of AI technology, the image is analysed and processed, and the fertilizer needed for plant growth is predicted.