## **SMART INDIA HACKATHON 2024**



## Introduction

• Problem Statement ID: 1673

• Problem Statement Title: Farmers Disease Diagnostic/Reporting Portal - Mobile Portal Al

Based

• Theme: Agriculture, FoodTech & Rural Development



• Team ID- GUSIH135

• **Team Name** – AgroVision





# MOMENTUM TO AGRICULCUTRE (Productivity and Food Security)



#### Detailed explanation of the proposed solution

- All increases the accuracy level of detecting the deficiency in the plant and disease in animal.
- Chat box help the farmer to share their problem and acquire the better solution.
- Finance will store the seasonal records of farmer and help in better understanding of there expenditure and profit earn.
- Al will help the farmer in better decision making and understanding of the problem.

#### Innovation And Uniqueness Are:-

- We Have create AI Detector Tool which have detect the problems of the plants such as (wheat, Rice, And Some other kind of Herbs etc.) and health of the animals such as ()It Also helps for predict the upcoming plant disease which also help to protect the crop fields.
- We have created a platform for direct connection from farmer to consumer without interference of any broker. It improve the farmers life quality and security.



## **TECHNICAL APPROACH**

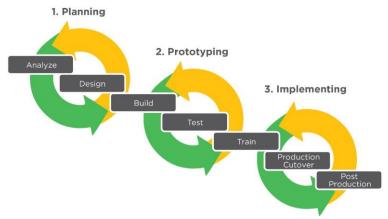


❖ Technologies to be used are:- AI-Driven Decision Support Systems, Natural Language Processing (NLP), and the languages are:-

 ❖ HTML
 CSS
 React
 JavaScript
 Python
 SQL
 PHP
 Kotlin
 Java

 HTML
 CSS
 React
 Image: React python
 Image: React python

Methodology and process for implementation:-



A website for farmers to solve the crop fields problem in real life with the help of Programming languages, Database, Frameworks and Inbuilt Artificial Intelligence.



## FEASIBILITY AND VIABILITY



- Analysis of the feasibility of the idea:-
- Farmers: Small-scale to large-scale farmers in various regions.
- Consumers: Individuals interested in sustainable food and local produce.
- User-friendly Interface: Easy navigation and intuitive design.

## Strategies for overcoming these challenges:-

Challenge: Farmers may not be familiar with how to use AI tools effectively.

**Strategy:** Implement farmer training programs focused on the use of AI, data collection, and smart farming techniques. This can be done through community workshops, agricultural extension services, or even interactive online tutorials. Partnering with local institutions and NGOs to provide continuous support can help build trust and familiarity.

- Challenge: Farmers may be hesitant to fully trust new technologies over their traditional practices.

  Strategy: Develop AI tools that integrate well with traditional farming methods. Use AI to enhance, not replace, the farmer's knowledge. For example, AI tools could assist farmers in recognizing patterns they already know and give additional insights.
- Challenge: Farmers need quick, real-time responses to make decisions in rapidly changing conditions.

  Strategy: Design AI systems that offer real-time analysis and feedback, allowing farmers to address issues like pest infestations or nutrient deficiencies as they arise. Implement user-friendly interfaces that provide immediate solutions or advice when a crop is scanned.

## Team AGRO VISION

## **IMPACT AND BENEFITS**



- Potential Impact On The Target Audience Is:-
- Enhanced Decision-Making
- Increased Efficiency
- User Experience
- Benefits Of The Social, Economic, Environmental Is:-
- Social Benefits
- Educational Aspect
- Technological Development
- Make Farmer More Sustaniable
- Economic Benefits-
- Increased Productivity
- Social Farming
- Market Access
- Environmental Benefits:-
- Resource Efficiency
- Waste Reduction
- Lower Carbon Footprint
- Improve Crop and Animal Health



## RESEARCH AND REFERENCES



We are researching on the crop disease and soil problems which impact on the plant. and On field data analysis and using some ai tools, website, & some images to train the inbuilt website AI. Which helps to built our website fast and responsive.

## **TOOLS & LINKS ARE:-**

