



A Project Sponsored by

**MINISTRY OF ELECTRONICS AND  
INFORMATION TECHNOLOGY  
GOVERNMENT OF INDIA**

**Title of Project:**

***“Development and Deployment of KISAN Cloud  
using Electronic Soil Nutrients Analyser (ESNA)  
and Capacity Building of ST Masses on  
SmartAgri and Livelihood Entrepreneurship  
for Self-Employment”***

**Product Specification of KISAN Cloud**



Implemented by

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# Features of KISAN Cloud:

## **1. Soil Analysis:**

- KISAN Cloud offers comprehensive soil analysis services.
- It provides detailed reports on soil composition, pH levels, nutrient content, and organic matter.
- Users can access soil health information for informed decision-making.
- Recommendations for soil amendments and treatments are included.

## **2. Weed Identification and Management:**

- KISAN Cloud image recognition technology to identify weeds.
- Users can take pictures of weeds in their fields and receive instant identification.
- The platform offers guidance on effective weed management strategies.

## **3. Pest Identification and Management:**

- KISAN Cloud includes a pest identification tool.
- Users can upload images of pests, and the system identifies them.
- Integrated solutions for pest control and management are provided.

## **4. Sowing to Harvesting Methods for Various Crops:**

- The platform offers detailed crop cultivation guidelines.
- Users can access step-by-step instructions from sowing to harvesting.
- Information is tailored to different crop types and varieties.

## **5. Crop Plantation According to Weather:**

- KISAN Cloud integrates weather forecasting data.
- Farmers receive weather alerts and recommendations for optimal planting times.
- This feature ensures crops are planted in favourable conditions.

## **6. Fertilizer Recommendation System:**

- The platform analyses soil and crop data to recommend appropriate fertilizers.
- It considers nutrient deficiencies and crop requirements.
- Users receive precise fertilizer application guidance.

## **7. E-commerce for Agriculture Equipment:**

- KISAN Cloud includes an e-commerce marketplace for agricultural equipment.
- Farmers can browse and purchase farming machinery online.
- Payment and delivery options are facilitated within the platform.

## **8. Marketplace for Seeds:**

- The platform offers a marketplace for buying and selling seeds.
- Users can explore a variety of seed options for different crops.
- Quality and certified seeds are available from reputable suppliers.

## **9. Marketplace for Fertilizers:**

- KISAN Cloud features a marketplace for fertilizers.
- Farmers can compare fertilizer products, prices, and brands.
- Bulk purchases and delivery arrangements are supported.

## **10. Marketplace for Pesticides:**

- The platform includes a marketplace for pesticides and insecticides.
- Users can find pest control solutions suitable for their crops.
- Safety information and usage guidelines are provided.

## **11. Market Place for Agricultural Tools and Machinery.**

## **12. Agricultural Drone Spray Services.**

## **13. Agricultural Manpower Supply Services.**

## **14. Agricultural Tools and Machinery Services.**

# KISAN Cloud Platform Architecture

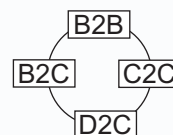
## User Questionnaire and GUI interface

Multi Devices Compatibility and OS

Windows, Android, iOS, Linux, etc.

Mobile, Tablet / PC, Laptop, Desktop

## Application Business Modules



## Knowledge based Integrated Sustainable Agriculture & Food Network

### SaaS Application

#### KISAN Cloud Features and Services

Soil Analysis

Seed Selection information

Field Preparation information and Management

Sowing to Harvesting Methods for Various Crops

Crop Plantation, Recommendation According to Weather

Fertilizer Recommendation System

Disease Management information

Weed Identification and Management

Pest Identification and Management

### PaaS Application

#### KISAN Cloud e-Commerce Services

Seed Market place

Fertilizers Market place

Pesticide Market place

### IaaS Application

#### KISAN Cloud Classified Services

Agricultural Drone Spray Services

Agricultural Tools and Machinery Services

Agricultural Manpower Supply Services

### Note:

After the Expression of Interest (EoI) phase, successful candidates or organizations will be required to participate in a Training of Trainers (ToT) program. As part of this program, access to the source code and development files related to the KISAN Cloud project will be provided. This will facilitate knowledge transfer and ensure that trainers are well-equipped to deliver services related to the project. Specific terms and conditions for the transfer of these assets will be detailed in the contractual agreements between the project and the selected candidates or organizations.

