



Project Proposal

Smart Agricultural Support & Sustainable Solution

A web base platform offering farmers AI crop diagnosis, expert help, and access to agricultural products and services

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Title: AgroSphere – Smart Agricultural Support & Sustainable Solution

1. Introduction

AgroSphere is a web-based platform that connects farmers with pesticide companies, certified field officers, solar turbine installers, and AI-based crop diagnosis. The platform provides fast, reliable, and expert-assisted agricultural solutions through a unified digital system.

2. Problem Statement

Farmers often experience problems such as incorrect disease identification, lack of expert guidance, difficulty finding authentic agricultural products, and no proper way to contact solar irrigation service providers. This leads to delayed decisions and reduced crop productivity.

3. Proposed Solution: AgroSphere Platform

AgroSphere provides an integrated support system through the following modules:

Crop Disease Reporting & AI Diagnosis

- Farmers upload crop photos and symptoms.
- AI gives an initial diagnosis with confidence score.
- Field Officers add expert comments and recommendations.
- Nearby FO can schedule an on-site visit.

Company Store Module

- Pesticide companies list products, offers, pricing, and usage details.
- Farmers compare products and contact companies.

Solar Irrigation Installer Module

- Installers list solar pump/turbine services.
- Farmers request installation, maintenance, or quotations.

Social Media & Event Promotion Module

- Companies add social media links, WhatsApp groups, and upcoming event links.
- Farmers get updates about promotions, training sessions, and product launches.

Additional Features

- Real-time notifications
- Ratings & reviews
- Secure role-based access

4. User Roles

Farmer, Pesticide Company, Field Officer, Solar Installer, Admin.

5. Technology Stack

Frontend

- **HTML5**
- **CSS3**
- **JavaScript (React. Js)**
- **Tailwind CSS**

Backend

- **PHP**
- **Node.js (Express.js)**
- **Python (Django or Flask)**

Database

- **MySQL or MongoDB**

AI Model Integration

- Pretrained model (Python)
- API-based integration

Other Tools

- Cloud storage (Firebase / AWS S3)
- Admin Panel (custom HTML/PHP or Django Admin)

6. Expected Outcomes

- Faster expert support for farmers
- Better market reach for companies
- Improved access to solar irrigation providers
- Enhanced communication through social media integration
- Complete digital transformation of agricultural assistance

7. Conclusion

AgroSphere is a scalable, user-friendly agricultural support platform that combines AI assistance, expert analysis, product management, social media promotion, and solar service accessibility to empower farmers and improve agricultural outcomes.