



कृषि एवं किसान
कल्याण मंत्रालय
MINISTRY OF
AGRICULTURE AND
FARMERS WELFARE



NATIONAL BANK FOR
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Team Details:

Team Name: Tribalag

Team Leader Name: Ankika Giri

Problem Statement: Tech Solutions Making Regenerative Agriculture Remunerative

Project Title:

Fruit Tree Planting Lifecycle Management Solution

Objective: Develop an IT-enabled platform to manage fruit tree planting, provide additional income to farmers, and alleviate climate change impacts.

Key Features:

- Farmer Portal:
- Vriksha Sevak Portal:
- Administrative Portal:
- Maps:

Goals:

- Support farmers in managing fruit tree planting and earning a steady income
- Alleviate climate change impacts through carbon credit ecosystem
- Scale up the project to tribal districts in Jharkhand, Sikkim, and West Bengal

Current System:

- Manual process with Vriksha Sevak supporting farmers in each cluster
- Data collection, sapling distribution, and fruit marketing done manually

Proposed System:

- IT-enabled platform for efficient management and tracking
- Three portals for farmers, Vriksha Sevak, and administrators
- Maps and geo-tagging for location tracking

Opportunities

How different is it from any of the other existing ideas?

1. Tribal District Focus:
2. Comprehensive Lifecycle Management:
3. Multilingual Support:
4. Integration with State-Level Support:
5. Carbon Credit Ecosystem:
6. Aggregation Power:
7. Phased Implementation:

How will it be able to solve the problem?

1. Predictable income streams
2. Access to expertise and resources
3. Efficient supply chain management
4. Climate change mitigation strategies
5. User-friendly and inclusive platform

USP of the proposed solution

- **Comprehensive Lifecycle Management:** End-to-end support for farmers, from planting to harvesting and selling
- **Multilingual Support:** Personalized voice calls and platform support in local languages, ensuring inclusivity
- **Carbon Credit Ecosystem:** - Additional revenue stream for farmers through carbon credits, promoting sustainable practices
- **Integration with State-Level Benefits:** Streamlined access to subsidies, benefits, and resources for farmers
- **Geo-Tagging and Monitoring:** Real-time tracking of plant health, enabling data-driven decisions
- **Aggregation Power:** - Connecting farmers with relevant players in the supply chain, amplifying their collective impact
- **Phased Implementation:** - Iterative approach ensuring successful adoption and scaling up

List of features offered by the solution

Farmer Portal

1. Registration and profiling
2. Demand assessment and capture
3. Personalized voice calls for planting and nurturing guidance
4. Access to weather reports and agro-advisory services
5. Input ordering and management
6. Fruit sales management and market linkage
7. Carbon credit benefits and tracking

Vriksha Sevak Portal

1. Farmer data management and tracking
2. Sapling distribution and management
3. Plant health monitoring and reporting
4. Geo-tagging and mapping of plant locations
5. Truck movement tracking and logistics management

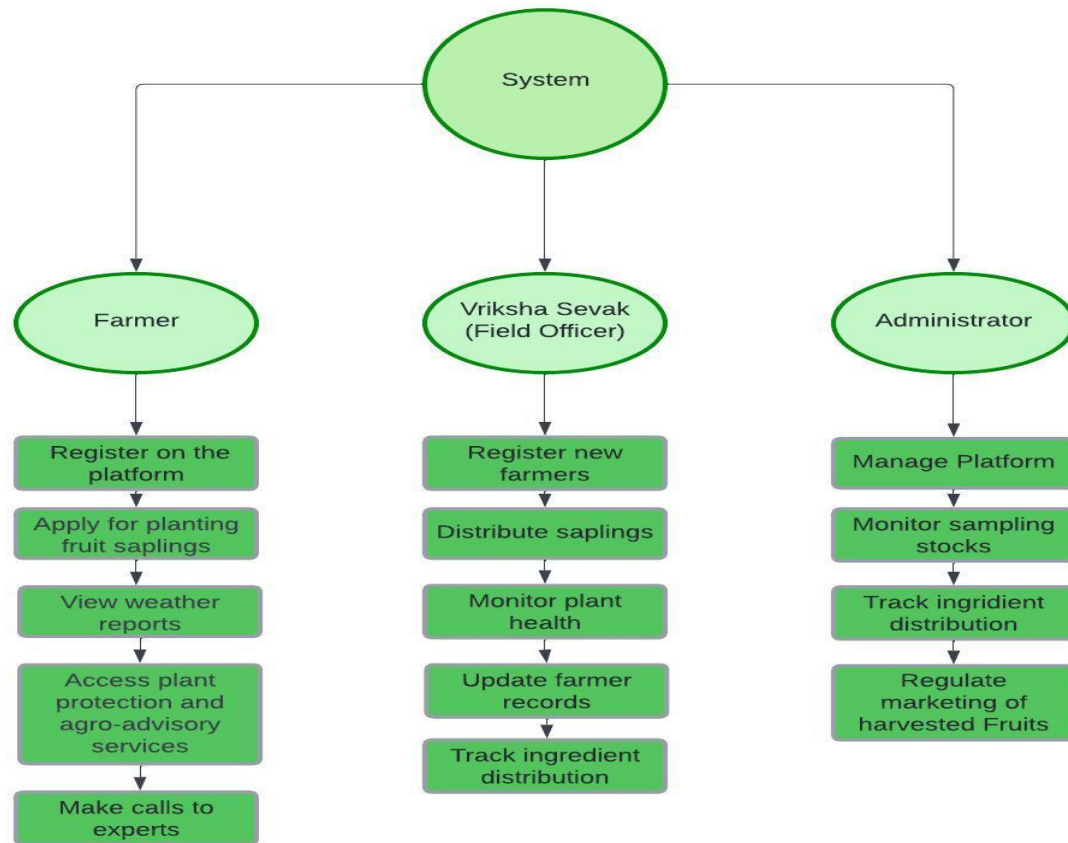
Administrative Portal

1. Overall project monitoring and management
2. Marketing and sales management
3. State-level benefit and subsidy management
4. Carbon credit management and tracking
5. Reporting and analytics dashboard

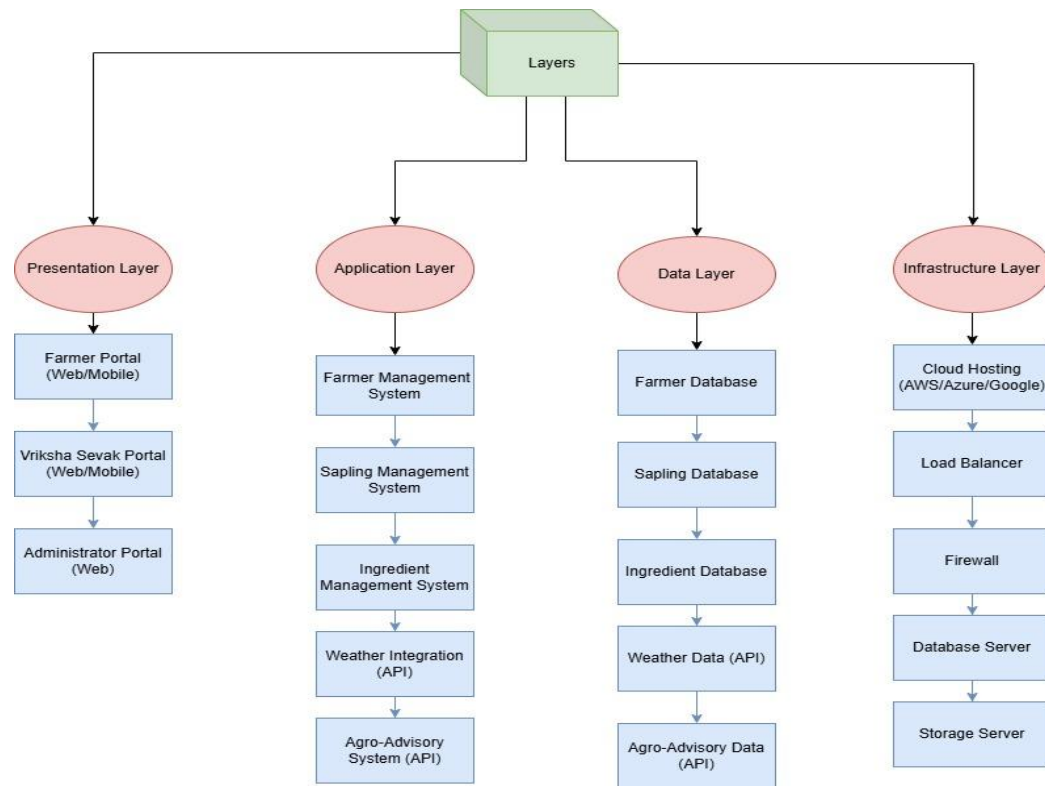
Other Features

1. Multilingual support for farmers
2. Integration with state-level benefits and subsidies
3. Aggregation power for farmers to connect with supply chain players
4. Phased implementation for successful adoption and scaling up

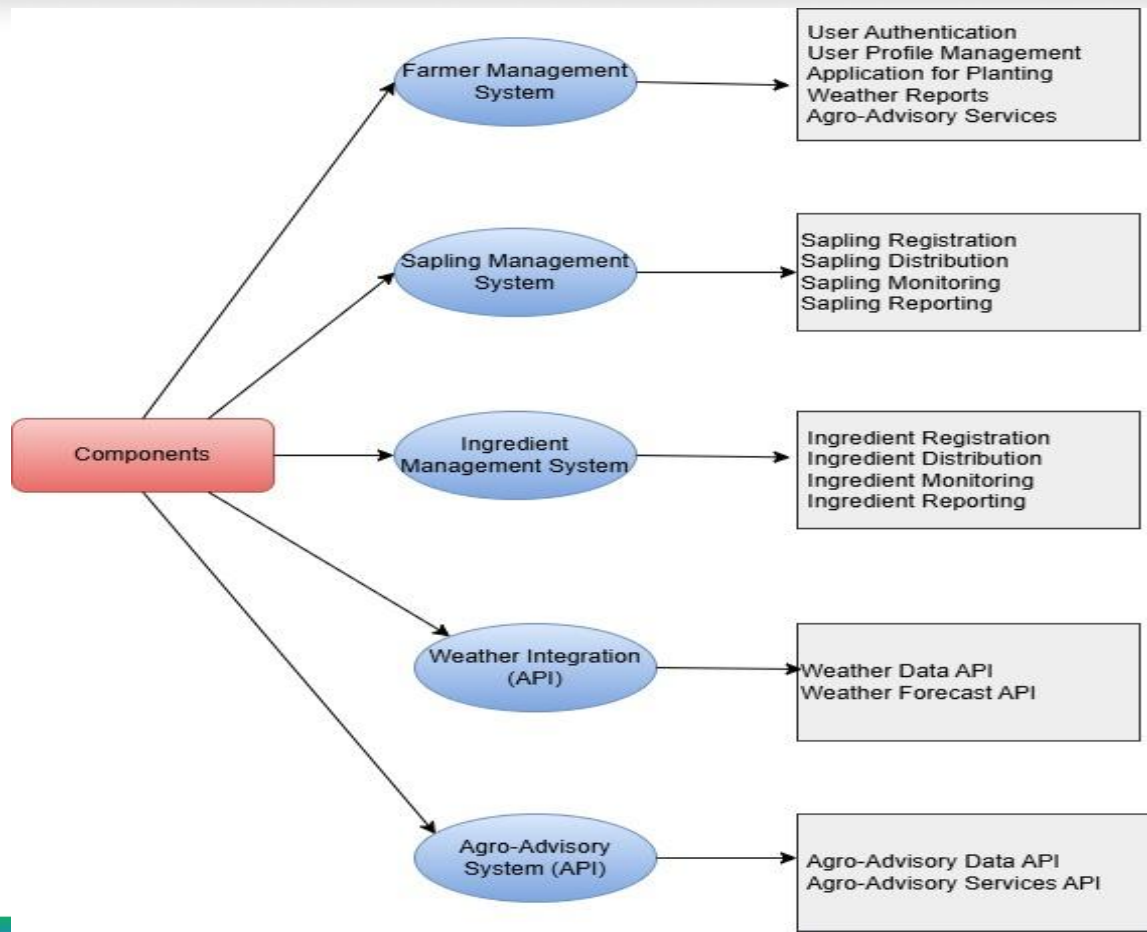
Process flow diagram or Use-case diagram



Architecture diagram of the proposed solution



Architecture diagram of the proposed solution



Technologies to be used in the solution

Frontend:

1. React for building the user interface and user experience.
2. CSS frameworks like Bootstrap for styling and layout.

Backend:

1. Node.js with Express.js for building the server-side logic.
2. Database: MongoDB for storing user data and application settings.
3. Authentication: JSON Web Tokens (JWT) for secure authentication.



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