AgriTech

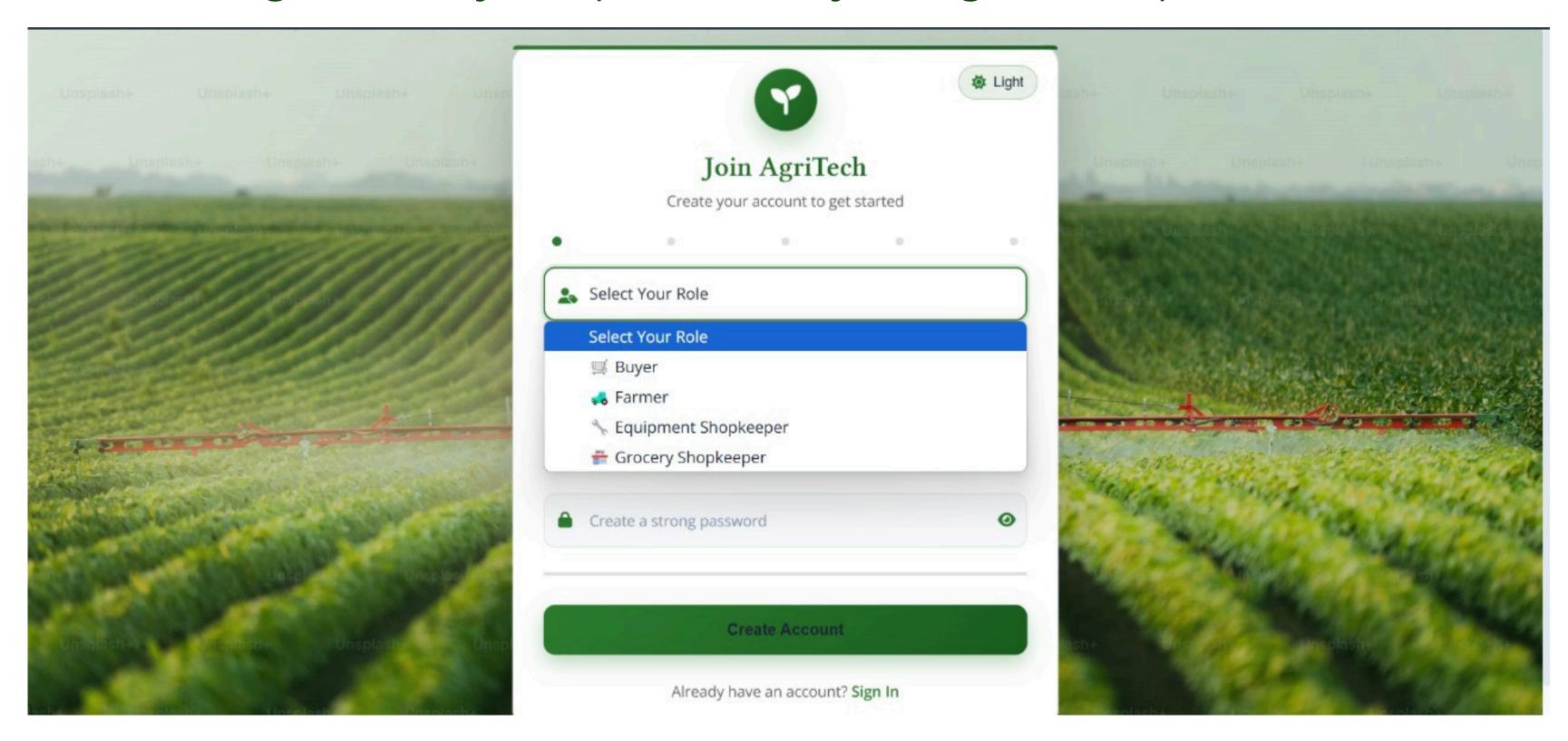
Al powered platform revolutionaizing agriculture by solving every problem from seed to harvest & beyond.



Our Platform Benefits

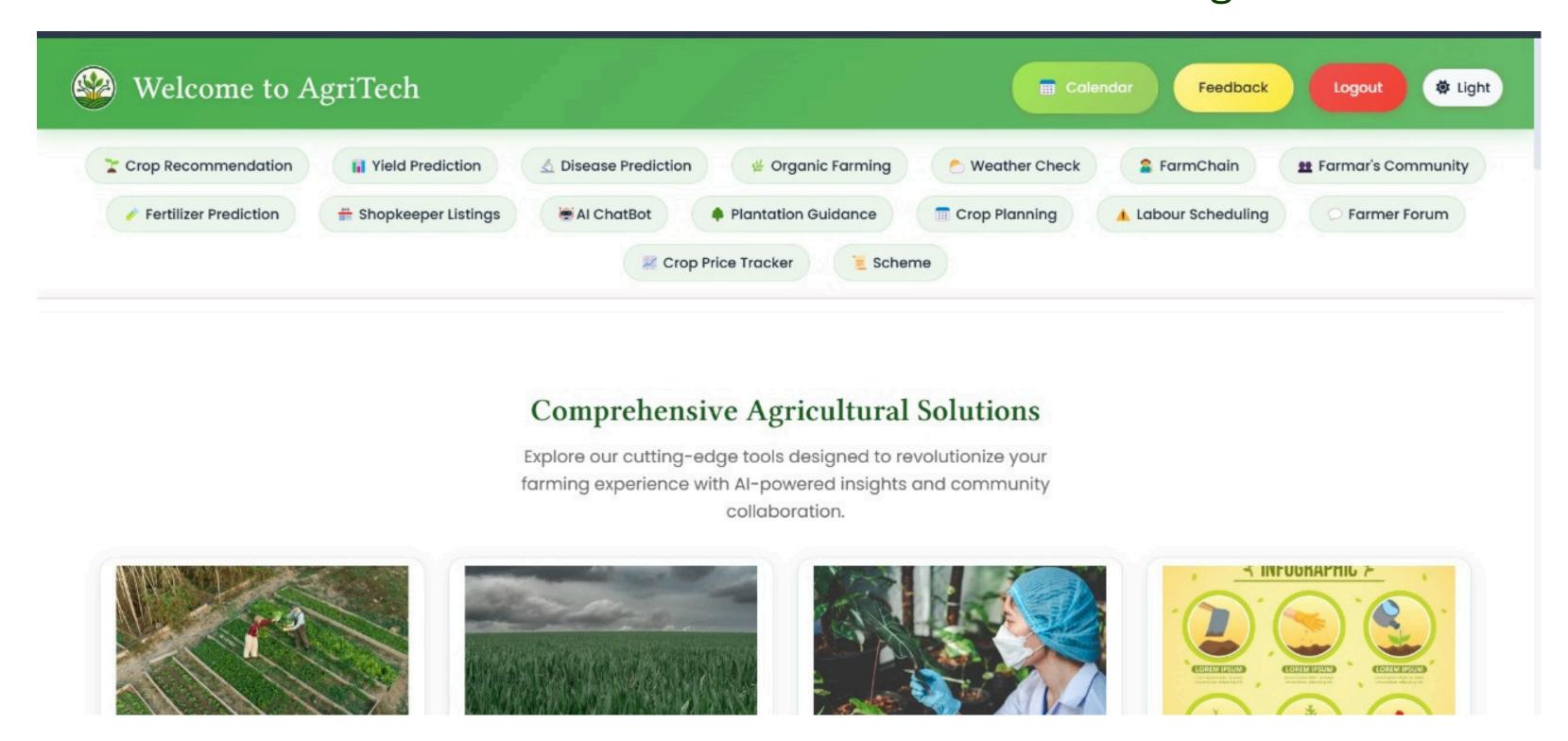
SignUp

Register easily and personalize your AgriTech experience.

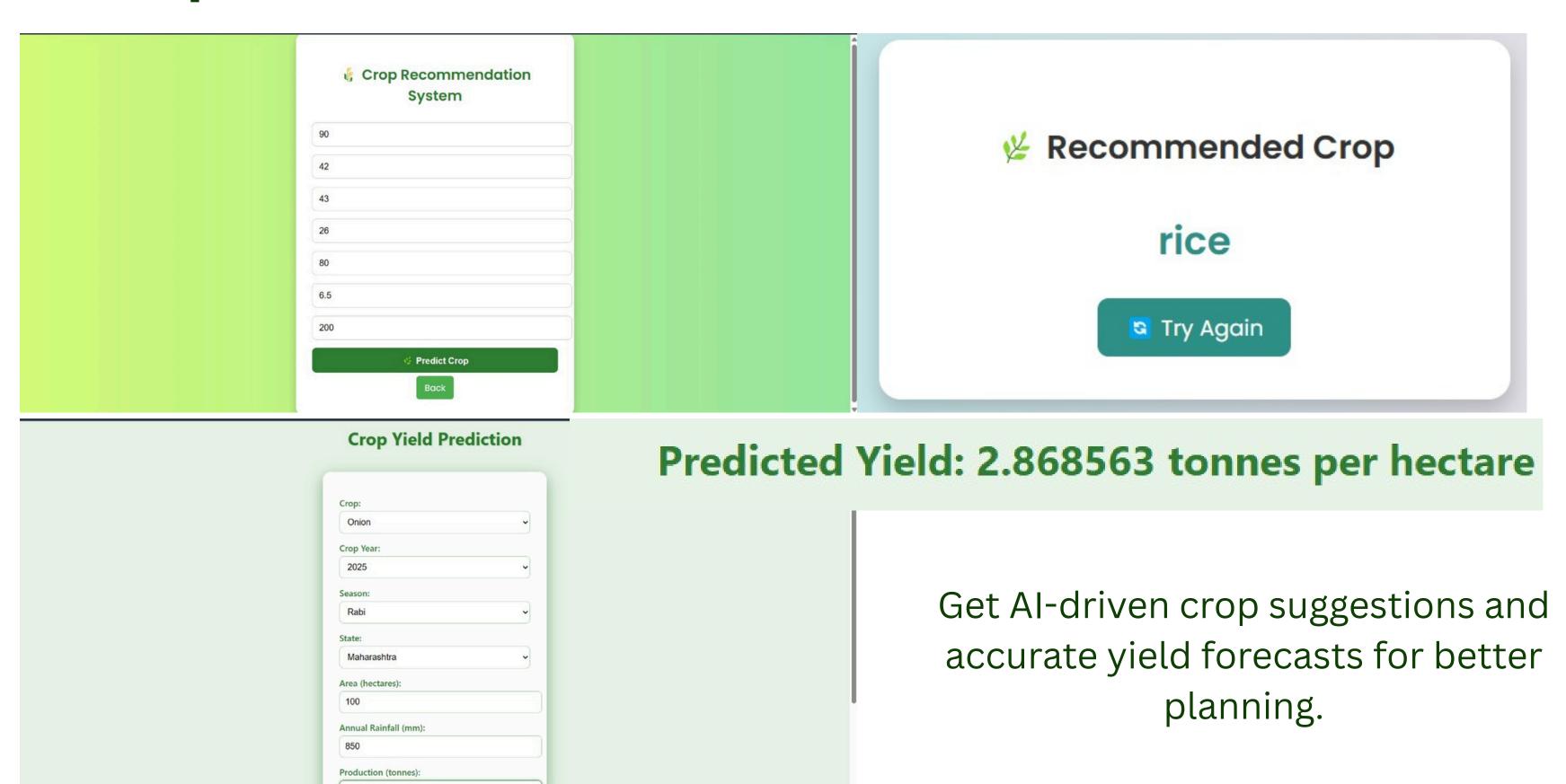


Home Page

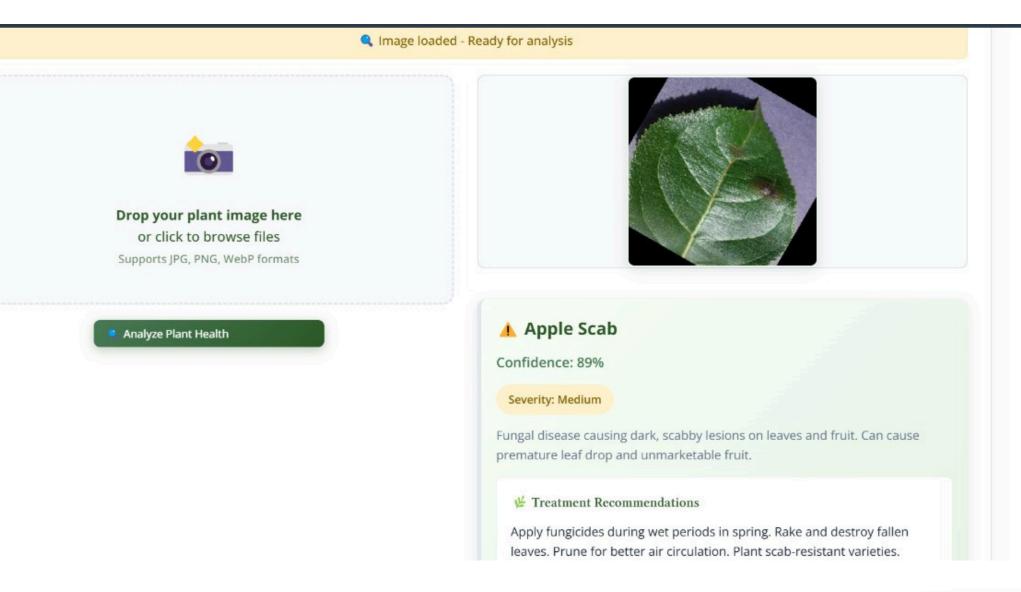
Your all-in-one hub for smart and sustainable farming solutions.



Crop Recommendation and Yield Prediction



Disease Prediction and Organic Farming

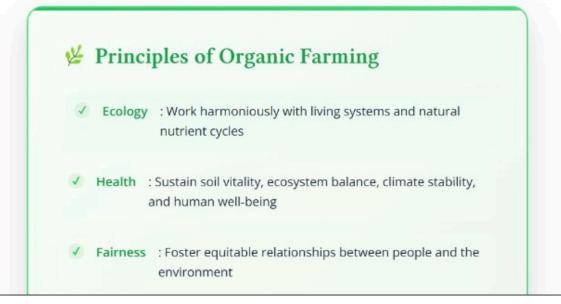


Disease prediction helps farmers by providing a tool to proactively identify plant diseases early, allowing them to take timely action and prevent crop failure.

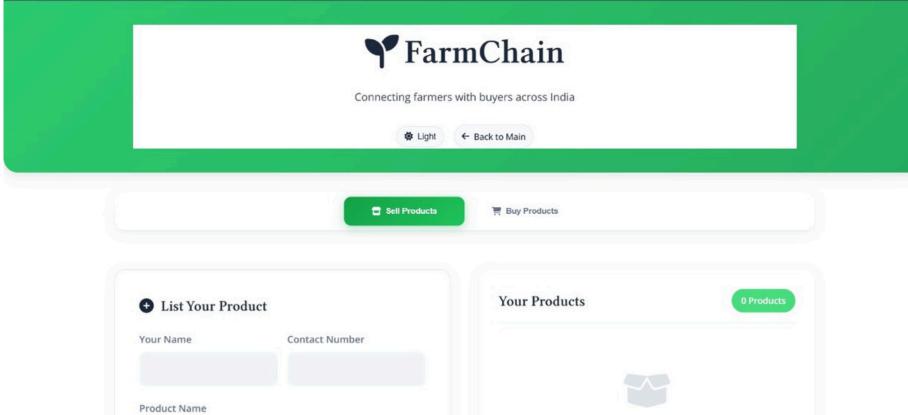


Discover sustainable agricultural practices that enhance soil health, preserve ecosystems, and produce premium quality crops through time-tested organic methods.

Organic farming serves as a guide for farmers, offering eco-friendly methods and techniques to sustainably cultivate crops while preserving soil health and biodiversity.

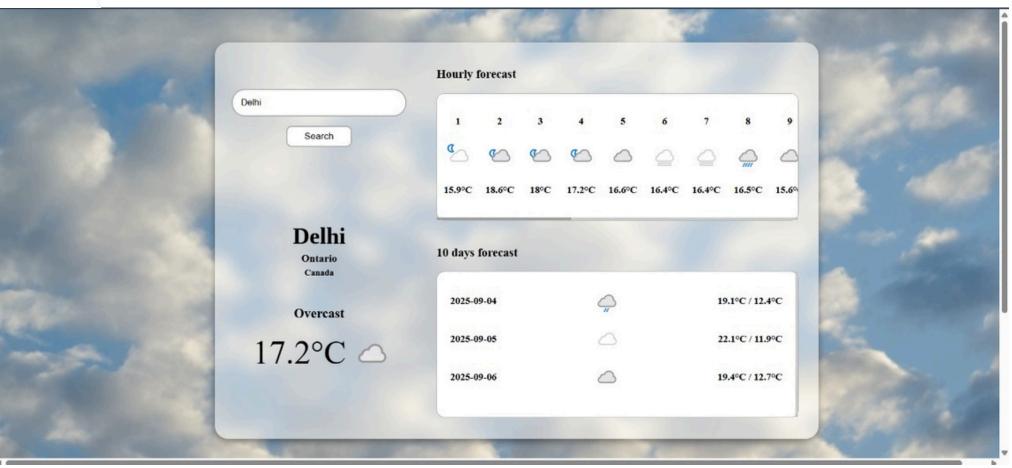


Weather Check and Farm Chain



FarmChain provides a direct-toconsumer platform connecting buyers and farmers, cutting out middlemen to ensure transparency and fairer prices.

Weather feature offers upcoming forecasts, enabling farmers to optimize their planting and crop planning.



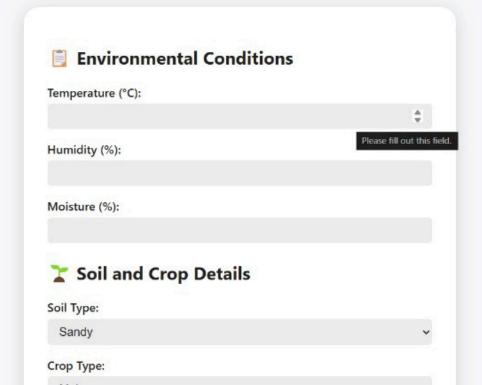
Community and Fertilizer Recommendation



Community feature allows farmers to connect and share knowledge with others in their local area and globally.

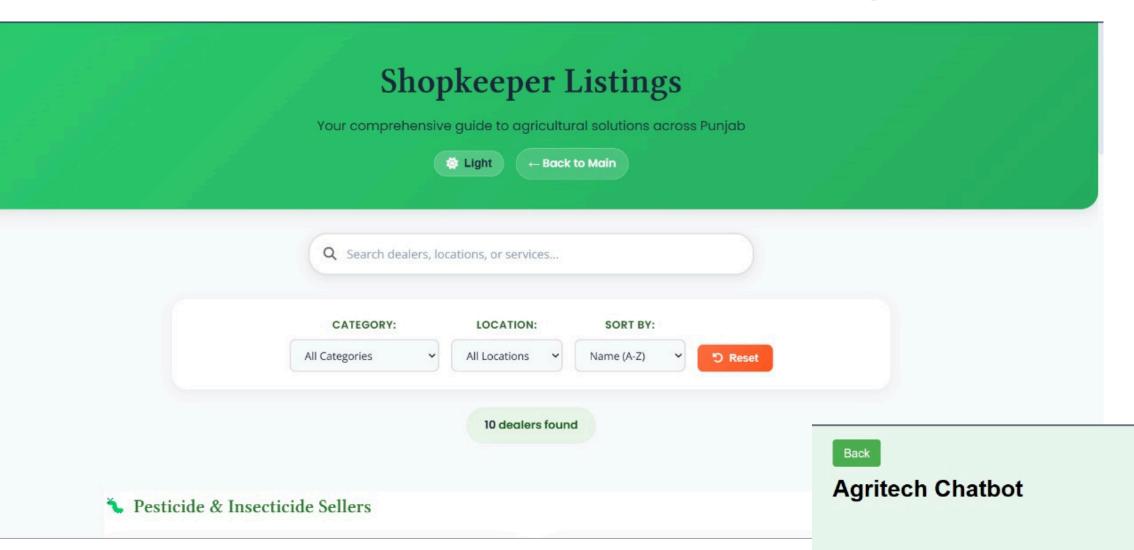
Fertilizer Recommendation System suggests the ideal fertilizers for your farm's specific needs, helping you grow crops more effectively.







Shopkeeper Listings and AgriTech Chatbot



Shopkeeper Listings connects you with local suppliers for all essential farming supplies, from equipment to fertilizers.

Chatbot is an Al assistant that gives farmers instant, on-demand answers to their questions about farming.

Bot: Hello! Ask me about weather, crops, pests, or soil.

You: What is hydroponics?

Bot: Hydroponics is growing plants in nutrient-rich water without soil.

Type your message...

Send

Plantation Guidance and Crop Planning

⟨ Crop Planner Al ★CLight

Research and Development

Selecting the right crops for cultivation is a critical step in agricultural planning. It involves analyzing various factors such as climate, soil characteristics, and market demand to ensure optimal yield and profitability.

1. Assessing Climate Conditions

Climate plays a pivotal role in determining which crops can thrive in a particular region. Key climatic factors to consider include:

- Temperature Ranges: Understanding the average temperatures helps in selecting crops that can withstand local heat or cold.
- · Rainfall Patterns: Analyzing annual precipitation and its distribution is essential, especially for rain-fed agriculture.
- Growing Season Length: The duration between the last and first frost dates influences the types of crops that can be grown.

For instance, in regions like Vidarbha, Maharashtra, farmers are shifting from traditional crops like cotton and soybean to maize due to its higher yield and better market prices, despite challenges like wildlife intrusion.

2. Analyzing Soil Characteristics

Soil health is fundamental to crop productivity. Key soil factors include:

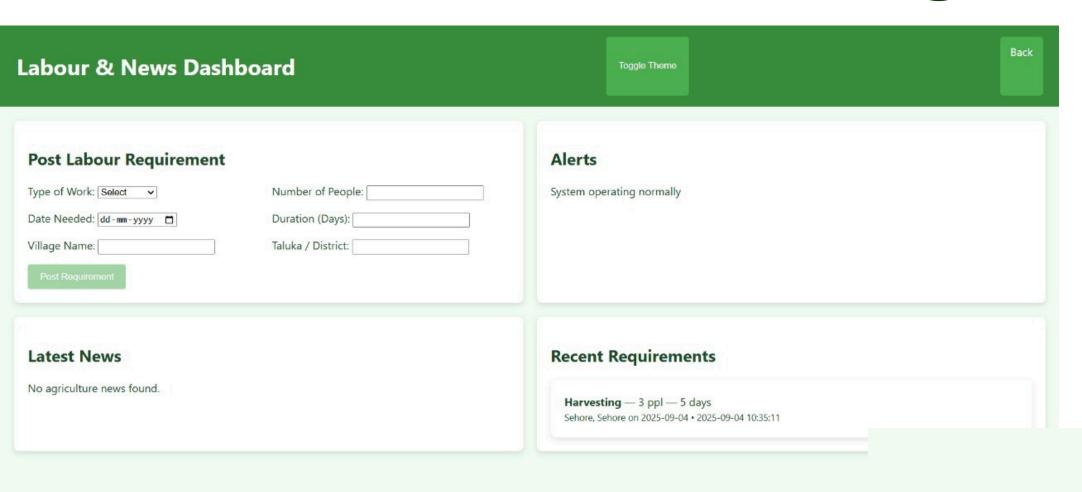
- . Soil Type: Sandy, loamy, or clay soils have different water retention and nutrient profiles.
- pH Levels: Certain crops require specific pH ranges for optimal nutrient uptake.

Plantation Guidance offers expert advice on planting techniques and a step-by-step farming guide, helping farmers ensure a successful harvest.

Crop Planner AI provides intelligent recommendations for crop selection and planting schedules to help farmers maximize their yield and profit.



Labour Scheduling and Farmer Forum

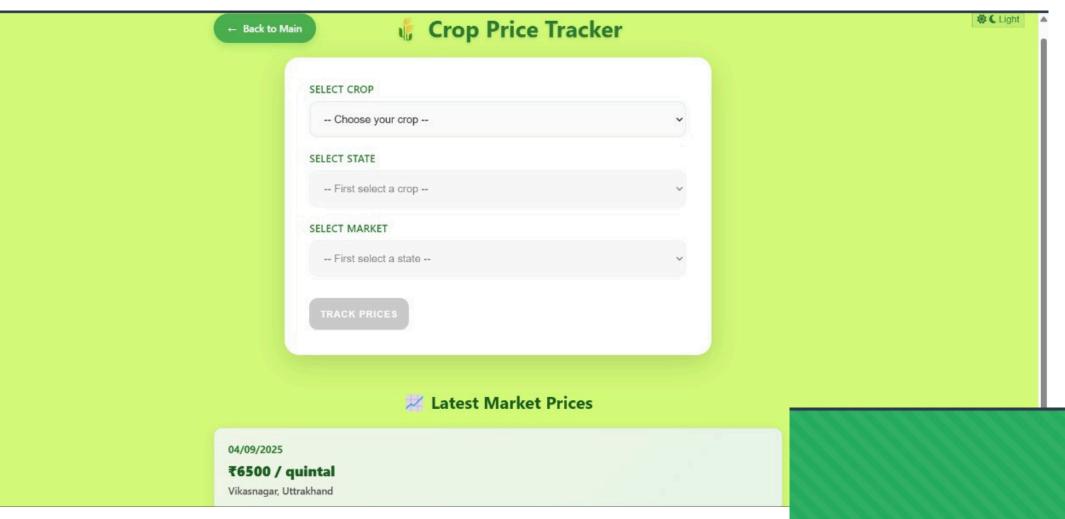


Labor Scheduling feature helps you manage your workforce by providing alerts for labor needs and connecting you with available workers.

Farmer Forum provides a direct communication channel for farmers to connect with the AgriTech admin team.



Crop Price Tracker and Schemes

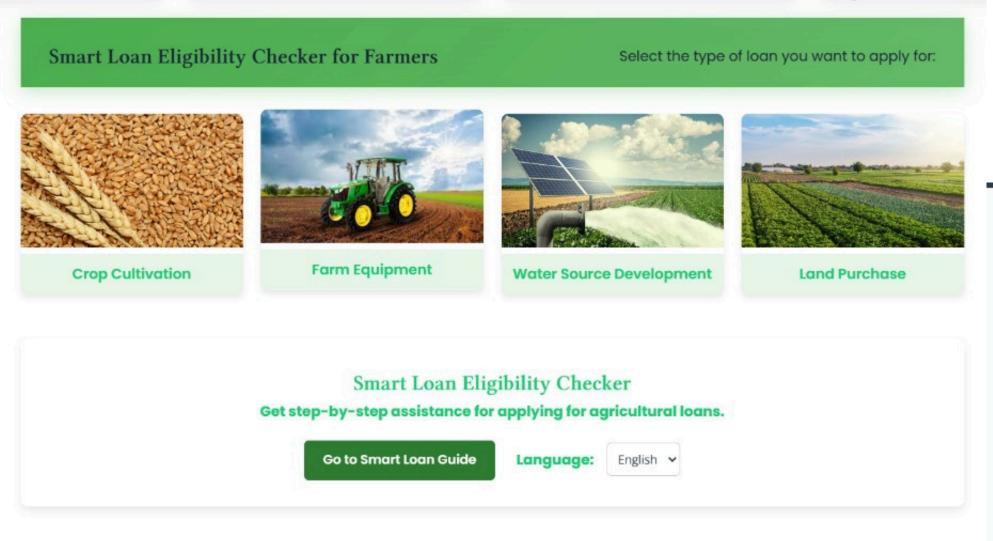


Crop Price Tracker provides real-time market prices to help farmers decide when and where to sell to get the best profit

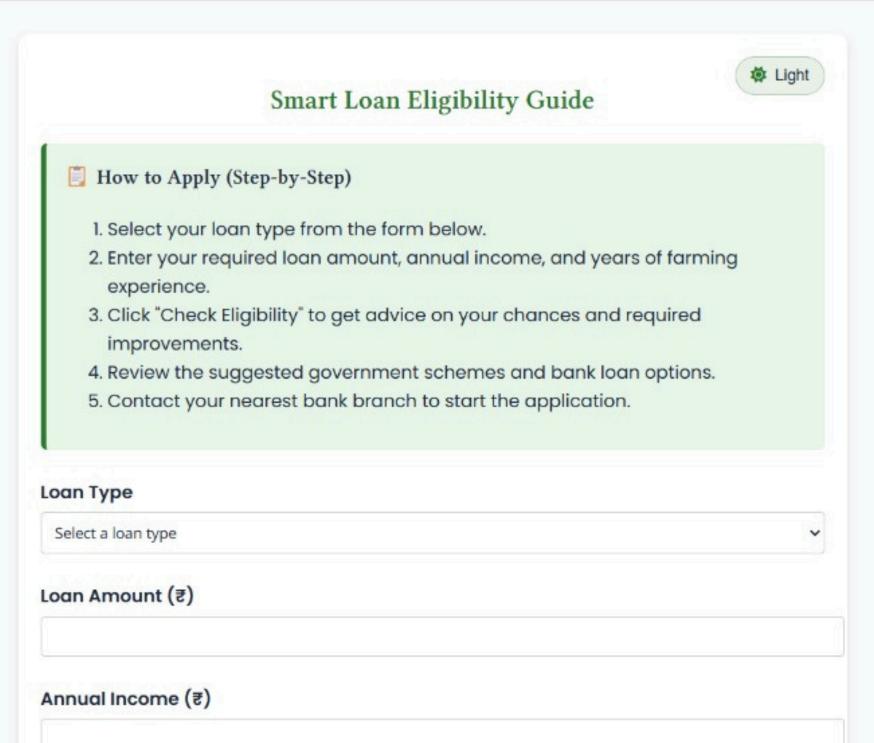
Schemes is a centralized hub where farmers can discover and access all relevant government-provided schemes, subsidies, and financial aid.



Loan Eligibility Predictor



Loan Eligibility feature helps you determine your eligibility for various agricultural loans, making it easier to secure funding for crop cultivation, equipment, and land.



Future Enhancements

- Authentication System.
- Nationwide shopkeeper listings.
- Database Integration.
- Dataset expansion for crop recommendation, yield prediction, disease prediction

Challenges

- Gathering accurate, diverse and real-time data from across regions.
- Ensuring scalability, security and smooth deployment of AgriTech.
- Handling large volumes of user requests, especially during peak seasons.
- Bridging the digital divide and making AgriTech accessible for farmers.

Thank You