

## **Product Requirements Document (PRD)**

**Product Name:** FarmConnect

**Version:** 1.0

**Last Updated:** July 8, 2025

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### **1. Purpose**

FarmConnect is a web-based application that connects farmers and distributors at the state/regional level through a searchable, profile-based community platform. It facilitates discovery and networking (not ordering) between users and supports multi-language access, voice-enabled onboarding, and a simple, farmer-friendly UI.

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### **2. Goals and Objectives**

- Enable farmers to showcase crops and connect with relevant distributors.
  - Enable distributors to find suitable farmers based on location, crop type, and availability.
  - Ensure simplicity and accessibility for users with low digital literacy.
  - Provide multilingual and voice-assisted onboarding experiences.
  - Create a non-transactional, community-based platform.
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### **3. User Roles**

- **Farmer**
- **Distributor**

Each role has a distinct profile, dashboard, and crop management capabilities.

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### **4. Core Features**

#### **4.1 Profile Registration and Onboarding**

- Separate flows for farmers and distributors.
- Required fields: Name, Address, Contact Info, Role Type, Crops.
- Cannot proceed without validating all mandatory fields.
- Optional profile photo/logo.
- AI voice assistant to prompt for each required field (supports Hindi, Marathi, English).

## 4.2 AI Voice Assistant

- Uses Web Speech API or Google Cloud Speech-to-Text.
- Guides users through profile creation by asking:
  - Name
  - Location/Farm address
  - Contact information (phone/WhatsApp)
  - Crop type, quantity, and season
  - Multilingual prompts (EN/HI/MR).

## 4.3 Dashboard

- Sidebar navigation on the left.
- Profile
- Messages (future enhancement)
- Crop Manager
- Logout
- Content Area:
  - **Initial login:** Displays placeholder text like “You haven’t visited any profiles yet.”
  - **Visited Profiles:** Grid of square cards showing previously viewed profiles.

## 4.4 Search & Filter

- Available after onboarding is complete.
- **Farmers can filter distributors by:**
  - Crop Type
  - Location (state/district)
  - Rating
- **Distributors can filter farmers by:**
  - Crop Type
  - Location
  - Availability/Harvest Date

## 4.5 Profile Cards

- Square-shaped cards.
- Information on card:
  - Profile image/logo
  - Name & Location
  - Crop list
  - Star rating
  - View Profile button
- Hover state: border highlight + quick contact icon

## 4.6 Crop Management (Farmer/Distributor)

- Add, Edit, Delete crop entries (no global listing).
- Fields:
  - Crop Name, Variety

- Quantity
- Harvest Date
- Optional image

#### 4.7 Multilingual Support

- UI language options:
  - English, Hindi, Marathi (initial)
  - Implemented using `react-i18next` or equivalent i18n library.
  - All UI elements, system messages, voice prompts localized.
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### 5. Technical Stack

- **Frontend:** React or Vue.js, Tailwind CSS, react-i18next
  - **Backend:** Node.js/Express or Django/DRF
  - **Database:** PostgreSQL or MySQL
  - **AI/Voice:** Web Speech API or Google Speech-to-Text
  - **Hosting:**
  - Frontend: Vercel/Netlify
  - Backend: AWS/GCP/Heroku
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### 6. Security & Privacy

- HTTPS enforced
  - Secure authentication (JWT or OAuth)
  - Passwords stored using bcrypt
  - Input validation and sanitation
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### 7. Future Enhancements

- Chat/Messaging between users
  - Community forums for agricultural discussion
  - Insights dashboard (regional crop trends, demand tracking)
  - Mobile application with offline support
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### 8. Milestones

Phase	Deliverables	Timeline
Phase 1: Planning	Wireframes, PRD, i18n setup, AI voice POC	Week 1-2
Phase 2: MVP Build	Registration, Profile, Crop Mgmt, Search	Week 3-5

Phase	Deliverables	Timeline
Phase 3: Testing	UX feedback, accessibility, translations	Week 6
Phase 4: Launch	Live deployment, user onboarding	Week 7

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## 9. Success Metrics

- % of users who complete profile via voice assistant
- Number of daily connections (profile views)
- Language selection rates (EN vs HI vs MR)
- Profile completeness rate
- Average time to onboard new users

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*FarmConnect is designed to empower regional agriculture by building accessible, trust-based connections between farmers and distributors.*