# **Detailed Portal Requirements for Krishi Mitra**

1. **Login Portal**
2. **User Login**

* Username: username/Phone number
* Password: 8 letter password or OTP

1. **User Creation**

Different types of Users

* Super Admin ( Krishi Mitra)
* Admins (Krishi Mitra / Government Officials)
* Farmer
* Buyer
* Delivery
* Vendor (Phase 2)
* Customer Support staff
* Ground Support staff

1. **Forgot Password**

Ways to reset:

* Re-enter new password from prompt page
* Via OTP authentication

## **1. Farmer Portal**

### **1.1 User Management and Profile**

1. **Registration and Authentication**
   * Secure sign-up process with email verification / OTP
   * Two-factor authentication option (not a suitable option for farmers , just use OTP)
   * Password reset functionality
   * Single sign-on integration with government farmer ID systems (if applicable)

VKT: Should be able to be done via Aadhar card, Not all the states have the Farmer ID Systems and its better we skip this step for now as part of Phase 1.

Let us just provide a filed for uploading AADHAR card while registering

1. **Profile Management**
   * Personal details (name, contact information, address)
   * Farm details (location, size, soil type, irrigation facilities, type of crop)
   * Crop specialization and history
   * Certifications and awards
   * Bank account details for payments / UPI Integration
2. **Dashboard**
   * Overview of active listings, ongoing auctions, and recent transactions
   * Quick access to create new listings
   * Notifications for bids, messages, and important platform updates
   * Summary of earnings and pending payments , Payment status
   * Delivery Status

### **1.2 Produce Listing and Auction Management**

1. **Listing (Create /Delete)**
   * Step-by-step wizard for creating new produce listings
   * Fields for produce type, quantity, quality grade, expected harvest date
   * Option to add multiple high-quality images and videos (mandatory)
   * Ability to set minimum bid price and reserve price ( min bid price should be generated by the app based on the govt daily pricing and the bid should not tolerate more than + 10-15% variance)
   * Auction duration settings (start time, end time, auto-extension options)
   * Take down the listing
2. **Auction Monitoring**
   * Real-time updates on bidding activity
   * Visual representation of bid history (e.g., graph of bid prices over time)
   * Alerts for new bids, outbids, and auction closing
   * Option to communicate with bidders through a built-in messaging system
3. **Post-Auction Actions**
   * Review highest bid details and bidder information
   * Accept or reject the winning bid with reason
   * Automatic relisting options for unsold produce
   * Feedback system for rating transactions and buyers
   * Loading the produce (uploading the picture after loading into vehicle)
   * Tracking the Delivery process

### **1.3 Inventory and Crop Management**

1. **Inventory Tracking**
   * Real-time update of current stock levels
   * Categorization by crop type, harvest date, and quality grade
   * Low stock alerts and automatic listing suggestions
2. **Crop Planning**
   * Calendar view for planning future crops
   * Integration with weather forecasts for optimal planting times (phase 3)
   * Yield prediction based on historical data and current conditions (phase 3)
   * Recommendations for crop rotation and diversification (phase 3)
3. **Quality Control**
   * Built-in guidelines for quality grading of different produce
   * Option to request third-party quality certification
   * Image recognition tool for preliminary quality assessment
   * Tracking of quality-related feedback from buyers

## **2. Vendor Portal**

### **2.1 User Management and Company Profile**

1. **Registration and Authentication**
   * Secure sign-up process with business verification
   * Multi-user access with role-based permissions (e.g., admin, buyer, finance)

(Crop Buyer, Vendors as listed in Business Requirement document)

* + Two-factor authentication and single sign-on options

( OTP Integration same like farmer)

* + Password management and access control logs

1. **Company Profile (optional, we should be able to accommodate independent buyers as well)**
   * Company details (name, registration number, address)
   * Business type and scale of operations
   * Purchasing history and preferences
   * Certifications and compliance documents
   * Bank account and payment method management
2. **Dashboard**
   * Overview of active bids, won auctions, and recent purchases
   * Quick access to browse auctions and place bids
   * Notifications for outbids, auction results, and messages
   * Summary of expenditures and upcoming payments
   * Scheduling a delivery using the listed Delivery or Logistic personnel

### **2.2 Auction Participation and Bidding**

1. **Browse Auctions**
   * Advanced search and filter options (by crop, location, quantity, etc.)
   * Map view of available produce with distance calculation
   * Watchlist feature for interesting auctions
   * Automated matching of auctions to buying preferences
2. **Bidding System**
   * Quick bid placement with predefined increments
   * Auto-bidding feature up to a maximum price
   * Real-time notifications for outbids and auction status changes
   * Bid retraction with valid reasons (time window limited)
3. **Auction Analytics**
   * Historical price trends for specific produce and regions
   * Competitor analysis (anonymized bidding patterns)
   * Predictive pricing suggestions based on market data
   * Personal bidding statistics and success rate analysis

### **2.3 Purchase Management and Logistics**

1. **Order Processing**
   * Automatic generation of purchase orders for won auctions
   * Integration with internal inventory management systems
   * Bulk order management for multiple won auctions
   * Custom fields for internal reference numbers and notes
2. **Logistics Coordination**
   * Built-in transport booking system with multiple service providers
   * Route optimization for multiple pickups
   * Real-time tracking of shipments
   * Digital documentation (e-way bills, quality certificates, etc.)
3. **Quality Assurance**
   * Option to request pre-shipment quality inspection
   * Mobile app for on-site quality checks during pickup
   * Dispute resolution system for quality-related issues
   * Integration with lab testing services for detailed quality reports

## **3. Admin Portal**

Will be different for each kind of Admin.

We need separate admins for Farmers/Buyer/Vendor , Finance Admin, Customer Support,

Ground Staff, Network Admins

### **3.1 User and Content Management**

1. **User Administration**
   * Approval workflow for new farmer and buyer/vendor registrations
   * User profile verification and background checks
   * Ability to suspend, ban, or delete user accounts
   * Audit logs of all administrative actions on user accounts
2. **Content Moderation**
   * Review and approval process for produce listings

(Should be able to recheck pictures with previously uploaded pictures)

* + Automated flagging system for potentially fraudulent listings
  + Moderation tools for user-generated content (reviews, messages)
  + Ability to edit or remove non-compliant content

1. **Knowledge Base Management**
   * CMS for creating and updating FAQs, help articles, and tutorials
   * Version control for content updates
   * Multi-language support for content localization
   * Analytics on content engagement and helpfulness

### **3.2 Platform Monitoring and Analytics**

1. **Real-time Dashboard**
   * Live statistics on active users, auctions, and transactions
   * Alerts for unusual platform activity or performance issues
   * Key performance indicators (KPIs) with customizable thresholds
   * Geographical heat maps of user activity and transactions
2. **Financial Monitoring**
   * Real-time tracking of all financial transactions
   * Automated reconciliation with payment gateway reports
   * Detection of suspicious financial activities
   * Generation of financial reports (daily, weekly, monthly)
3. **Market Analysis Tools**
   * Price trend analysis across different produce and regions
   * Supply and demand forecasting models
   * Seasonal pattern recognition for various crops
   * Benchmarking tools to compare platform performance with market indices

### **3.3 System Configuration and Maintenance**

1. **Platform Settings**
   * Configuration of platform fees and commission structures
   * Management of payment terms and methods
   * Setup of platform-wide rules (e.g., minimum bid increments, auction durations)
   * Control over feature rollouts and A/B testing
2. **Integration Management**
   * Configuration of third-party service integrations (payment gateways, logistics providers)
   * API key management and access control
   * Monitoring of API usage and performance
   * Troubleshooting tools for integration issues
3. **System Health and Security**
   * Real-time monitoring of system performance and uptime
   * Automated backup and disaster recovery procedures
   * Security vulnerability scans and penetration testing tools
   * Access to system logs for auditing and troubleshooting
4. Super Admin Portal

* Should be able to reset the various admins as listed under the Admin Portal
* @ Sai …. Please breakdown the portal system requirements accordingly

1. Customer Support Portal

5.1 Customer Admin Portal

5.2 Customer Support Staff

* Active Call Logging
* Active Ticket Tracking
* Monitoring the Status of Tickets
* Resolution process
* Allocation of Tickets to Ground staff as required for resolution

1. Ground staff Portal

6.1 Farmer Onboard Staff per Mandal

* Should be able to create logins for Farmer

6.2 Ticket Resolution staff per Mandal

* Should be able to see the list of assigned tickets
* Should be able to transcript the verification
* Should be able to upload complaint resolution pics
* Closing the tickets

## **Quick Overview:**

Here's a summary of the key points for each portal:

1. **Farmer Portal:**
   * Focuses on user management, produce listing, auction management, and crop planning.
   * Emphasizes ease of use for farmers with varying levels of technical expertise.
   * Integrated crop management tools to help farmers optimize their production.
2. **Vendor Portal:**
   * Centered around efficient auction participation, purchase management, and logistics coordination.
   * Provides advanced tools for market analysis and bidding strategies.
   * Emphasizes quality control and seamless integration with vendors' existing systems.
3. **Admin Portal:**
   * Concentrates on user and content management, platform monitoring, and system configuration.
   * Provides powerful tools for market analysis and financial oversight.
   * Ensures platform integrity through content moderation and system health monitoring.