

# Vision 1.0 - Document

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## Document Version

Version	Date	Description	Authors
V1.0	22nd February 2024	Initial Vision Document	Waheed Ghulzar Ammad Ashraf Tayyab Attiq

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## **Cropify** (An agri digital marketplace)

*“ When Farmers Win, We All Do ”*

## **2. Introduction**

### **2.1 Purpose**

This document aims to gather, analyze, and define high-level needs and features of the Farmer and buyer system. It focuses on the capabilities needed by the stakeholders, and the target users, and why these needs exist. The details of how the Agri Digital Marketplace fulfills these needs are detailed in the use case and supplementary specifications.

### **2.2 Scope**

This Vision Document applies to the Agri Digital Marketplace that our team will create. Agri Digital Marketplace is the name of our web app that connects farmers and buyers of agricultural products on a digital B2B platform. It enables users to trade directly, negotiate fair prices, reduce transaction costs and risks, access a barter system, and join a thriving agricultural community.

Farmers who want to sell their agricultural products and buyers, such as exporters and major dealers, who want to buy these products directly from the farmers, will be the main users of this app. This app will be made keeping in mind an existing web application, Agrimp. The respective system will be controlled on phones or via laptops when connected to the internet.

### **2.3 Definitions, Acronyms, and Abbreviations**

**Food processors:** Businesses that change raw materials (agri material) to final products.

**Food manufacturers:** Businesses that produce usable items from these raw materials

**Food retailers:** who sell eatables and food products to end consumers.

**Industrial buyers:** Buyers who purchase raw materials not for food but for biofuel etc.

### **2.4 References**

TBD

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### 3. Business Opportunity

Agri Digital Marketplace will aim to deliver value both to the buyer and the farmer by removing the intermediaries.

- Agri Digital Marketplace also aims to create ease for both farmers and customers and make them click away. Rather than struggling to get a good buyer and seller, both farmers and buyers respectively contact each other.
- When the buyer and seller go through a deal, Cropify will charge them a certain percentage of the overall price.

### 4. Problem Statement

<b>The Problem</b>	<p>Farmers consistently put in hard work, but they face two major obstacles.</p> <ul style="list-style-type: none"><li>- First, they don't get paid enough for their produce because middlemen and dealers demand astronomical commissions from buyers, lowering the farmers' take-home pay.</li><li>- Second, due to financial limitations—farmers typically receive their income only at the end of the season—buying necessary pesticides during the farming season is challenging. Their financial stability and profitability are hampered by these problems collectively.</li></ul>
<b>Affects</b>	<p>Farmers, who put in a lot of effort to produce agricultural products, are impacted by this problem.</p>
<b>The Impact Of which is</b>	<p>Due to this issue, farmers find it difficult to make a fair living from their labor-intensive farming activities, which over time may result in financial instability and decreased agricultural productivity. Additionally, it keeps farmers trapped in a cycle of poverty, impeding rural development.</p>

<p><b>A Successful Solution would Be</b></p>	<p>A successful solution would be a web app that allows farmers to communicate directly with buyers, such as exporters and large dealers, to negotiate fair prices for their produce, do away with expensive middlemen, and boost their overall profitability <b>by</b> using Agri Digital Marketplace.</p> <p>The web app should also include a barter system that enables farmers to trade their produce for necessary inputs like pesticides, easing their financial burdens and fostering sustainable agricultural methods <b>through</b> Agri Digital Marketplace.</p> <p>This solution would strengthen farmer autonomy, enhance their standard of living, and support the expansion of the agricultural industry as a whole <b>with</b> the <b>Agri</b> Digital Marketplace.</p>
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## 5. Product Position Statement

<b>For</b>	Farmers, Agriculture Cooperatives, Food processors, Food manufacturers, Food retailers, and industrial buyers
<b>Who</b>	are seeking an efficient and innovative way to trade agricultural products
<b>The Cropify</b> (formerly known as Agri Digital Marketplace)	Is a digital B2B agri digital marketplace with an integrated Barter System
<b>That</b>	Empowers users to streamline trading, reduce intermediaries, increase profitability and build a thriving agricultural community
<b>Unlike</b>	<p>other traditional trading methods</p> <pre> graph LR     A[FARMER / COOPS] --&gt; B[CONTACT BUYER]     B --&gt; C[MEETING]     C --&gt; D[NEGOTIATION]     D --&gt; E[SAMPLE CHECK]     E --&gt; F[SALES CONTRACT]     F --&gt; G[ADVANCED PAYMENT]     G --&gt; H[BATCH CHECK]     H --&gt; I[SHIP]     I --&gt; J[CUSTOMS]     J --&gt; K[TRUCK]     K --&gt; L[PRODUCT LOAD]     L --&gt; M[UNLOAD]     M --&gt; N[TRUCK]     N --&gt; O[QUALITY CHECK]     O --&gt; P[DELIVERY]     P --&gt; Q[FINAL PAYMENT]     Q --&gt; R[AGRO-INDUSTRY]   </pre>
<b>Our product</b>	simplifies the process, fosters direct exchanges, and connects users to a digital ecosystem, revolutionizing the way agricultural products are bought, sold, and bartered.



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## 6. Stakeholder and User Descriptions

### 6.1 Market Demographics

Our target market consists of farmers living in agriculturally rich areas and cities. Users fall into two main groups: farmers with surplus agricultural products like grains, wheat, rice, etc., looking to sell directly to buyers such as exporters and major dealers; and farmers facing financial constraints, who seek to exchange their products for fertilizer through contracts with dealers.

### 6.2 Stakeholder Summary

Name	Description	Responsibilities
<b>System Analyst (Non-User)</b>	This is a stakeholder that works with the stakeholders to gather their needs.	Gathers requirements from Stakeholders and converts them into use cases
<b>Requirement Specifier (Non-User)</b>	This is a stakeholder that works with the Analysts to correctly translate requests/needs into requirements to be used for design.	He formalizes the requirements and changes the requirements into technical requirements. He figures out the functional and nonfunctional requirements
<b>Technical Reviewer (Non-User)</b>	This is a stakeholder that must be involved regularly to maintain the development cycle.	Responsible for contributing feedback to the review process.

Name	Description	Responsibilities
<b>Software Architect (Non-User)</b>	This is a stakeholder who is the primary for leading the system development.	Responsible for the software architecture, which includes the key technical decisions that constrain the overall design and implementation of the project.
<b>Project Manager (Non-User)</b>	This is a stakeholder who is the primary for leading the system development.	Plans, manages and allocates resources, shapes priorities, coordinates interactions with customers and users, and keeps the project team focused. It also establishes a set of practices that ensure the integrity and quality of project artifacts.
<b>Market Analyst (Non-User)</b>	This is a stakeholder who will assist our abilities to position our product successfully.	Ensures that there is going to be a market demand for the product's features and the new service.
<b>Farmer(User)</b>	This stakeholder is primarily responsible for using the end system.	They are able to effectively add and update their products, manage their products and profiles, and request machinery and fertilizer through a barter system.

Name	Description	Responsibilities
<b>Buyer(User)</b>	This is a primary stakeholder who will use the end system.	Can manage his profile, chat with the seller, place and cancel product orders, and ask for a sample of the product.
<b>Cropify team(User)</b>	The owner of the system is this stakeholder.	He can inspect the product and generate commodity reports whenever the buyer requests them.

### 6.3 User Summary

Name	Description	Responsibilities	Stakeholder
<b>Farmer</b>	Primary end user of the system	Can efficiently add and manage their product listings, exercise control over pricing strategies, and seamlessly request fertilizer through a barter system. Additionally, they can maintain and update their profiles.	Self
<b>Buyers</b>	Primary end users of the system	Can effortlessly place orders for products, efficiently manage their shopping carts, maintain and update their profiles, check transactions, and even	Self

		order product samples to make informed purchasing decisions.	
<b>Customer Support</b>	End user of the system	Monitoring the status of the system can assist Farmers with system operation.	Self
<b>Cropify Owner</b>	The End user of the system	will generate a report on the request of the buyer	self

## 6.4 User Environment

The user will access the system using their internet-enabled device. It could be either a Personal Computer or a Mobile phone, it's all up to them. On the device, the user will access the Agri Digital Marketplace system through the web browser. On Mobile phones, it can also be accessed through the mobile web version. After opening the app, users will be prompted to log in, after which they can gain their respective access to the Agri Digital Marketplace services.

## 6.5 Stakeholder Profiles

### 6.5.1 Farmer

<b>Description</b>	A primary user that will use the system actively to sell the product they are offering.
<b>Type</b>	This is a casual and daily user, who may or may not have previous technical knowledge.
<b>Responsibilities</b>	Their responsibilities are to offer transparent trades without any compromises on pricing or quality of the product.
<b>Success Criteria</b>	Success is defined by users depending on how efficiently they use the services provided by Agri Digital Marketplace.
<b>Involvement</b>	To test the system in its initial stages, some individuals from every aspect will be asked to stay involved.

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### 6.5.2 Industrial Buyers

<b>Description</b>	This is a commercial individual who will use the system to buy agricultural products from Farmers who are using the system.
<b>Type</b>	This is a casual user, preferably with previous technical knowledge about automated marketplaces.
<b>Responsibilities</b>	They are responsible for bringing forward profitable trades for both the farmers and themselves using the system.
<b>Success Criteria</b>	Success criteria are defined by users efficiently using the system for profitable trades.
<b>Involvement</b>	Representatives of the respective industry will be involved during the testing period to ensure the efficiency of the system.

### 6.5.3 Customer Support

<b>Description</b>	This individual will support system users in operating Agri Digital Marketplace to its full potential.
<b>Type</b>	This is an advanced user who has deep knowledge of the system.
<b>Responsibilities</b>	They are responsible for providing extensive help and support to the users in case of any difficulty.
<b>Success Criteria</b>	Success criteria are defined by the ability of a customer support representative to resolve issues faced by the user.
<b>Involvement</b>	They are actively involved in the whole development process to provide insights on the improvement of the system.
<b>Deliverables</b>	End user support manuals, and technical reference manuals.

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## **6.6 Alternatives And Competition**

1. Agrimp\_**Portugal**
2. MarketGalee\_**India**
3. Agribazaar\_**India**

## **7. Summary of Features**

### **7.1 User Profile Administration**

#### **7.1.1 Manage Account**

Users can customize their profiles as well as their company information.

#### **7.1.2 Remove Account**

Users can delete their account and company information.

#### **7.1.3 Review Pending Payment**

Users can view any pending payments.

#### **7.1.4 Save Favourites**

Users can view any saved offer or bid.

### **7.2 Cart Management**

#### **7.2.1 Add post to cart**

Buyers can add a post to the cart.

#### **7.2.2. Delete From Cart**

Buyers can delete the post from the cart.

#### **7.2.3 Update Cart**

The system updates the cart when a post is added or deleted.

### **7.3 Commodity Listing Management**

**7.3.1 Upload Post of Commodity** (Farmers can upload the post of the commodity.)

#### **7.3.2 Delete Post of the Commodity**

Farmers can delete their listings.

#### **7.3.3 Listing Modification**

Farmers can update their posts.

### **7.4 Price Management**

#### **7.4.1 The Price Calculation**

The system calculates the price of a commodity according to its overall weight.

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## **7.5 Sample Ordering**

### **7.5.1 Order Sample**

Buyers can send a sample request for the commodity.

## **7.6 Barter System**

### **7.6.1 Farmer Request Barter**

### **7.6.2 Exporter Accept Or Reject Request**

## **7.7 Order Management**

### **7.7.1 Track Deals**

### **7.7.2 Deals Cancelation**

## **7.8 Bid Management**

### **7.8.1 Bid Submission (By Exporter)**

Allows exporters to submit price offers.

### **7.8.2 Bid Response (By Farmer)**

## **7.9 Searching and Filtration**

### **7.9.1 Enhanced Discovery**

Facilitates detailed search and filtering options for commodity listings.

## **7.10 Inspection Report**

### **7.10.1 Exporter Request Report**

### **7.11.2 Cropify generates the Report**

## **7.11 User Registration And Verifications**

### **7.11.1 Register Users**

Users can register themselves and their company (choose preferred products).

### **7.11.2 Cropify Verifying**

Verification of the user by the company.

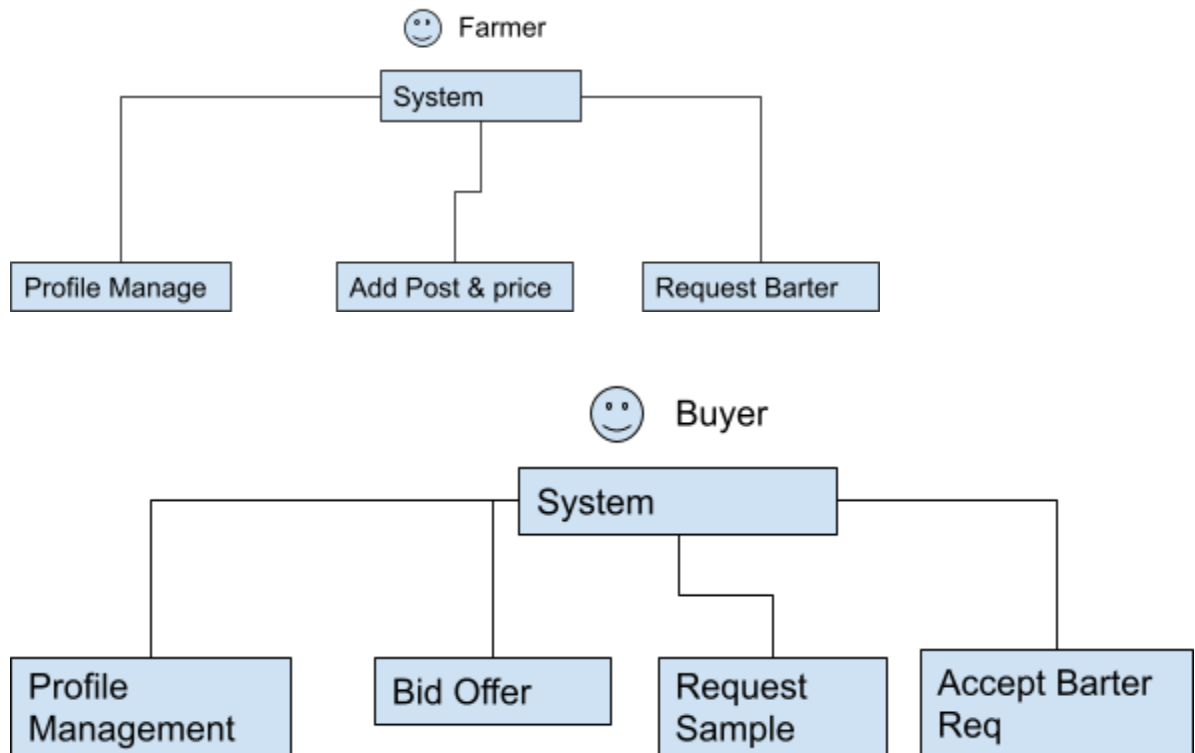
## **7.12 Customer support**

### **7.12.1 Resolving Customer Queries**

## **7.13 Payment Gateways**

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## 8. Product Overview



## 9. Dependencies and Constraints

1. **Security:** The system will be secure and will provide data security. Authentication of the user is done by identifier and password. Users will be able to change their profiles, and customer care has the right to change the system.
2. **Usability:** The system is user-friendly and easy to learn.
3. **Agri-Experts:** Cropify needs experts who should generate reports of the commodities on buyer requests.



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## 10. Cost and Pricing

Item	No. of items	Cost	Total
Developers		TBD	
Printer		TBD	
Others	-	TBD	

## 11. Licensing and Installation

The system should be Installed by the users on mobile devices or PCs, or they can simply use it online even if they don't install it.