



# **Empowering The Farmers**

Theme: Life In Lockdown

# UX Aspirantz

Team



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# Lockdown Scenario

1. How might Ashok, Farmer at rural village, sell harvested low span vegetables & fruits without loss?
2. How might Narayanan, Landlord, sell highly perishable goods like vegetables & fruits to those in need, those who don't have a access to fresh food in lockdown ?
3. How might Karthik, Farmer, export the sugarcane & turmeric with lack of transport and storage ?



# Problem Identified

## PROBLEM DESCRIPTION

How do you think farmers can find a way to sell their highly perishable fruits and vegetables to those who are in need and also make some profit during the lockdown ?

## WHY IS IT A CRUCIAL PROBLEM?

- There are 70% of rural households still depending primarily on agriculture for their livelihood, with 82% of people depending on agriculture as a secondary income
- Some of them need to repay the agriculture loan. And Some are cultivating in Rental land..
- Due to imbalance of supply, common people are facing price hike issues



# Target User Persona



## NARAYANAN

Job Title : **Farmer**

Gender : **Male**

Family Setting : **Married**

Age Group : **30 +**

## DEMOGRAPHICS

Income : **Above Average**

Education : **Graduated College University**

## GEOGRAPHY

Location : **Tindivam (villupuram Dist), Tamilnadu**

## FRUSTRATION

- While supplying the vegetables to market Police couldn't considering the e-passes
- Unable to determine the price
- No cold storage is available to store fruits
- Regular agencies not available

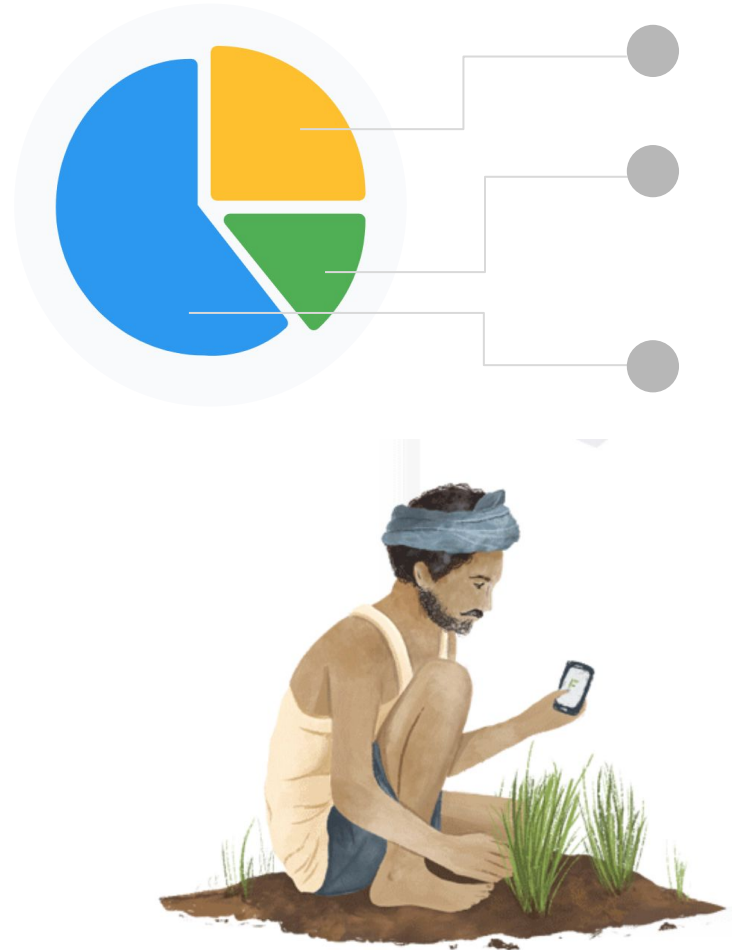
## GOALS

- Get Profit ( 0 % loss)
- Fulfill customer demand
- Utilize/marketing entire goods
- Healthy food, Healthy life

# Explorations

## SOLUTIONS & IDEAS

- Assist farmers to sell their vegetables and crops with the help of agencies
- Seek Organization help ( to be a middleman )
- Organization keeps track of harvesting
- Organization helps in transportation of vegetables and crops from the farmers to the common hub once farmer calls the organization
- For the low lifespan vegetables, cold storage will be provided
- Vegetables and crops will be collected from the common hub by agencies
- Provision of QR Code to each vehicle carrying the vegetables and crops which can be scanned by police department to permit transportation
- Provide opportunities to sell vegetables by vehicles



# Solution

## HOW DOES THE SOLUTION ADDRESS THE IDENTIFIED PROBLEM

Keeping all the problems in mind, such as :

- Waiting in a long queue
- Low span vegetables and fruits going on waste because they are unable to be sold
- Farmers not being able to find agencies
- Local selling prices being two times lesser than the agency's selling price
- Storage and transportation issues during the crisis

We tried to ideate and implement solutions to these problems and the solutions include

- Digital arrangements for selling vegetables and crops with the help of agencies, organization and farmers where the organization will be the middleman
- Vegetables, crops and fruits with low lifespan will be transported using cold storage system and this way wastage of goods can be reduced.
- Token system will be provided to each farmer for security purpose. And since there is a pricing problem, only when the farmer finalises the price and collects the price from the agency, the goods can be sold.
- When the farmers notify the organization either through phone call or digital methods, the organization makes necessary arrangements for the transportation depending on the weight of the goods



# User Experience

- Based on our study 7/10 Farmers have **Smartphones**. They have already adapted to use it.
- The digital platform **saves more time** from waiting in queue to get price for their goods.
- Get **permission** for the transport in a **single process** (vendor)
- **Sell** products from home (farmer)
- Get updates from Mobile (vendor need not visit the Organisation during **lockdown**)

## Prototype links



Farmer

[Prototype link](#)



Vendor

[Prototype link](#)

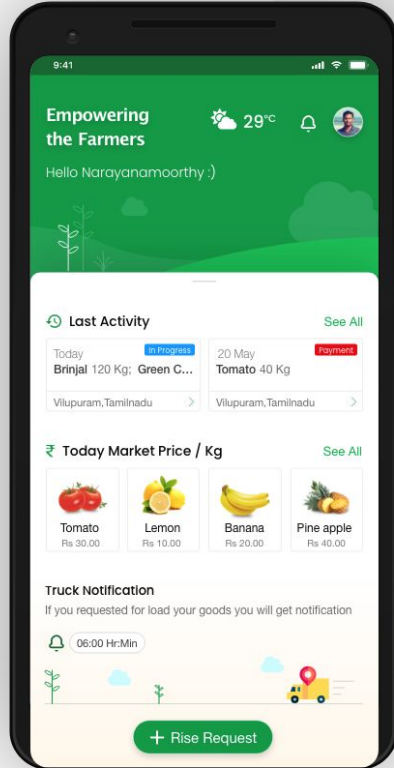


Video

[Story Link](#)



# How Our solution will Act from Farmer's end



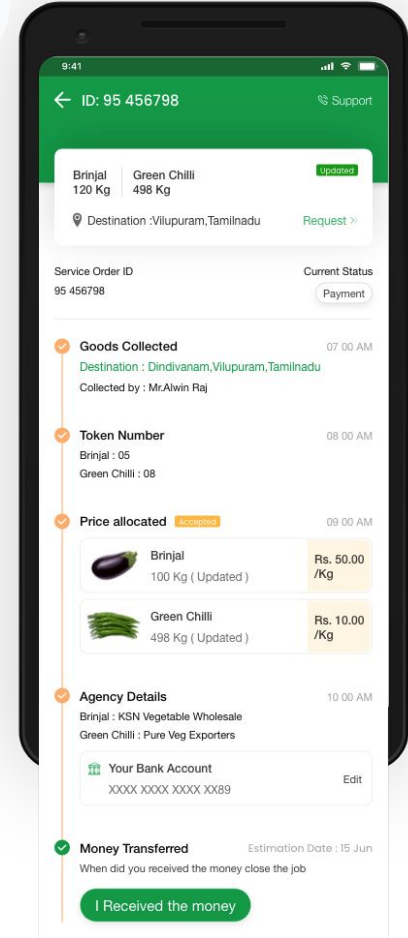
## Landing Screen with necessary information

Application helps

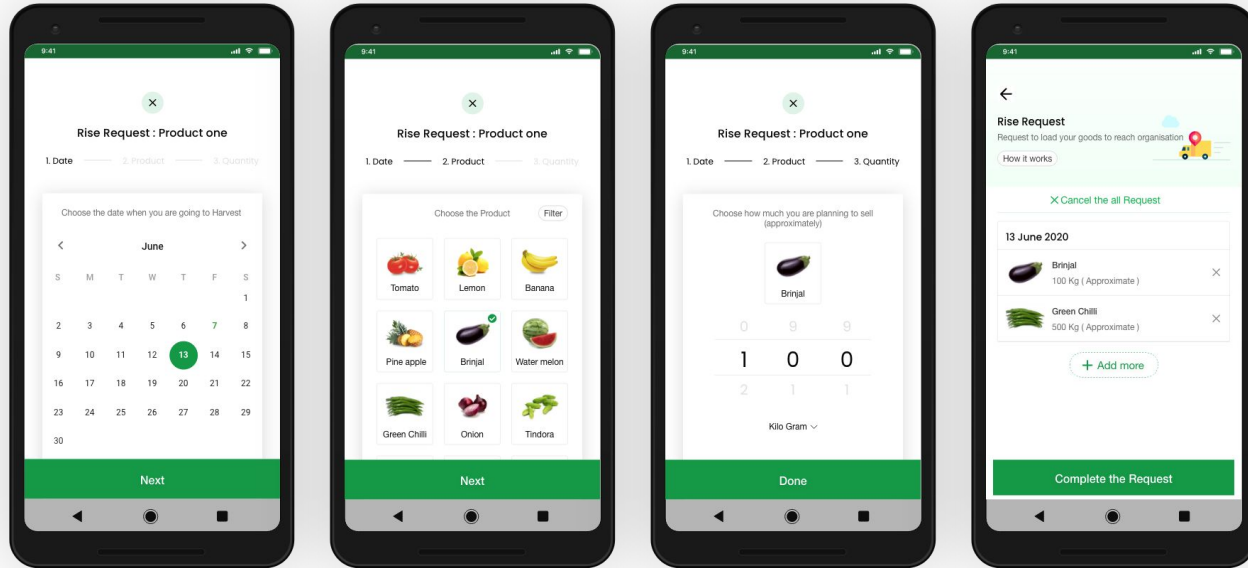
1. Raise request to load commodity
2. Able to raise request for vehicles from local pick point
3. Able to track their goods status
4. Know the current market price
5. Instant updates about goods

## Track Commodity Status at one place

When the goods are collected, Token number, Price details, Able to accept & request high Price, Get payment



# How Our solution will Act from farmer's end



3 click to add commodity in request list

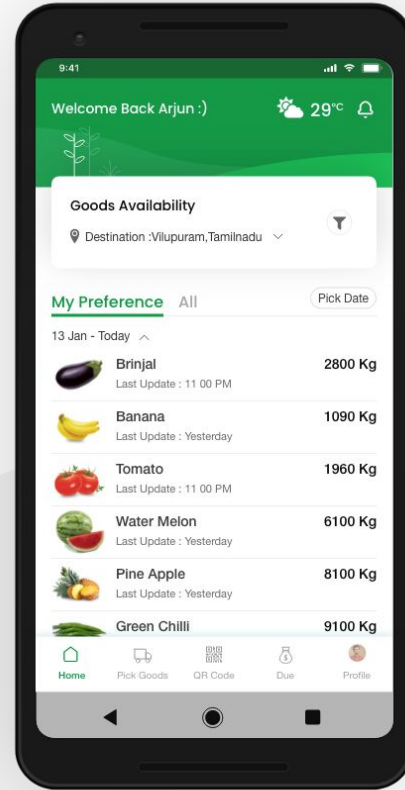
Prototype link: <https://xd.adobe.com/view/89c18207-96a6-4b8d-6c09-eff7a8ea118c-fff0/>



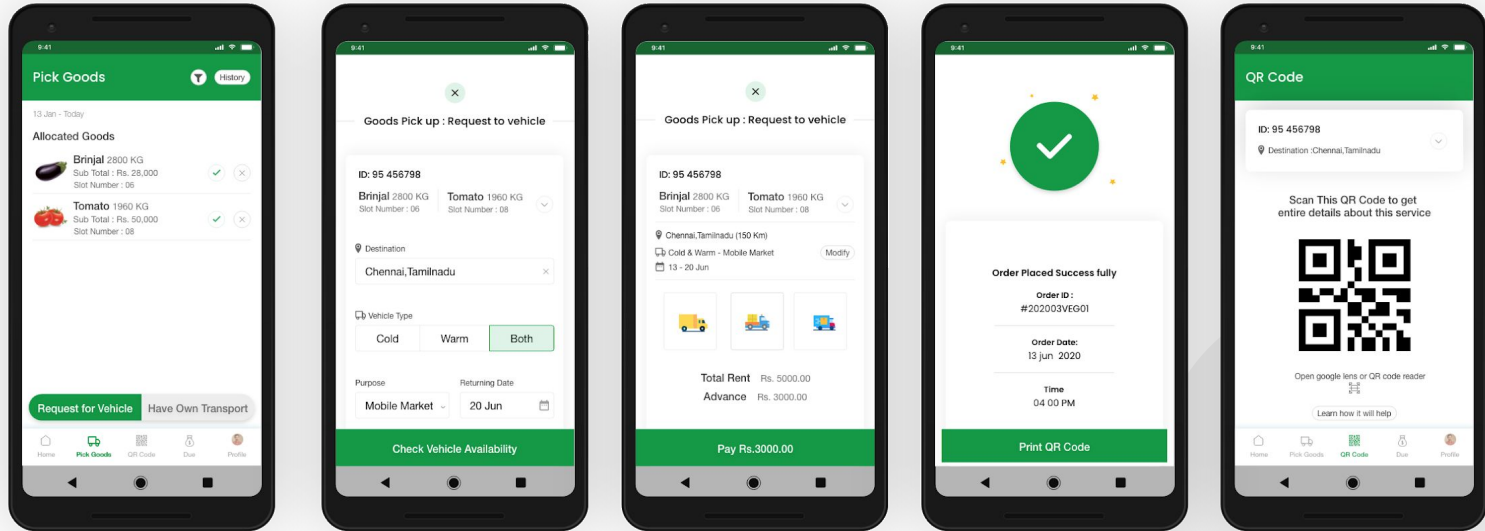
## How Our solution will help the vendor

### Landing Screen

- Able to check product **availability** from anywhere
- Check whatever is needed via set **preferred** commodity, preferred location
- Track payment due - Pay from mobile and forget about standing in queue.



## Shifting goods with the help of Organisation Vehicle



- Able to pick products by their own transport & Organisation transport,
- Need not fear about Social distancing, Just fill the form via mobile and Upload the goods whenever possible
- QR code helps on Road to get permitted from Traffic Staffs + No need to handle paper documents.

Prototype link: <https://xd.adobe.com/view/48a55506-150a-4802-7f59-7445a73a39af-3e94/>



# Digital System Introducing Agriculture Product Market Committee

Farmer Agricultural Market Management System

Search Property or type something

Tindivanam

Select Date To View Commodity Request 20 Jun

State Bank Of India  
Bank - Number 3, 213, Manappakkam Main Rd  
120 Request Received

Rosnai Division

Commodity Quantity

	Brinjal	2800 KG
	Tomato	1960 KG
	Green Chilli	1960 KG

Assign Transport For 6720 KG

Driver: Alwin Raj

Transportation can able to Assign the day before

Assign Transport

- Access all division & local pickup point details from **single page**
- **Auto assign** Cold & Warm Storage Vehicle for each Pickup point



# Digital System Introducing Agriculture Product Market Committee

Farmer Agricultural Market Management System

Search Property or type something

Tindivanam

Select Date To View Commodity Request 20 Jun

Former Agent

Tindivanam Q FARDIN Sort By Last Added

Basic Info	Phone	Commodity
Grant Marshall ID : FARDIN90897867	+91 897868978	Brinjal, Tomato
Pena Valdez ID : FARDIN90897867	+91 677868978	Brinjal, Tomato, Green Chilli...
Narayanamoorthy ID : FARDIN9897867	+91 877868978	Brinjal, Tomato, Green Chilli...
Kerri Barber ID : FARDIN0897867	+91 8097868978	Tomato, Mango

All A B C D E F G H I J K L M N O P Q R S

**Narayanamoorthy**  
ID : FARDIN9897867  
+91 877868978  
Brinjal, Tomato, Green Chilli

Send SMS Call Rise Request

**Current Activity**  
No Data Found :(  
The Person not have any current activities

**Last Activity** See All

Today	20 May	20 May	20
Brinjal 120 Kg: Green C...	Tomato 40 Kg	Tomato 40 Kg	Tom

Vilupuram,Tamilnadu Vilupuram,Tamilnadu

Narayanamoorthy  
+91 877868978  
03 : 00

- 24 X 7 offline support
- Specially concentrated on non technical people. They can connect via toll free number
- 3 click to get Farmer & Agent details

### ◆ Inspiration



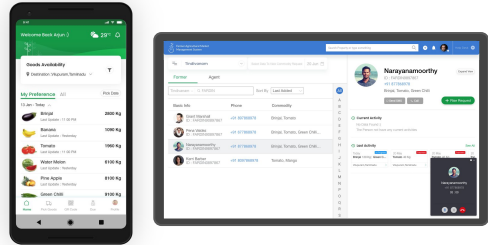
- Get to know farmers problem through television.
- Connect with known farming people via mobile (due to lockdown)
- Listen to their Past & current story
- Via miro board dive into process

### ◆ Ideation



- Get to know the existing process
- Opportunity : Agriculture product market committee; Aavin milk collection center; Gas booking via 2 min automated call.
- QR code for police verification

### ◆ Implementation



- Tamilnadu Govt. is also working on creating online platform. It is easy to implement this with their help.
- Concept is tested with farmers and modified based on comments.
- Solution can be used even after lock down.

# Impact

**Problem 1 :** Until the agency confirms the price, farmers have to wait which would take quite a long time

**Solution :** We have come to a conclusion, where the slots will be booked digitally and the amount confirmation message will be sent via app or phone call. Once the farmer accepts the amount, it will be transferred from the agency to farmer's account and that way we can save some amount of time



**Problem 2 :** Possibilities of farmer's ID being misused

**Solution :** We have introduced QR Code scanning system which will be scanned by the police department and gives access to transportation. It also avoids the misuse of ID

**Problem 3 :** Keeping low lifespan vegetables fresh

**Solution :** We have introduced cold storage system. It keeps the low lifespan vegetables at the temperature we set and also keeps them fresh and makes them last longer



**Problem 4 :** Small vendors / Retailer not able to find proper transportation

**Solution :** We have introduced cold & warm storage type of vehicle renting system. It helps them to relocate the commodities to fulfill the demands of common people.





# Execution & Viability

- Tamilnadu agriculture product market committee is already taking care of the physical distribution of goods.
- However, if the same concept can be implemented digitally, using slot booking method and transporting the goods in trucks with cold storage system, the wastage of low span vegetables and fruits can be avoided during the crisis.
- 7/10 Farmers have smartphones and they have already adapted to use it.
- Non technical people have an experience of connecting with artificial customer service [Gas booking, Network(SIM) Complaint] so it is easy to connect with organisation
- For online money transaction we can sync 3rd party applications (many applications are available in market)
- Feasible one,

தமிழ்நாடு வேளாண்மையப் பல்கலைக்கழக வேளாண் இணையதளம்

வேளாண் விற்பனை

<https://enam>



Thank You

Rotting of vegetables and fruits is one of the major issues faced. Food is precious and wasting of food needs to be stopped . So lets try our best not to waste food.