



KISAN MITRA

A FARMER-FRIENDLY
AI-POWERED ANDROID APP



SCENARIO

INTRODUCTION

- The alarming condition of farmers in India can be linked to socio-economic aspects.
- Farmers fall into debts because have to face a scarce crops productivity (GM seeds, water management, etc.) which increase the risk of their profit and high cost of life (education, health, daughter marriage, etc.).
- This creates a vicious cycle and most of the time farmers suffer of mental distress. Often they might see the suicide as the only solution for their families.

THE CAUSES



WEATHER DEPENDENCE

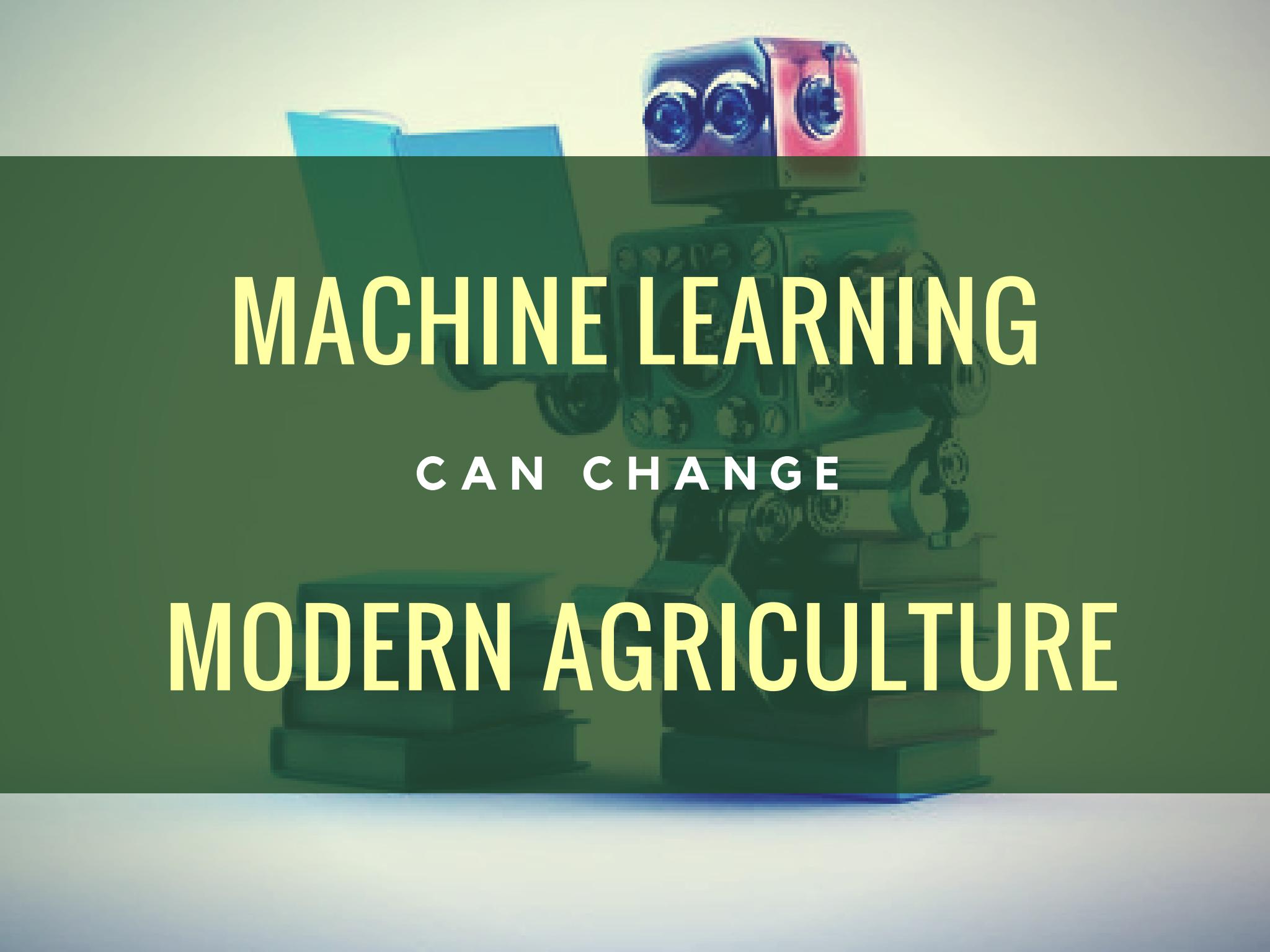
Country's crop area is completely dependent on Monsoon rains, weak Monsoon rains result in crop failure

CROP LOSSES

Crop disease is a major cause of famine and food insecurity around the world

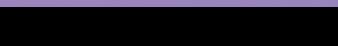
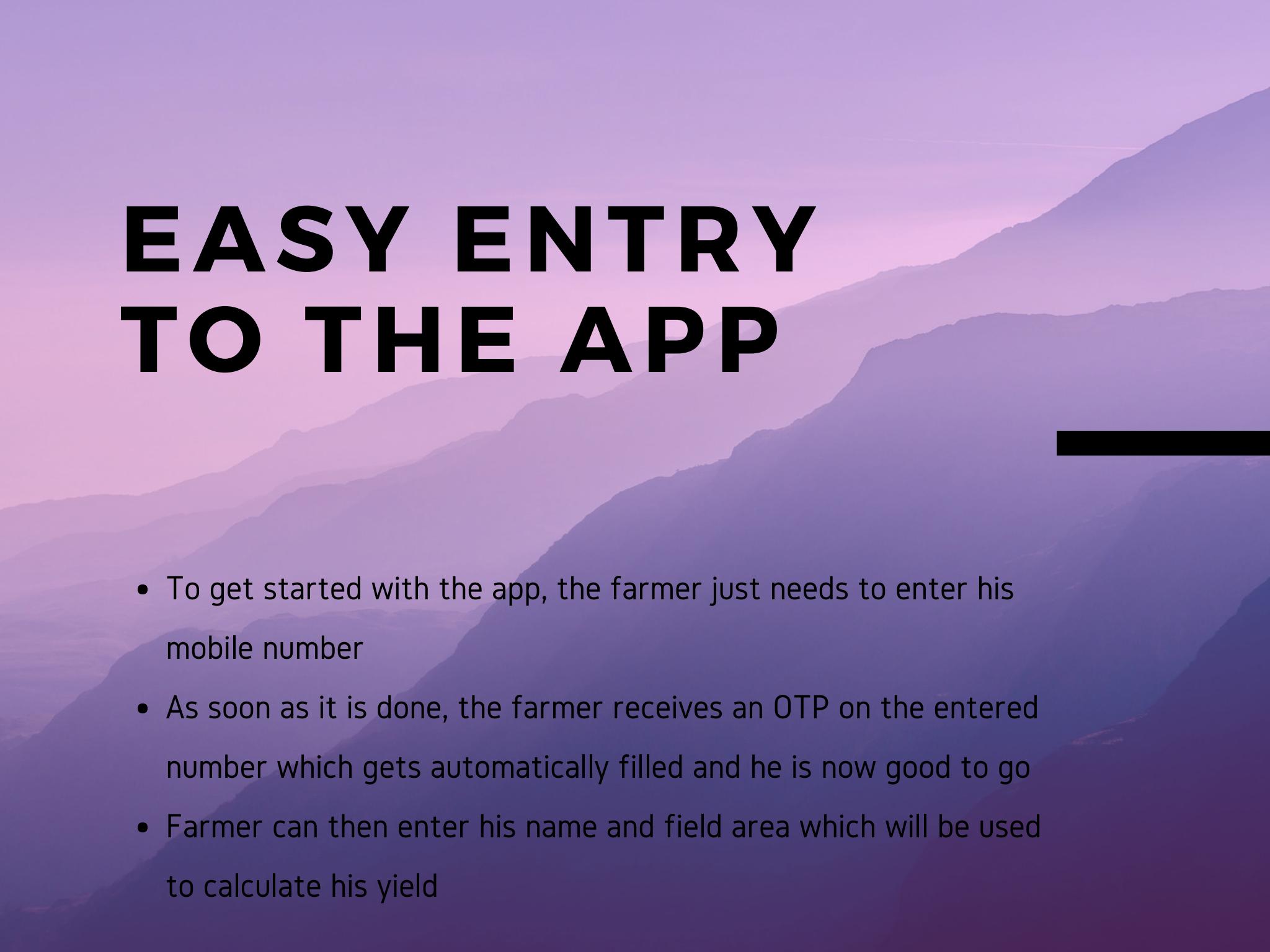
UNDERSERVED PRICES

Farmers get prices lower than what they deserve

A green tractor is shown from a front-three-quarter perspective. A robotic arm with a camera system is attached to the front of the tractor. The background is a light blue gradient.

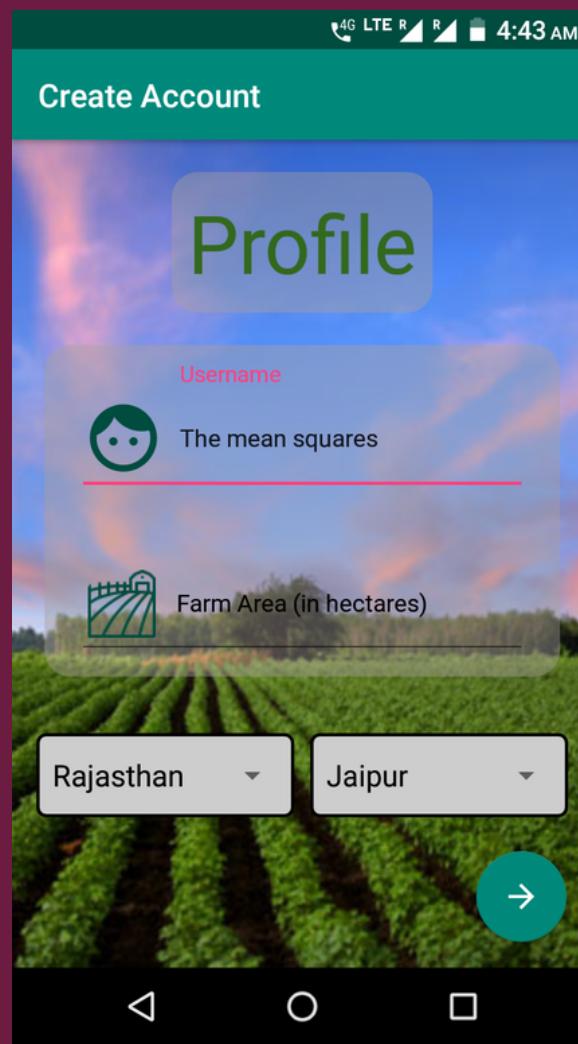
MACHINE LEARNING CAN CHANGE MODERN AGRICULTURE

EASY ENTRY TO THE APP



- To get started with the app, the farmer just needs to enter his mobile number
- As soon as it is done, the farmer receives an OTP on the entered number which gets automatically filled and he is now good to go
- Farmer can then enter his name and field area which will be used to calculate his yield

IN APP SCREENSHOTS





CROP SUGGESTIONS

- Kisan Mitra suggests the crops that can be grown in that area, at that season of time
- It also predicts expected production and selling worth using Machine Learning
- Farmer can choose any crop and look for more details about that crop

IN APP SCREENSHOTS

4G LTE R R 3:41 AM

Kisan Mitra



ARHAR

Expected production: 268.00 Quintal
Expected selling worth: ₹1474000.00



WHEAT

Expected production: 472.00 Quintal
Expected selling worth: ₹944000.00



BAJRA

Expected production: 336.00 Quintal
Expected selling worth: ₹470400.00

◀ ○ □

4G LTE R R 3:41 AM

Kisan Mitra



ARHAR

Expected yield
268.00 QUINTAL | Expected worth
₹1474000.00

Cycle

Day 1-28
The seedling establishment with root, leaf, and tiller development takes place during this phase.
Panicle initiation also begins.

Day 29-40

◀ ○ □

4G LTE R R 3:41 AM

Kisan Mitra



ARHAR

Fertilizers required

Boron
150Kg/ha
Potash
130Kg/ha

Prone to diseases/insects

Shoot fly
Cypermethrin
White ant

◀ ○ □

Crop Prices Prediction

1

Future whole-sale
price prediction of
various crops using
Machine Learning

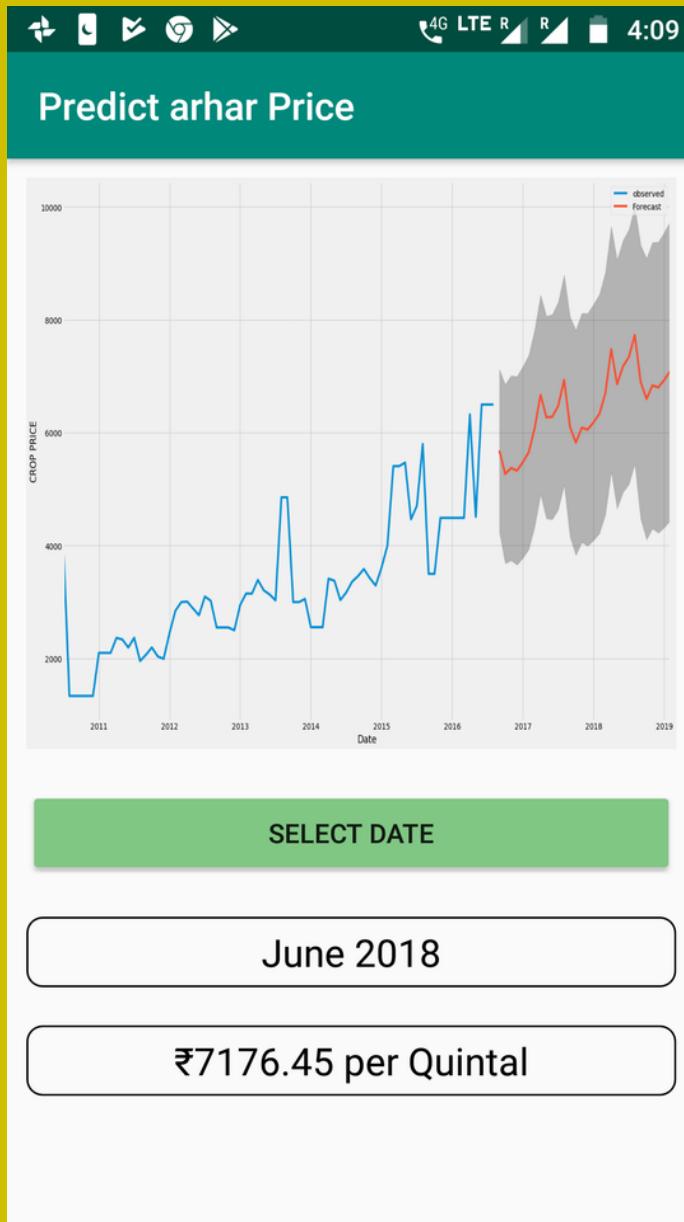
2

Monthly data of
previous many years
help predict these
prices

3

Farmer can see
prices for any month
of the year as well
as the trends
throughout the year

IN APP SCREENSHOTS

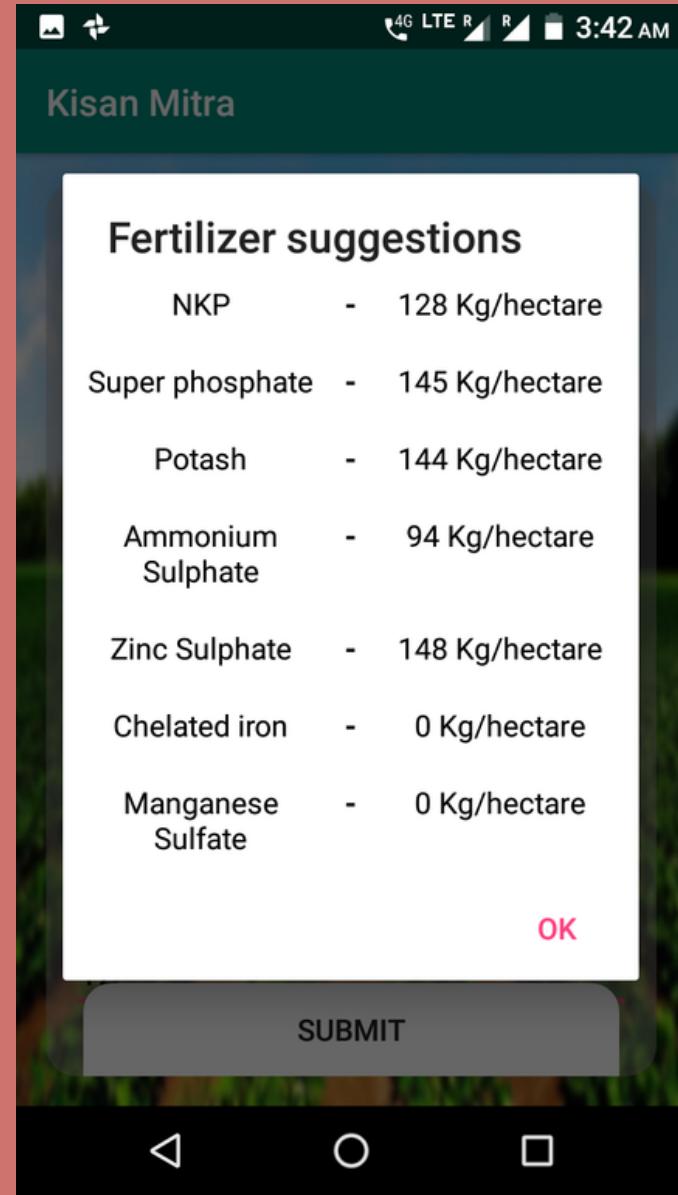
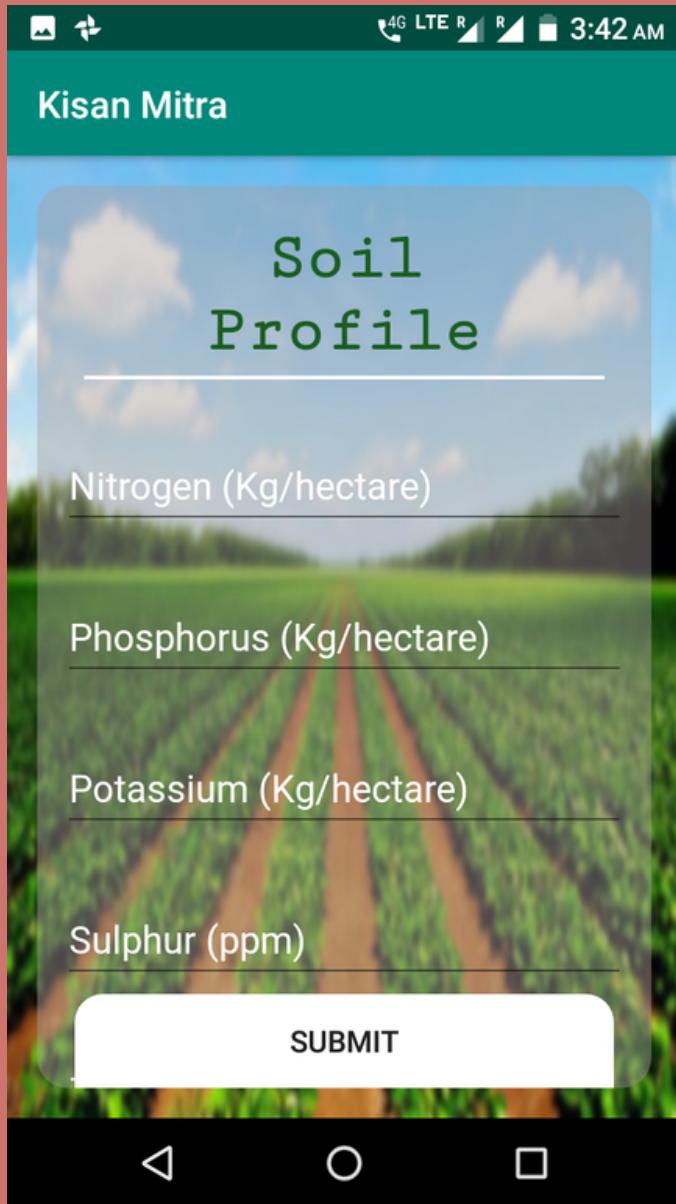




FERTILISER SUGGESTIONS

- The farmer can enter the soil profile of his field and get fertiliser recommendations sitting at his home
- The recommendations are very useful for farmer and is different for each as the suggestions are different for different soil profiles

IN APP SCREENSHOTS





CROP DISEASE DETECTION & PREVENTION

01

NEED

Crop disease is a major cause of famine and food insecurity around the world. The traditional method of identifying plant disease is done by visual examination, which is prone to human error

02

SOLUTION

Using Machine Learning & Computer Vision, our app can detect the disease from an uploaded or clicked image and give information to prevent it

03

PREVENTION

After detecting the disease, the app suggests the Pesticides (to be applied per hectare) and various other preventive care tips

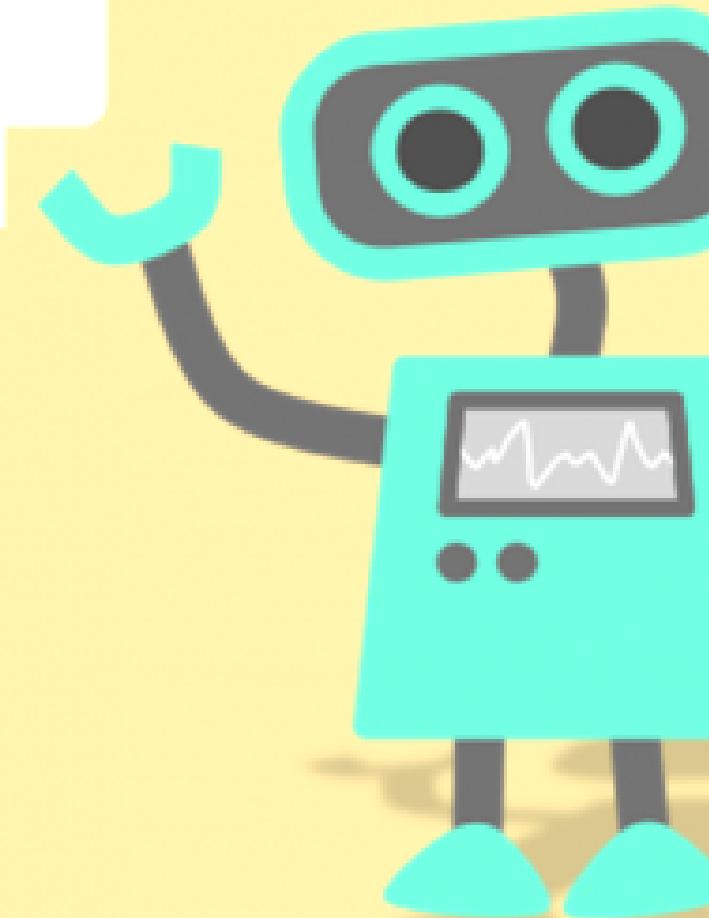
IN APP SCREENSHOTS



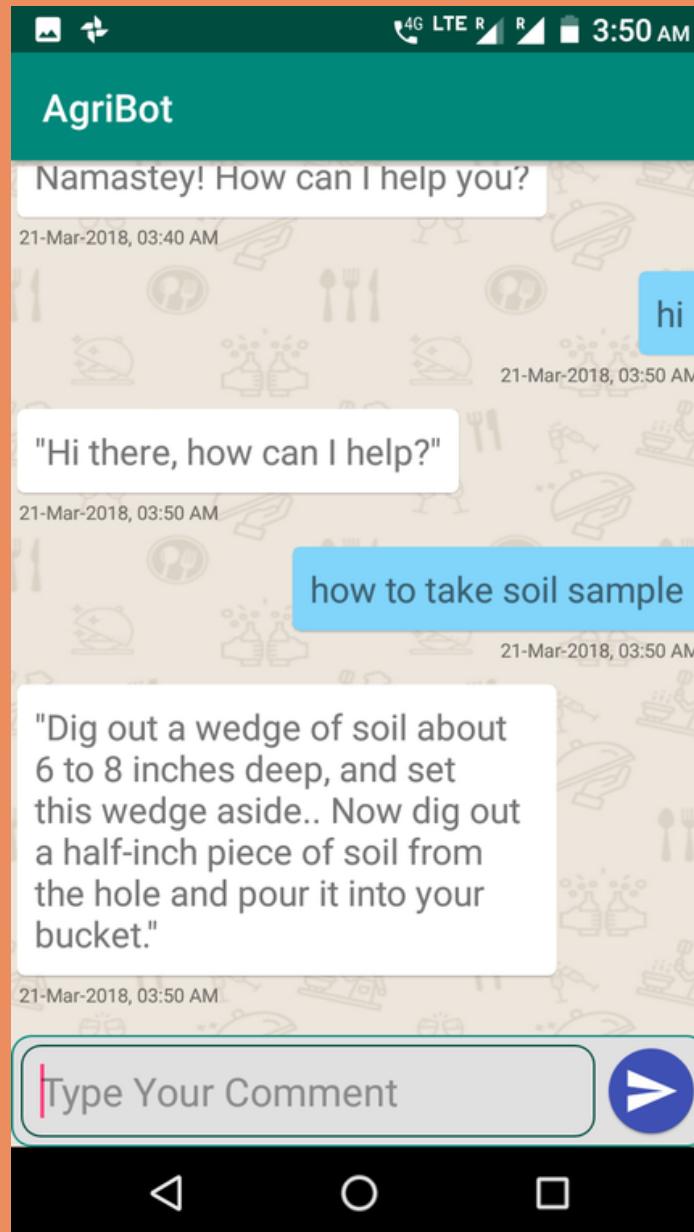
AgriBot (the chatbot)

- Built using Natural Language Processing, a farmer-friendly chatbot to address queries of farmers anytime-anywhere
- Presently we receive around 5 lakh calls on call centers every month. This shows that our farmers want relevant information today and are willing to ask for it
- Reduces the cost of setting up Call Centres

Hi!



IN APP SCREENSHOTS





WEATHER FORECASTING

- Kisan Call Center(KCC) data suggests that weather queries are the most common queries by farmers
- Kisan Mitra app forecasts the weather condition of 5 days by detecting location using **GPS**, thus farmer need not to call KCC to just know the weather
- It helps him a lot in taking various decisions

IN APP SCREENSHOTS



Notifications Broadcasting

The admin can broadcast important notifications to the farmers for things like hailstorms, widespread of crop infections in the area, etc

A photograph of a person's hands held together in a cupping gesture, set against a background of a field of tall, golden grass under a clear blue sky. The hands are positioned centrally, with the fingers interlaced.

LOOKING INTO THE FUTURE

FUTURE SCOPES OF THE APP

Yes, it is possible!

01

Farmers will be able to chat with Kisan Mitra in their local languages like Hindi, Telugu etc

02

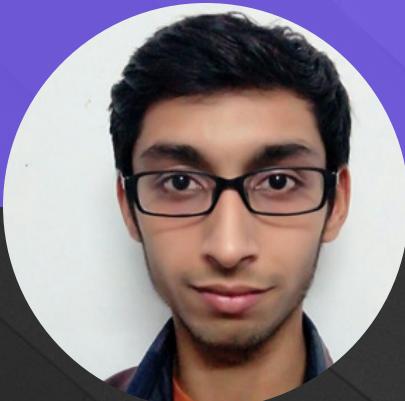
Location of nearby stores will be shown for the suggested pesticides

03

Estimated Rainfall trends in the region throughout the year

THE MEAN SQUARES

TEAM NAME



PULKIT RATHI
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DEVELOPER



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