

AGRO  
RTC



An rtc bus for the crops

# MEMBER DETAILS



**NAME :**

MADUPU SRILEKHA  
Likhitha  
Bhavana

**COLLEGE :**

BV Raju institute of technology,Narsapur ,medak

**THEME :**

AGRICULTURE

# PROBLEM STATEMENT

Tropical root and tuber crops play an important role in the sustainable development and food security of the people and they are the second most important food crops after cereals in the tropical and sub tropical countries.

In tubers , harvesting is done by lifting or digging the tubers, manually by people and mechanical harvesters. Manual harvesting is carried out by the use of spade, crowbar, sickle, axes and hoe etc. This method is time consuming.

# OBJECTIVE OF THE IDEA

- The main purpose of our project is to automate the harvesting methods of the tuber crops. They are mainly reaping, picking up the crop and collecting them.
- In the solution ,we are providing a machine which can do the processes such as reaping of leaves and picking the crop and collecting are done simultaneously.
- We have a facility to operate the machine just by giving a command through mobile.

# EXISTING SYSTEM

- In olden days the harvesting was a tedious process since entire process is done manually. Farmers used to harvest with the help of sickles.



- In present days two fuel based machines are used for harvesting of tuber crops. One of them is used for reaping of leaves and the other one for picking the crop from the ground.



# PROPOSED SYSTEM

- Our product consists of a Dc motor with a cutter at the front of the bot, used for reaping the leaves which are above the ground.
- At the bottom we have a ploughing part which helps to pick the crop from the ground.
- Now as the bot moves the crop gets collected inside the bot. Due to the continuous movement of the bot, most of the mud gets detached from the crop
- If this bin gets filled we have a facility to give an indication that the bot has filled.
- Here there is no wastage of crop since it picks deep from the ground
- This is a fuel free machine because we run this bot with the help of rechargeable batteries.
- Cost can be reduced by the use of single machine
  - 1.Collection of crops by Machine
  - 2.Reduces Manpower
  - 3.Saves Time



Cutter part of the bot



Complete picture of the bot



Mesh part



Ploughing part of the bot

PROTOTYPE

# STEPS OF IMPLEMENTATION



# BUSINESS

## Target Audience

- Farmers who are trying to grow tuber crops.
- In urban farming , to pick up the plants

## Target size

Greater than 1,00,000 farmers will use this model for harvesting purposes.

## Market plan

We follow arjuna's plan in maha bharat .First we will introduce our product into the 10 farm areas then we will take the feedback from them and after that we proceed further for huge marketing.

Thank  
you