

OOZE

SENSING THE FLOW

BY PRGADA SATWIK









Problem

• The majority of the time, farmers continuously provide water to their crops.

• Farmers are unaware of the water requirements for each plant.

• It cause wastage of water, power and damages the crop due

to ovreflow of water





Target Market and Opportunity

- AGRICULTURAL
- DRIP IRRIGATION FARMERS
- 78 PERCENTAGE OF FARMERS ARE USING DRIP IRRIGATION SYSTEM IN INDIA









Solution

WE DID RESEARCH ON HOW MUCH WATER IS REQUIRED FOR EACH PLANT AND USEING THAT INFORMATION WE CAN CALCULATE THE TOTAL CROP. THE FARMER WILL BENEFIT FROM THIS DEVICE IN THAT IT TELLS THAT HOW MUCH WATER IS NEEDED TO HARVEST THEIR CROPS AND THEN REMAINING WATER WILL BE CUT OFF IN ACCORDANCE WITH THE RESEARCH. WE WILL DEVELOP AN APPLICATION WHERE MANY CROPS WILL BE SHOWN ON THE USER INTERFACE SO THAT THE FARMER MAY CHOOSE THE TYPE OF CROP THEY ARE CULTIVATING ACCORDING TO THAT THEIR WILL FLOW OF WATER FROM THE OOZE









TOMATO CROP [EACH PLANT]

• 1ST GERMINATION = it requires 80ml of water 2nd SEEDLING = it requires 110 ml of water 3rd VEGETATIVE = it requires 432ml of water 4th BUD STAGE = it requires 650 ml of water 5th FLOWERING = it requires 982ml of water 6th RIPENING = it requires 2liters of water





USER INTERFACE



TOMATO



CABBAG E



MIRCHI

GERMINATION

SEEDLING

VEGETATIVE

BUD STAGE

FLOWERING

RIPENING





Revenue Streams

- TOTAL COST OF OOZE= rs4000
- MATERIAL REQUIRED
- SD CARD MODULE
- ESP 32
- LIFEPO₄ 6000MAH
- TP5000
- FLOW METER
- WIRES
- SOLAR PANEL
- PROFIT OF OOZE = rs500