

IOT BASED IRRIGATION MANAGEMENT

Real Time Water Quantification & Water Saving

Rice is water guzzling crop (consumes more than 60 % total irrigation water in India) cultivated mostly through inefficient irrigation methods (5000 lt of water for 1 kg grain) which leads to poor water use efficiency and many environmental problems. AWD method and real-time quantification is the need of the hour

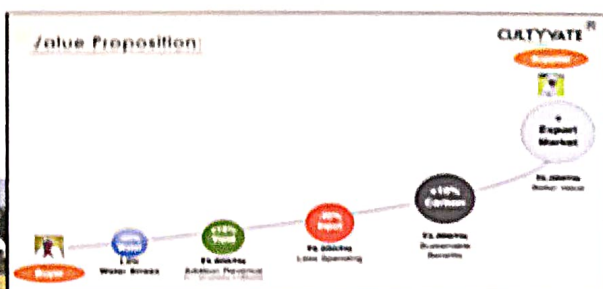
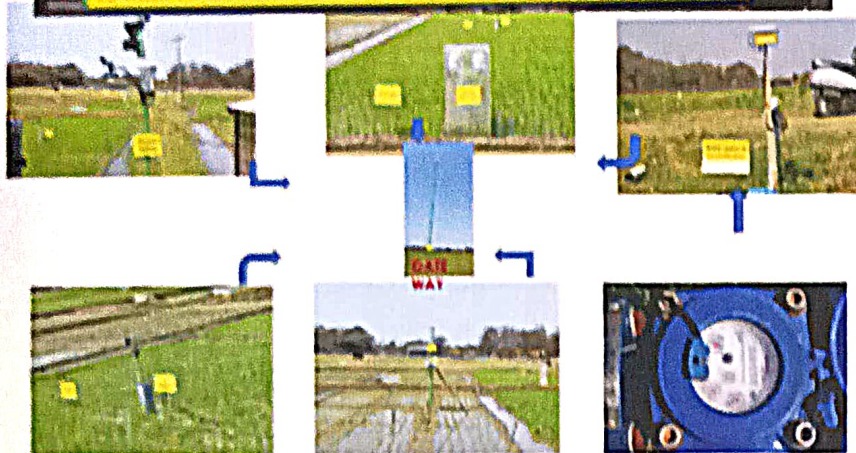


Fig 1. Sensor in the field

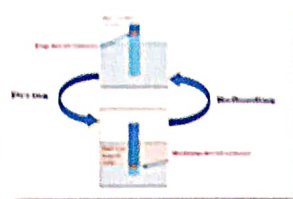


Fig 2. AWD with sensors

Who we are

CULTIVATE



Focus Area
Precision Analytics for water guzzling crops such as irrigation of Paddy/Sugarcane/Cotton along with water sensitive horticulture crops like Grape/Banana/Pomegranate

Founded In
30th March 2017

Location
Bangalore, Karnataka

Problem Statement

- World's population is expected to touch 9 billion by 2050
- Food production needs to increase by 60-70%
- Receding cultivable land & depleting water - major concern
- Farmers get upto 30% low yield while using upto 50% more water
- 70% more food to be grown with 50% less water

Tech Brief

- Our IoT devices measure the water level in paddy fields and notify the farmer via SMS when water level goes 1" above the root zone.
- The system monitors if the farmer has started irrigation before the water goes below root zone & escalates via call & field officer if irrigation was not started

Unique Selling Proposition

- Yield Increase - 15%
- Reduce spend on pest/disease/labor by 25%
- Reduce water use by 40%
- We help you generate/sell carbon credits

8000+ Acres covered

18 B2B customers

Water Saving 1771 Cr/ltr

Electricity Saving 1897 mWh

<https://www.youtube.com/watch?v=qL5ivUqGsM>

Benefits : The data on water utilization, CH₄, N₂O & CO₂ emission will be recorded in real time using sensors through which farmers can get carbon credits. (Doubling the farmer income). It saves 20-30% of borewell water.



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