

HYDRO AUTOMATOR

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- Problem: Improper irrigation of fields results in loss of field
- Product: A device which detects the moisture content and either releases water or collects water.

Initial Prototype:

A moisture sensor and motor which could sense the moisture level of soil.

Business:

Interacted with Nelapogula village farmers and collected feedback.
The product costs Rs-7000
The product is sold directly to Farmers and co-operative societies

Technology:

Arduino IDE (C language)
Arduino Interfacing relay modules sensor, motors& LCD display
Relay module to Digital Moisture sensor

Customer Stories:

A farmer named Venkaiah from nelapogula village committed suicide due to loss of crop.

Progress:

- Week1: Met our village farmers to understand farm irrigation problems.
- Week2: Started building our product based on market feedback.
- Week3: Enhancement of motors and use of high-power motors.
- Week4: Completed the planned features.
- Week5: Get to know the business and cost feasibility of the product.
- Week6: Testing and quality improvement of sensors.

Contributors:

Mentor Ramana explained about the competitors for our product.
Mentor Sandeep suggested reference sites

- IOT based farming
- Zero Budget Farming
- Forest Agriculture

Dr. Vijaya Kumari told us about the Reliability of the product