# **Smart Farming Application**

Category: Internet of Things

#### **Industry Mentors:**

- Sowjanya
- Sandeep

## Faculty Mentor:

G. Monisha

#### Team Leader:

V.Priya

#### Team Members:

- X. Sneha
- R. Sandhiya
- M. Navaniya shanmugabharathi

#### Use cases:-

#### Data collection:-

Smart farming sensor can monitor weather condition, soil quality, crop growth progress.

#### Cost management:-

Scientifically knowing how much water a plat needs for growth, versus the actual amount that it's fed, will educate farmers to cut down unnecessary irrigation ant to conserve water.

# > Enhanced product quality:-

Quality control is already an aspect of IOT in manufacturing, wherein thermal, and other related sensors are able to constantly monitor the quality metrics of produced goods.

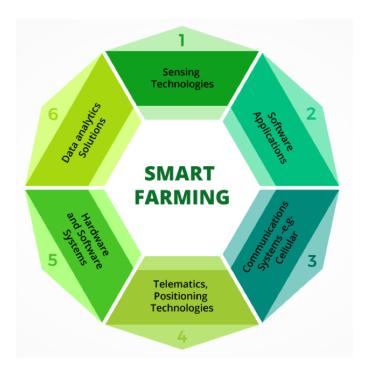
## Novelty:-

- Adoption of internet connectivity solutions in farming practices has been triggered, to reduce the need for manual labor.
- Enables growers and farmers to reduce waste and enhance productivity.
- Focused on helping farmers close the supply demand gap.

#### Feasability of idea:-

- The approach of using IOT technology to ensure optimum application of resources to achieve high crop yields and reduce operational costs is called precision agriculture.
- The farmers can monitor the field conditions from anywhere.

#### **Business model:-**



### Social Impact:-

With IOT, companies can enjoy benefits like **better crop productivity and improved worker safety**. They can use less fertilizer, water and pesticides. Because farmers can decrease the fertilizers and pesticides they use, there is less runoff into groundwater and rivers. This results in a lower impact on the ecosystem.

## Scalability of solution:-

- Automatic adjustment of farming equipment made possible by linking information like crops/weather and equipment to auto-adjust temperature, humidity, etc.
- In large farmland, Internet of Things equipped drone helps to receive the current state of crops and send the live pictures of farmland.
- Analyzing farmland from the land using its Solutions you will know the current situation of fields and crops in.