

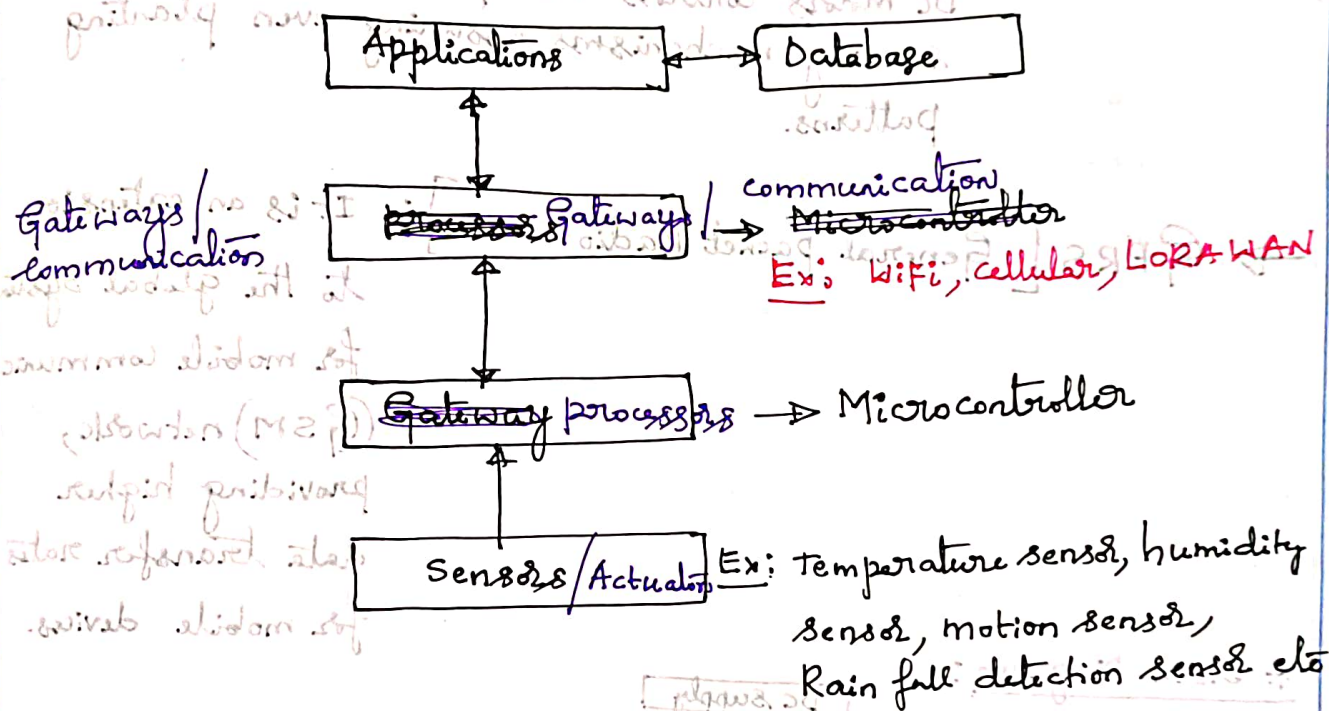
Use-cases of IoT pertaining to Different Domains:-

Domains like Retail, Logistics, Agriculture, Smart city.

* IoT in Agriculture:

* A functional block diagram of IoT:

→ IoT System is designed to monitor and manage agricultural operations.



* Benefits of IoT in Agriculture:

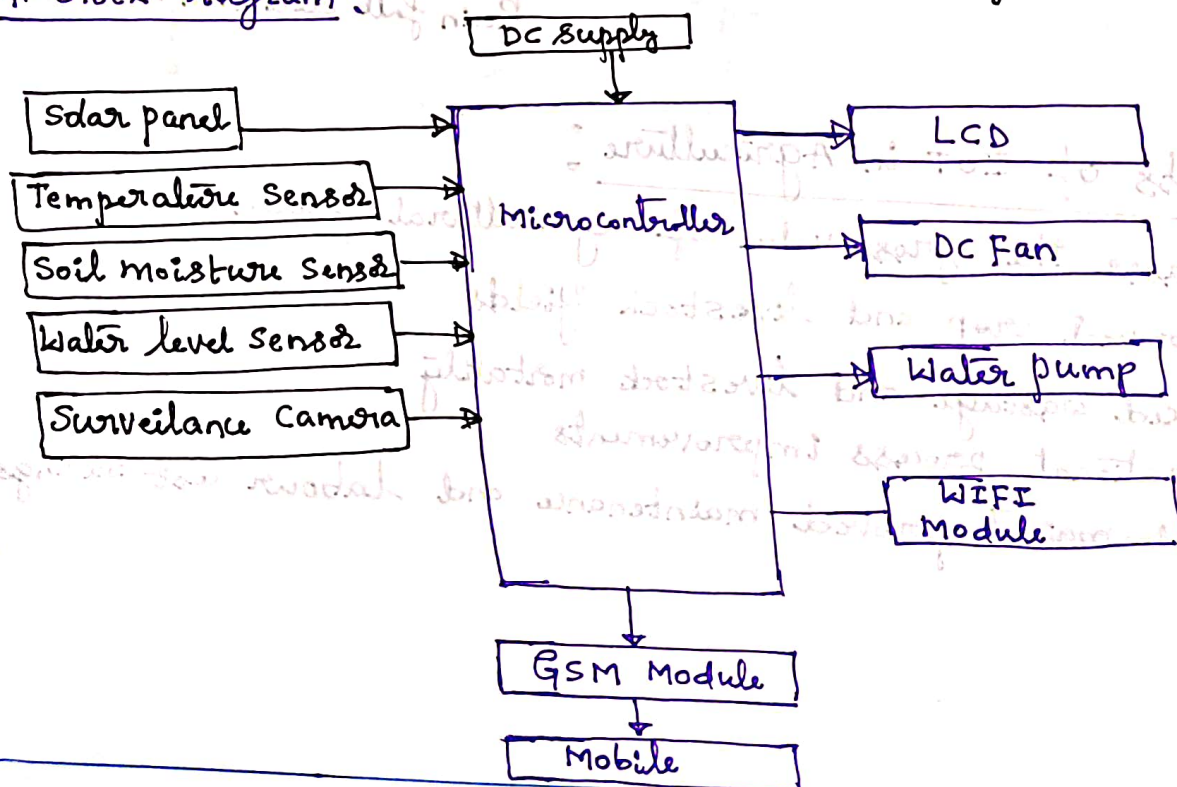
- Increases the gross value of agricultural production
- Improved crop and livestock yields
- Reduced wastage and livestock mortality
- Operational process improvements
- ~~Good~~ Improved maintenance and labour cost savings.

→ The smart agriculture using IOT System is powered by microcontroller. IOT System consists of Temperature, Moisture, water level sensors, DC motor and GPRS module.

→ DC Motors: drive pumps for ensuring consistent and efficient water distribution. provides precise control over speed, torque and power, which is essential for automated feeding and Seeding operations. Delivering water precisely to plant roots. Dc motors controls the speed and torque of seeding mechanisms ensuring even planting patterns.

→ GPRS [General packet Radio Service]: It is an extension to the global system for mobile communications (GSM) network, providing higher data transfer rates for mobile devices.

* Block Diagram:

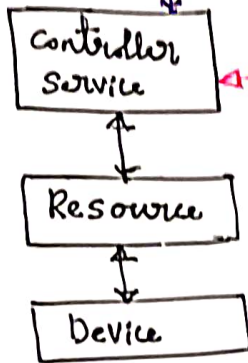
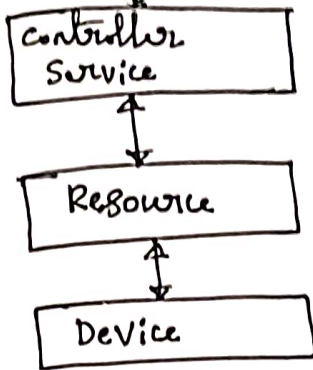


* IOT Level 6:

Local

cloud

REST/ Web socket
Communication



App

REST/ Web Socket
Services

Analysis
Component

Database

centralized
control

multiple
monitoring
nodes

centralized
coordination

cloud storage
analysis

