

Team ID	PNT2022TMID03184
Project Name	Project – Smart farmer-IoT enabled smart farming application.

#### PROBLEM:

Agriculture plays a vital role in our country's economy. India is a global agricultural powerhouse. It is the world's largest producer of milk, pulses, and spices, and has the world's largest cattle herd (buffaloes), as well as the largest area under wheat, rice and cotton. It is the second largest producer of rice, wheat, cotton, sugarcane, farmed fish, sheep & goat meat, fruit, vegetables and tea.

Farm production poses a number of challenges for farmers around the world. Food production requires adjustments to rapid population growth, the expenditure of resources, soil degradation, reduced utilization of land and a growing lack of water. In order to meet current and future needs of a growing world population, it's necessary to increase farm production.

#### SOLUTION:

IoT device includes every object that can be controlled through the Internet. The applications of the Internet of Things in agriculture target conventional farming operations to meet the increasing demands and decrease production losses. IoT in agriculture uses robots, drones, remote sensors, and computer imaging combined with continuously progressing machine learning and analytical tools for monitoring crops, surveying, and mapping the fields, and providing data to farmers for rational farm management plans to save both time and money. IoT in agriculture uses smart farming technologies which integrate sensitive physical hardware with analytical software. An analytical dashboard is mostly software that is processing the data recorded by equipment. Hence, a sound technical knowledge of robotics and computer-based intelligence is a prerequisite for operating, maintaining, and understanding the insights of this valuable equipment.