**SMART FARMER - IOT ENABLED SMART**

**FARMING APPLICATION**

**PROBLEM STATEMENT:**

The absence of automatic controlling of the system result in improper water control system.

The major reason for these limitations is the growth of population which is increasing at a faster rate.

At present there is emerging global water crisis where managing scarcity of water has become a serious job.

**IDEA/SOLUTION DESCRIPTION:**

Smart irrigation systems are a combination of an advanced technology of sprinklers with nozzles that improve coverage and irrigation controllers that are watering.

Water conservation systems that monitor moisture-related conditions on your property and automatically adjust watering to optimal levels.

This project also allows surveillance on the personnel and their crops so as to not occur losses.

**UNIQUENESS:**

The smart automatic irrigation system model was built using the Decision Tree (DT) algorithm.

Provide the quick and accurate results.

User friendly, anyone can access the system for analysing

purpose.

System, which serves the farmers for preventing pests and

crops diseases for betterment of production.

**SOCIAL IMPACT/CUSTOMER SATISFACTION:**

Places that have sparse or seasonal rainfall could not sustain agriculture without irrigation. In areas that have irregular precipitation, irrigation improves crop growth and quality.

By allowing farmers to grow crops on a consistent schedule, irrigation also creates more reliable food supplies Saves you water and time.

Both sprinkler and drip irrigation systems can be set to daily or weekly watering, as well as timed for specific hours during day or night, reduces weed growth, Improves plant growth, preserves soil nutrients.

**DESIGN MODEL:**

A well-designed system ensures that your grass and plants are getting the proper amount of water.

In dryer seasons, or periods of inadequate rain, an irrigation system can be the difference between brown grass and dying plants

This is achieved by using a smart platform of IoT and solenoid valves to control the flow of water based on the moisture of the soil and gives real time surveillance to the owners who stay far away from the farms.

**SCALABILITY OF SOLUTION:**

One huge disadvantage of smart farming is that it requires an unlimited or continuous internet connection to be successful.

This means that in rural communities, especially in the developing countries where we have mass crop production, it is completely impossible to operate this farming method.