Abstract—Agricultural sector in India plays a vital role in contributing towards the GDP of India both directly and indirectly. As everything is being computerized, leading to higher growth of technology and advancements in every sector. This paper proposes a smart irrigation system with weather monitoring forecast capability, to ease the daily problems faced by the farmers. It is fully automated and monitors the soil moisture and current temperature of the climate. Sensors are used to detect humidity and moisture in the soil. If the moisture content in the soil becomes low than the climate temperature is checked, that there is any chances of precipitation or not, If there are any chances then sprinklers will be turned on up to a certain limit else they will fully turned ON automatically. IoT will be used to keep the farmers connected to the device with the help of an Android application and a Thing Speak API's will be used to generate graph and analysis reports.