Abstract

In the recent era water is a precious resource at the time of dry season or in the dry places. In such types of regions/places water should be used efficiently because of its shortage. The systems of irrigation are still fruitless as they flood their farms without any reason. The result of wasting water and energy can be used for pumping the water. By the development of the technological infrastructure, feasible management of water usage and power expenditure of irrigation systems can be achieved. It may be done by enabling the irrigation system to place earmarked areas to irrigate. In this paper, a system of smart irrigation is proposed that consists of materials which are micro-controller and sensor integration of water pump. The sensor is placed in around 15 locations in University of Chittagong and where based on the integrated sensor’s information, pump is activated. In this situation, pump gives the water where the field is dry. This result gives us the efficient water use. To make it possible to adjust according to the particular locations, the moisture parameter is used.

References

**Index Terms**

Computer Science  
Circuits and Systems

**Keywords**

IoT, Smart Irrigation, Arduino, Soil moisture sensor, DC motor pump, Cost saving.