

Abstract

In day to day life, millions and millions of liters of water is being wasted through overflowing or excessive usage. In Kitui specifically, water availability by itself a challenge since the area rarely experiences long rainy seasons, has no flowing rivers, the dams are dry and there are only few boreholes available. It is for these reasons that we propose the adaptation of probe sensors to detect the water level in the hand washing water dispensers and storage tanks of the available boreholes in Kitui. The probe sensors detect the water level when they come in contact with them and in return a light emitting diode of the corresponding probe blinks. The system calculates the water level up to 100% by intervals of 25%. Moreover, the system is also connected to a relay switch that automatically turns on or off based on the water level. When each interval is reached, the light emitting diode blinks. At 25% the water level in the tank is lowest and this prompts the buzzer to produce a sound notifying the attenders that the tank needs to be refilled. An automatic refill also takes place due to the additional circuit connection. At 100% the relay goes OFF and water refill stops hence water wastage is avoided.