Smart Rainwater Harvesting System

The National Institute of Engineering, Mysore/ 1ST SEM/ E&E - A Section

PROBLEM STATEMENT

To increase the volume of water bodies and prevent overuse of underground water.

TEAM MEMBERS

Ashwini A
Unnathi M N
Sunil M L
Shreyas D K
Adithi K
Shreya M Swamy

INTRODUCTION

Many parts of the world have two kinds of seasons like rainy season and dry season. During the dry season, there is very little or no rain. Due to this, the water bodies like ponds, rivers, etc. are dried. By using these techniques, the water bodies can be recharged, and their volume can be increased.By storing rainwater, it reduces the surface runoff. This reduces the surface erosion. By capturing rainwater in reservoirs, the flood problem in large rainfalls is also diminished.

As the population of a locality increases, its demand for water increases too. To meet this, underground water is used. Due to this reason, the level of underground water is decreasing rapidly. By using rainwater, the demand on groundwater is reduced.

IDEA GENERATION

As soon as the tank is filled, in order to close the inlet, we have used a water level sensor which is coded along with the arduino uno. This can be implemented not only in overhead tanks but also it is used to close the inlet of the ground tank which is used as a storage for rain water. Instead of wasting the rain water, it can be stored and used for household works. But once the tank is filled during the rainy season, we don't want the rain water to overflow from the tank, so we have implemented this idea.

PROTOTYPE IMAGES