Microcontroller Based Water Control System

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Abstract- *As we know that Indian economy is one of the largest developing economies of the world.The agricultural sector has its largest contribution in the Indian economy. To achieve minimum utilization of man power and to obtain maximum profit in agriculture so at that time used various engineering techniques that are being used today.Water is the most important nature's gift to mankind,Without water there is no life.*

Todaysindia is facing many drought related problems,hence we need to find such a technique, that there are less losses and more efficiency.

Most people in India do not know about various tech used in modern world so we need to show some of the tech in effective way to have proper use of water.

In this system we use microcontroller, which has its own advantage that if the water level is more I.e the moisture content in the soil is more then the pump does not supply the water in the soil. And if the thethe water level is low then the water is pumped to the soil with the use of pump.

The loss due to evaporation and seepage is minimized with the use of such tech.Apart from this, it can indicate the amount of water in the tank, which can support global water types, including satellite data transmission systems, for cellular dealers, remote water monitoring systems. In addition, cellular phones with relatively high calculation power and high quality graphical user interfaces have recently been made available. It is necessary to reuse such valuable resources in the mobile application from the perspective of users. Finally, we have proposed a web and cellular based monitoring service protocol that determines and understands the water level globally.

Keywords- Conductivity, indicator, microchip, nozzle, and water level sensor

I. INTRODUCTION

India is agricultural country where 60 -70 % economy depends on agriculture the mobilization the conventional agricultural practice for the better productivity is must.solar panels are extensively use to power various things such as street light and pumps.

Home or office are potential obstacles to water management system. Many surveillance systems in the past few decades Integrated with water level detection has been accepted. Measuring the level of water is an essential function for the government Residence perspective This way, it would be possible Track the actual implementation of such initiatives Integration of various control activities Therefore, water The control system makes the implementation possible Importance in home applications Current automated The level detection method has been described and can be used to turn the device on / off. In addition, the standard method of level Control for home appliance is only to start feed pump A low level and allows it to run to high water level Reached the water tank. This is not supported properly Adequate control system In addition, liquid level control.Water Level Monitoring and Control Techniques The system is centered with some basic parts which are slowly Collected together in our proposed method. Basic Details of some parts are described below. A water level indicators For water level signal unit we can use some LED light Which will work for water level signals. By touching Different level of water should be LED, through water level sensor Should be indicated as on / off (i.e.: yes sensor sensory water). B. Water Level Sensor We want to make special water level sensors Present some convenient materials like Iron Rod, Nozzles, resistance, rubber etc. A connecting rod made of iron And steel which should be connected to the ground and we need it At least four nozzles should be connected to + 5v through one $1k\Omega$ resistance We need to bind them together and put one Rubber at their joint point which will act as an insulator Every nozzle when the sensor touches water, nozzles and Connecting rod gets electricity connection using water Conductivity.

II. METHODOLOGY/MATERIAL

1) microcontroller.
2) Battery.
3) Moisture sensor.
4) mulchuing paper.
5) drip line.
6) farm pond.
7) submersible pump motor.

8) led display unit.

Control the excess amount of water for the plant at their needed interval.
Growing agriculture crops in drought area.

To maintain and increasing agriculture felid.

Represented the disturbed soil in dry areas and during period of decreasing rain fall.

Microcontroller is connected to soil.Then microcontroller is sending message to auto motor.the irrigation is started with the help of pump and the setup is completed.

The water is withdrawn from farm pond and used in irrigation work for poper cultivation of sugarcane.

Mulching paper is placed over the soil bed leaving the area of sugar crop.

a) Moisture level of soil is measured. So that, we can provide water as per requirement of the soil. It prevents water clogging of soil.
b) Valves are controlled in our system. Therefore labour is not required for valve controlling.
c) Fertilizers through water.
d) Installation is easy & flexibility in operation for farmer.
e) Enhances plant growth and yield & better quality of produce.
f) Weed growth is less.
g) Saves labour works.
h) Avoid soil erosion.

This system consist of solar powered water pump along the and automatic water flow control using a moisture.