

INITIAL IDEA REPORT

Water covers 70% of our planet, and it is easy to think that it will always be plentiful. However, freshwater—the stuff we drink, bathe in, irrigate our farm fields with—is incredibly rare. Only 3% of the world's water is freshwater. 15 % of water is consumed for domestic purposes. Water is used for drinking, bathing, cooking food, and washing dishes, clothes, fruits, vegetables.

As a result, some 1.1 billion people worldwide lack access to water, and a total of 2.3 billion find water scarce. On average, each person uses about 80-100 gallons of water per day, for indoor home uses. Rivers, lakes, and aquifers are drying up and more than half the world's wetlands have disappeared. Nowadays, the overuse of water is increasing day by day and people are using an extra amount than needed.

Humans consume large amounts of water on a daily basis, whether intentionally or unintentionally, resulting in a water problem. In some cases, while filling the water bottles, buckets they may not remember to close the taps due to their negligence which causes overflow, which results in wastage of water.

To limit the consumption of water and save it for the future generation, we have come up with a solution - wall-mounted smart faucets equipped with digital meters and water flow sensors. In this, using an Arduino UNO, digital meter, and water flow sensor, we monitor the amount of water being supplied and used.

By using wall-mounted smart faucets equipped with digital meters and water flow sensors we can reduce the overflow of water, which helps you suppress the water crisis and save it for future generations.