## A water saving tap system invented by the students of Rajiv Gandhi Government Engineering college



Abhinav Dhiman and Himanshu Rana, two ECE final year students of Rajiv Gandhi Government Engineering College (RGGEC), Nagrota Bagwan, have invented micro-controller based water saving tap. It will work in four ways. These students have also got the patent for this device in their name.

In today's scenario, water scarcity is one of the challenges that we are facing. While nearly 70% of the world is covered by water, only 2.5 % of it is fresh. Due to overflow from conventional taps, many gallons of water are being wasted in industries and houses all over the world; the patent focuses on solving the problem of water wastage by conserving water in day to day life and by having proposed tap systems which can be used for commercial purposes. There are a number of devices on the market that accomplish the same thing that this device does. They save water that would otherwise go down the drain. However, known solutions generally contain clumsy solutions. In contrast, the invention disclosed herein is very easy to install. It is the simplest and best way to achieve the desired result of not wasting water simply.

There are four modes in the invented tap. In normal mode, the water from the tap will come in the same way as in normal taps. After setting the timing, the bucket of water placed under the tap in the second mode will not overflow after filling. In the third mode, water can be taken from the tap as per the convenience. The fourth mode is related to the timing of water. On turning it on, you can turn the tap on and off according to the timing. These students worked under the guidance of Mr. Sanjeev Kumar, Assistant Professor(ECE), RGGEC.

Professor P.P Sharma, Director, RGGEC said "water scarcity is one of the challenges in today's scenario. This patent from the students focuses on solving the problem of water wastage by conserving water in everyday life and proposed tap systems that can be used for commercial purposes" and he was also happy with the development and added that he expects the hard and focused work of students and faculty at RGGEC will lead to more patents in upcoming years.

The future plan of both the students is to commercialize the use of this patent for worldwide use and hope that it will contribute to the society to solve the problem of water scarcity.