

C.A.C.H.E : Clean Air & Care for Healthy Environment

Abstract

Covid-19 is one of the most horrifying outbreaks that ever occurred on the planet. As per data, each country in the world had gone through a lockdown. Some curbed human activity for almost 2 months. It's been more than 7 months since this outbreak started. During the lockdown, nature replenished itself. Rivers were becoming cleaner and the AQI was improving considerably. But in July the 'Unlock' happened. Well, now the AQI has again gone to the extremely poor category in Delhi-NCR. This project of ours is a small step to tackle the problem of air pollution. We are using home grade chemicals like deodorized kerosene, caustic soda, etc. to purify the air. As per our analysis, it can clean up 10,000 liters of air in 8 hours. The hardware is backed up by the IoT Blynk Cloud. Whenever the AQI reading increases beyond 100, the air-purifier starts up. We are using an aquarium air pump to regulate the flow of air inside the apparatus. Along with this, we are having a website (currently local server-based). It communicates with an API and takes in real-time data for the nearest city. We are promoting the SHAN (Saaf Hawa Aur Nagrik campaign) based on the Lung Care Foundation. We believe that one of the most pressing situations in the upcoming time is going to be air-pollution because after lockdown more people will be using vehicles (and there are no metro trains) so there will be more pollution and that can cause some hazardous problems.