

# Ideation Phase

## Define the Problem Statements

Date	8 September 2022
Team ID	PNT2022TMID25646
Project Name	Efficient Water Quality Prediction Using Machine Learning
Maximum Marks	2 Marks

### **PROBLEM STATEMENT:**

Safe and readily available water is important for public health, whether it is used for drinking, domestic use, food production or recreational purposes. Better water supplies and sanitation, as well as better management of water resources, can contribute greatly to poverty reduction and economic growth. It is known that contaminated water and inadequate sanitation facilitate the transmission of diseases such as cholera, diarrhea, dysentery, hepatitis A, typhoid, and polio. Those without access to clean water and sanitation face preventable health risks.

### **IDEATION PHASE - DEFINE THE PROBLEM STATEMENT :**

We are going to implement a water quality prediction using machine learning techniques. In this technique, our model predicts that the water is safe to drink or not using some parameters like Ph value, conductivity, hardness, etc.

Problem Statement (PS)	I am (Customer)	I'm trying to	But	Because	Which makes me feel
PS-1	Lab Assistant	Check water quality index (WQI)	It gives wrong result	There is not enough parameters	Frustrated
PS-2	Government public health organisation	Check if water is portable or not	It gives inaccurate result	Parameter readings are not correct	Inadequance

