#### IBM NAAN MUDHALVAN

### **DOMAIN - INTERNET OF THINGS**

| DATE          | 26-09-2023                         |  |
|---------------|------------------------------------|--|
| TEAM ID       | Proj_224685_Team1                  |  |
| PROJECT TITLE | Flood monitoring and early warning |  |

#### **PROBLEM STATEMENT:**

- 1. A flood warning system is a way of detecting and forecasting flood events so that the public can be alerted in advance and can undertake appropriate responses to minimize the impact.
- 2. A basic flood warning system consists of sensor circuits, communication system, controller and power system.

#### WARNING TO RURAL PROBLEM STATEMENT TEMPLATE:

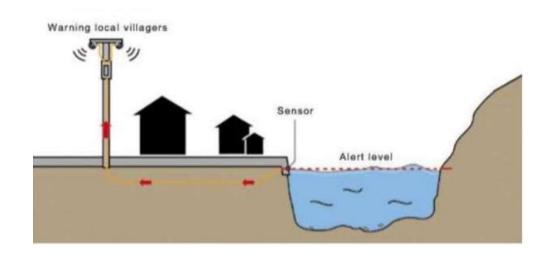
| I am                           | I'm trying to                      | But  | Because   | Which makes   |
|--------------------------------|------------------------------------|--|---|---|
| Village Administrative Officer | Keep my village secure from floods | Due to heavy rain the water level of lake or river in the village becomes high | Of the rainfall, the habitations near the lake or river. Affecting people life and agricultural | me feel  The loss of human life and drowning of crops |

# **OBJECTIVES:**

### The main objectives of this project are:

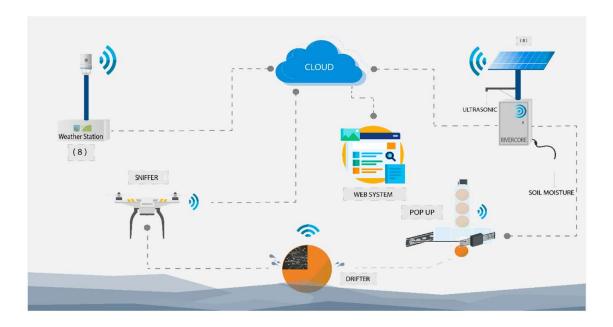
- 1) Gather information regarding current water level readings using Arduino ultrasonic sensor
- 2) Develop Flood Monitoring and Early Warning through online system
- 3) Evaluate and manipulate the information obtained to the Flood prediction

# FLOOD EARLY WARNING SYSTEM:



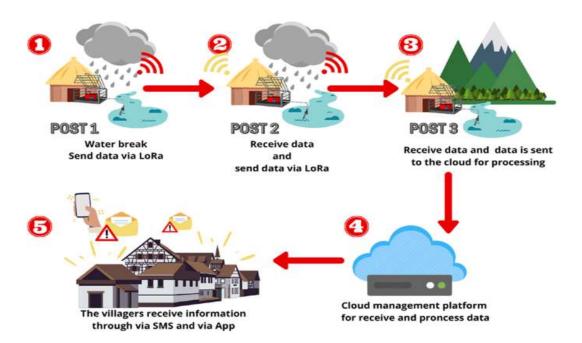
# **DESIGNING A IOT SENSOR NETWORK MODEL:**

A system of sensors used in flash flood prediction that offers critical real time information used to provide early warning that can provide the minute needed for persons to evacuate before imminent events.



### **DEVELOPING THE WARNING PLATFORM:**

The sensor readings of each post are displayed on the App, and alerts are sent via **Short Message Service (SMS)** and via the App



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|-----------------|-------------------|
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