FLASH FLOOD INTIMATION OVER GSM NETWORK

ABSTRACT

The main objective of this project is to detect rising water level in a river at a reasonable distance from the rail track/roadways and intimate that to the respective authorities through SMS, to take appropriate action.

For example, railways face major challenges in prior detection of possible flash flood along the track, which might cause accidents. In this proposed system, water level rise is sensed at a considerable distance from the tracks and necessary action is initiated. Thus, many lives and properties can be saved by this warning system.

In this project a water sensing arrangement is made which is interfaced to a programmable microcontroller. During flash flood conditions if the device senses a rise in water level beyond a danger mark at a considerable distance from railway tracks, it will alert the station master via SMS. Hence, train services of that route can be detained to prevent accidents. An LCD display is also attached to indicate the status.
**HARDWARE REQUIREMENTS:**

- 8051 series Microcontroller, Level Shifter IC, GSM module, LCD, Resistors, LED, Capacitors, Diodes, Transformer, Regulator.

**SOFTWARE REQUIREMENTS:**

- Keil Compiler
- Language: Embedded C or Assembly.