**High Level Project Summary**

From Flood Forecasting and Warning Centre we can only get the forecast of the water level after 24 hours. But when the water level of a river starts to increase it is more import to predict the water level within 24 hours. Hence, we planned of a device which will predict the time when the water level will go beyond the danger-limit so that people can take enough steps to reduce their own loss before flood

**Details Project Description**

A few months ago, Sylhet and Shunamganj were hit by the worst floods in the country history. In addition to financial loss, people’s lives and property have been greatly damaged. One of the many reasons why people suffer from terrible damage is lack of understanding of the dangers of flooding. As for the flood forecast, even though the flood forecasting centre gives a few days advance warning, the floods in Sylhet and Shunamganj become severe within 24 hours. So, we identified the problem of not being able to predict the flood situation within 24 hours as our project.

**Our Solution**

We have planned a device called WLI [ water-level indicator] which basically will work in 3 ways. Data Store, data calculate, data send. It will store the data of water height and time and will send it to the forecast centre. On the other hand, for the calculation, we used Arithmetic Series to predict the next time when it will touch the next sensor.

**How we will predict?**

In arithmetic, if we know the value of 3 numbers suppose 1+3+5, then with an arithmetic formula, we can easily predict what will be the 4th number. In the same way, if we have the data like: Sensor 1 touched= 1:00PM. sensor 2 touched= 1:05PM, sensor 3 touched= 1:09PM then we can easily predict when water will touch sensor 4,5,6,7 etc.

**How does WLI work?**

It will store the data of water height and sensor touching time and will send it to the respective flood forecasting centre. But from sensor touching time’s data, it will predict, when the next sensor will be touched. And after doing calculation, it will send the signal to the connected lights and siren.

**Advantages**

1. With the help of WLI, we can predict the flood situation within 24 hours.
2. It will save the time of the forecasting centre which they used to waste to send the flood signal to the people.
3. It will reduce a huge financial loss.