

# Flood Prevention System

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# Chapter 1

## Introduction

### 1.1 Overview

Natural disasters are considered to be a major threat which causes huge damage and loss of human lives. It is very important to keep track of the precautionary measures to prepare for a disaster and to take safety steps so that human lives could be saved from such a disaster. Floods are considered a bigger threat especially in heavily populated areas. The areas nearby major rivers are mostly remote urban areas and small villages which are always on the verge of major threat of disaster. Since last few decades, floods has caused a big damage to these small villages. Floods has caused large number of causalities as well as damage to the property, animals, and crops. One of the major problem is the lack of awareness and flow of information in those areas, due to which, people of those areas are unable to take any precautionary measure such as building banks across rivers, early migration of goods to safe areas as well as early evacuation.

The “Flood Prevention System” aims to prevent the destruction caused by the floods. The system will calculate the chances of occurrence of flood in a specific area by gathering and analyzing the different data such as weather reports, minimum and maximum capacity of major rivers, time of travel for flow of water between major rivers etc. The system will be able to tell the probability of short-term occurrence of any upcoming flood. If in a certain area, there is a higher risk of flood, the system will alert the users in that specific area regarding this emergency as well as it will provide them with some safety and precautionary measures to be taken.

### 1.2 Objective

- To develop an application that analyze the data to predict the occurrence of a flood for a short-term period.
- To highlight the specific regions so user may be aware of extreme risky area.
- To provide complete user guidelines to spread awareness