



# *Sunbeam College for Women*

## Flood Risk Management {Minor Project}

**Creator**

Ms. Akanksha Kumari

**Supervisor**

Mrs. Anita Shah



Public FLOOD Emergency and  
Awareness service

# Acknowledgement

The completion of this project would have been not possible if not dependent on the dedicated support and encouragement of my project supervisor “**MRS. ANITA SHAH**” who provided me the opportunity to do such a project and there guidelines to work on this wonderful project. I would like to give my thanks of gratitude to all the other faculty members of the department.

For their inspiring intellectual guidance, constructive criticism and valuable suggestion throughout the project work.

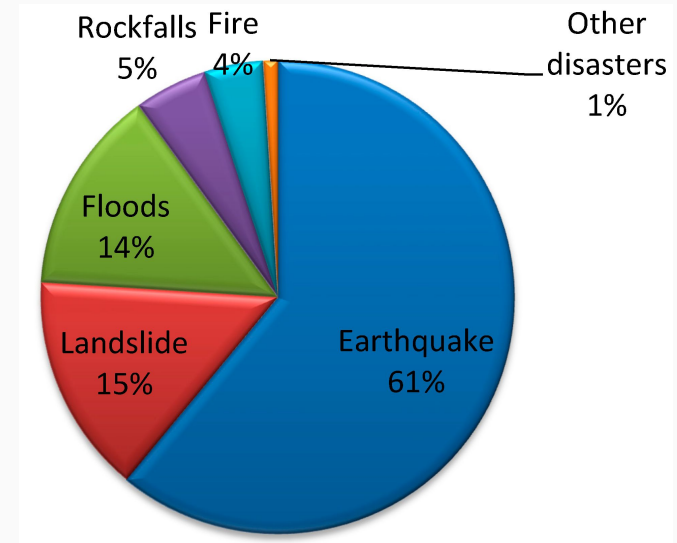
Lastly, I should like to express my deep apperception towards my classmates and parent for providing me the moral support and encouragement.

## Special Thanks

Mr. Daya Shankar,  
Saurabh, Pankaj,  
Ashish, Ananya

# What is Disaster Management

Disaster Management can be defined as the organization and management of resources and responsibilities for dealing with all humanitarian aspects of emergencies, in particular preparedness, response and recovery in order to lessen the impact of disasters.



# Why Flood Risk Management

- To improve the systems of warning and emergency communications
- To provide support for the public authorities and government institutions' hazard mitigation efforts, including planning and action coordination
- To inform the public on the risk exposure to natural hazards and how they can get prepared, respond, recover and mitigate the impacts of such events



# Scope

The Flood serv set out a sustainable, long-term strategy to manage the flood risk within each River Basin, focused on the areas of potentially significant flood risk and the sources of flooding giving rise to that risk.

The Flood Serv set out the range of policies and measures, which are in place, under development or proposed that contribute to the reduction and management of flood risk throughout the River Basin.



## Guidelines

There's a need to have all numbers to hand as part of your flood emergency kit.

If you need to stay with friends or family during a flood having a number to contact them will be vital.





# Software Requirements

- **Operating System:** Window XP, 2003, 2007
- **Platform:** Visual Studio Code
- **Tools:** Mongodb Compass
- **Front-End:** HTML5, CSS3, Bootstrap, JavaScript
- **Back-End:** Express.js, Mongodb
- **Framework:** React.js
- **Server:** Node.js
- **Browser:** Internet Explorer, Google Chrome, Mozilla Firefox etc.

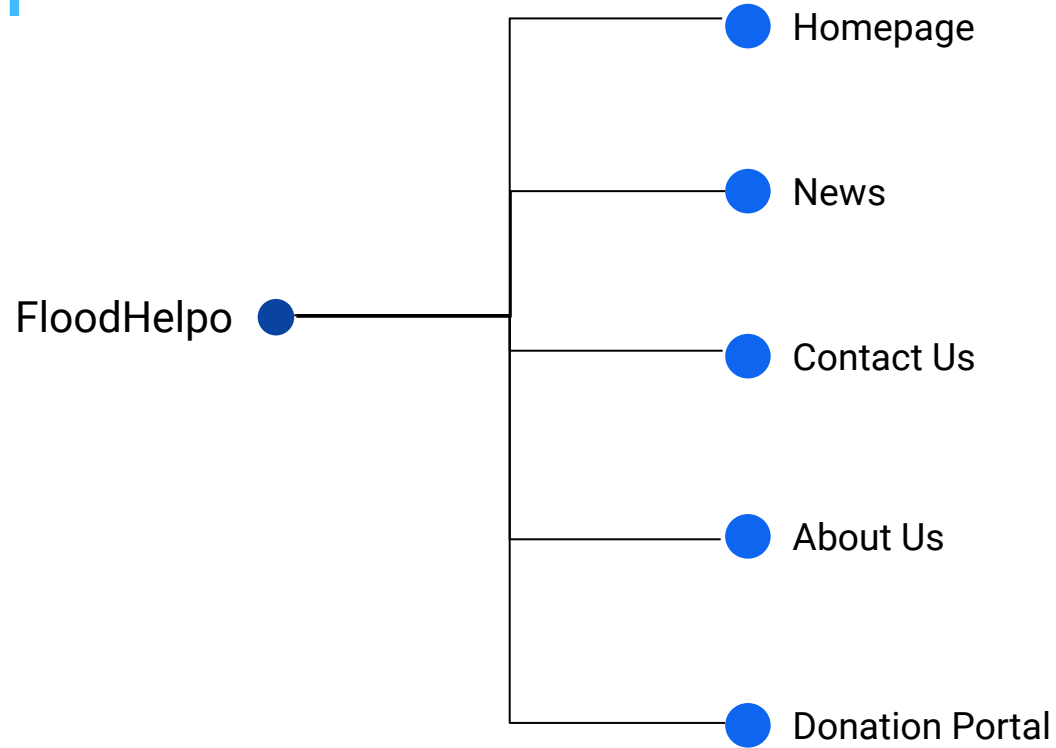


# Hardware Requirements

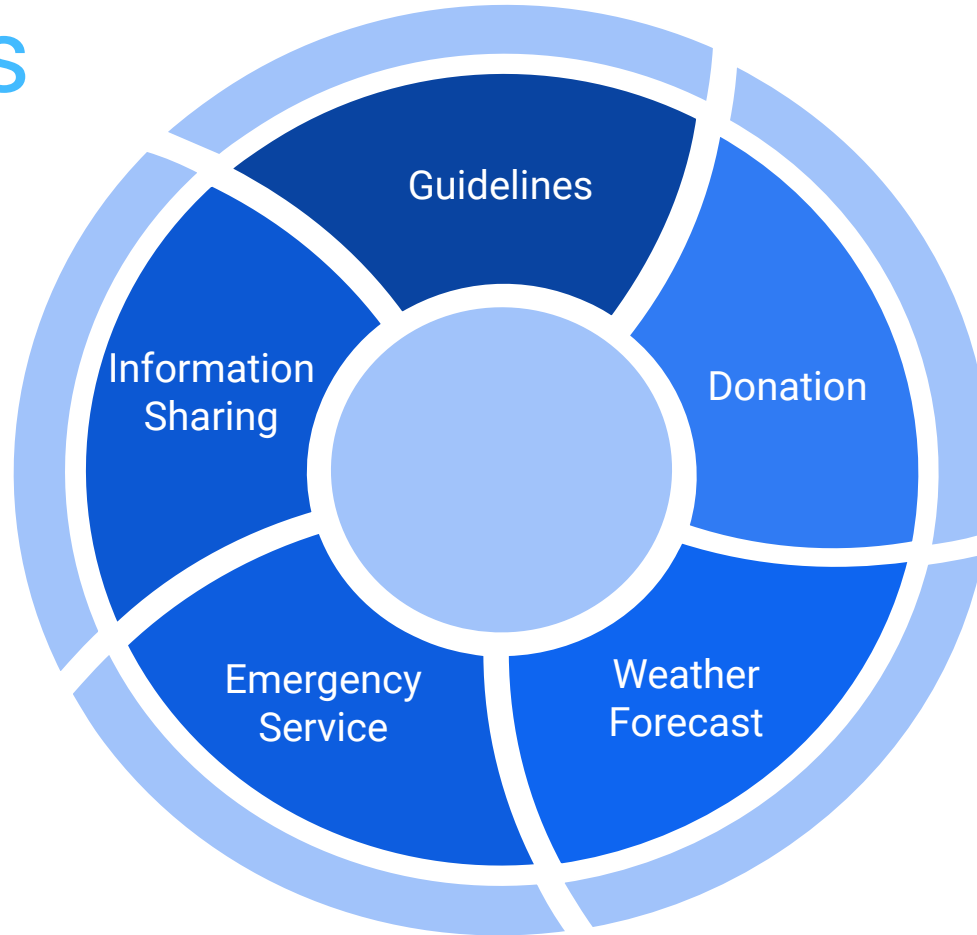
- **Monitor:** VDU
- **Processor:** Intel Core i3 generation (speed 2GHZ or High)
- **RAM:** 128 MB RAM
- **HDD:** 20 GB HD CD-ROM
- **DRIVE:** 52X



# Site Map



# Modules





# Components

- [Contact Us](#)
- [Donate to help](#)
- [Government Guidelines](#)
- [Emergency Kit](#)
- [Weather Forecast](#)
- [Flood Bulletin](#)



**IMD, BMC to bring in flood warning system**  
 New Delhi (IANS) Updated On: 11, 2019, 11:40 AM | NEWS OF INDIA

“We received real time data for a 6 km topography, drainage pattern, water bodies in the city, life lines and data from various sensors in the area. The data received from BMC. The system will know and how much trouble you can expect in different sectors. This will be very useful, especially if people need to be evacuated from low-lying areas as we will be able to forecast 12 hours in advance how a particular spot may get flooded.”

**Dr. M. Rajeevan**  
 Secretary, Ministry of Earth Sciences

**Ministry of Earth Sciences**  
 Government of India  
 Pashupat Bhawan, (Opp. India Habitat Centre)  
 Lodhi Road, New Delhi-110003  
[www.moes.gov.in](http://www.moes.gov.in)  
 @moesgovin

**iFLOWS-MUMBAI**  
**INTEGRATED FLOOD WARNING SYSTEM FOR MUMBAI**  
 A G2G Initiative Towards A Disaster Resilient India

MINISTRY OF EARTH SCIENCES

## Floods In India

India is highly vulnerable to floods. Out of the total geographical area of 329 million hectares (mha), more than 40 mha is flood prone. Floods are a recurrent phenomenon, which cause huge loss of lives and damage to livelihood systems, property, infrastructure and public utilities. It is a cause for concern that flood related damages show an increasing trend. The average annual flood damage in the last 10 years period from 1996 to 2005 was Rs. 4745 crore as compared to Rs. 1805 crore, the corresponding average for the previous 53 years. This can be attributed to many reasons including a steep increase in population, rapid urbanization growing developmental and economic activities in flood plains coupled with global warming.

An average every year, 75 lakh hectares of land is affected, 1600 lives are lost and the damage caused to crops, houses and public utilities is Rs.1805 crores due to floods. The maximum number of lives (11,316) was lost in the year 1977. The frequency of major floods is more than once in five years.

## Emergency Kit

- Battery operated torch
- Extra batteries
- Battery operated radio
- First aid kit and essential medicines
- Emergency food (dry items) and water (packed and sealed)
- Candles and matches in a waterproof container
- Knife
- Chlorine tablets or powdered water
- Important documents (Ration card, Voter ID card, Aadhar Card etc.)
- Cash, Aadhar Card and Ration Card
- Thick ropes and cords
- Shoes



सेवा परमो धर्मः

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**Caught by Deluges and Droughts, India's Cities Look to Become Climate Smarter**



**'Uninhabitable Hell': Climate Change and Disease Threaten Millions, UN Warns**



**India – Hundreds of Homes Damaged by Floods in Bangalore**



**India – Over 60 Dead After More Rain and Floods Hit Telangana**



**India – Third Wave of Floods Hits 300,000 Across 13 Districts**



**India – Rain Triggers Deadly Floods in Meghalaya and Assam**

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**Contact Room:** +91-11-26701728 (Mon-Fri 24X7)

**Telephones:** +91-11-26701700 (Mon-Fri - 9:30AM-6:00PM)

FloodHelpo



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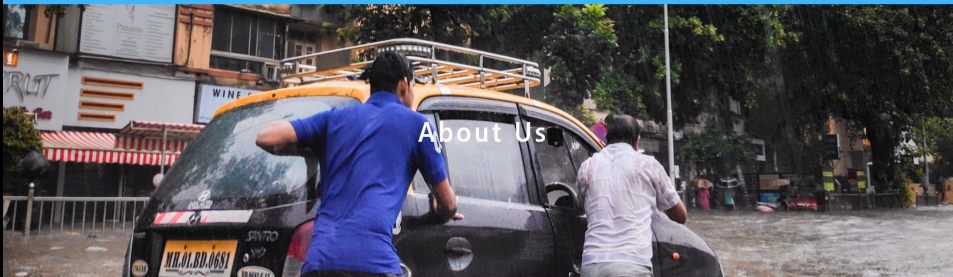
Give your details

We will contact you shortly

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## Overview

Floods have also occurred in areas, which were earlier not considered flood prone. An effort has been made in these Guidelines to cover the entire gamut of Flood Management. Eighty per cent of the precipitation takes place in the monsoon months from June to September. The rivers bring heavy sediment load from catchments. These, coupled with inadequate carrying capacity of rivers are responsible for causing floods; drainage congestion and erosion of river-banks. Cyclones, cyclonic circulations and cloud bursts cause flash floods and lead to huge losses. It is a fact that some of the rivers causing damage in India originate in neighboring countries; adding another complex dimension to the problem. Continuing and large-scale loss of lives and damage to public and private property due to floods indicate that we are still to develop an effective response to floods. NDMA's Executive Summary Guidelines have been prepared to enable the various implementing and stakeholder agencies to effectively address the critical areas for minimising flood damage.

Floods endanger human lives, cause huge environmental consequences, for example when installations holding large quantities of toxic chemicals are inundated or wetland areas destroyed, while they can also provoke heavy economic losses.

In this context, we have thought that significant risk reduction in large international basins can only be achieved through transnational, interdisciplinary and stakeholder-oriented approaches within the framework of a joint transnational research project that will focus on flood risk management.

FloodHelpo try to create awareness among people so that they are aware of the flood, and the damages it causes. So, FLOOD-helpo created a system that can access different flood-related datasets across a broad number of different sources (sensors, social media and open data) and make sense of them on different mobile technologies – tablets and smartphones but also on laptops and PCs – in a way that helps the end users (public authorities, emergency personnel and citizens).

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#### DONATION FORM

Name

Email Address

Phone Number

Address

Postal Code

☐ Eatables ☐ Medicines ☐ Clothes

Discription

Submit

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## Contact us Form Schema

FloodHelpo.contacts

DOCUMENTS1

TOTAL SIZE127B

AVG. SIZE127B

INDEXES3

TOTAL SIZE60.0KB

AVG. SIZE20.0KB

Documents

Aggregations

Schema

Explain Plan

Indexes

Validation

FILTER

OPTIONS

FIND

RESET

...

ADD DATA

VIEW

Displaying documents 1 - 4 of 4

REFRESH

```
_id: ObjectId("5fcdcd1d90ab913f48baf747")
name: "akanksha Kumari"
email: "abs@gmail.com"
phone: 1234567893
message: "for the test purpose"
__v: 0
```

```
_id: ObjectId("5fcdcf7090ab913f48baf749")
name: "demo1"
email: "e1@f.com"
phone: 123456784
message: "m1"
__v: 0
```

```
_id: ObjectId("5fcdcf9290ab913f48baf74a")
name: "demo2"
email: "e2@f.c"
phone: 98876543214
message: "d2"
__v: 0
```

```
_id: ObjectId("5fcdcf9a90ab913f48baf74b")
name: "demo3"
email: "e3@m.c"
phone: 7418529633
message: "demo3"
__v: 0
```

## Help Desk

For the people who are in immediate need

## Admin Login

Admin portal to update the data

## Shelter Homes

Information about the vacant homes.

# FUTURE ENHANCEMENT

## Current Scenario

Updates could be made through live API

## Water Level

Information about the river basins water flow

## Animal Rescue

Safeguard the animals who are affected

# CONCLUSION

The website is special design for the reach of basic information about Flood prone areas.

The elemental problem faced by the lives ,encourage people to do something regarding respective conditions.



The project will reach not only the people affected by floods and stakeholders in the field of water management, spatial planning, crisis management (civil protection), economic affairs, public health, environmental protection but also those who may not be so intrinsically motivated to participate in the flood risk management process.

# What people are saying

We learn from every natural disaster. Whether it's a fire or a flood, we learn something from it so we can respond to the next one better.

Malcolm Turnbull

While natural disasters capture headlines and national attention short-term, the work of recovery and rebuilding is long-term.

Sylvia Mathews Burwell

War zones are dangerous, protests can be violent, also, natural disasters are difficult to cover, so there are going to be risks.

Kate Adie



*Thank You !!*