



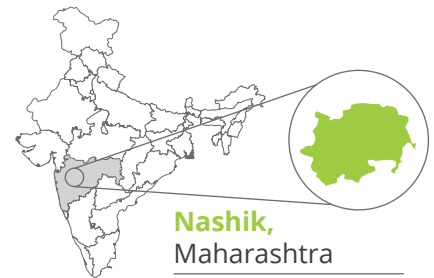
## A CASE STUDY OF PROTECTIVE MEASURES TAKEN BEFORE, DURING & AFTER THE FLOOD: NASHIK

### Project Highlights

- Revision of the Disaster Management Plan to update all the information related to flood preparedness
- Mass awareness and extensive community engagement
- Adoption of city-wide flood precautionary measures

### Background

Nashik, the Grape City of Maharashtra, situated on the North-west sides of Maharashtra not only the administrative center and industrial hub of the Maharashtra state but also a popular pilgrimage tourist destination. The district having a population of 61,09,052 makes it the 3rd most populated city of Maharashtra. Considering its geographical location, the city is vulnerable to various kind of hazard like flood, earthquake, fire hazard, drought etc. The affinity towards various natural disaster produce long lasting impacts on human lives, livelihoods and property of the city. In view of this, the District Administration felt the urgency of preparing an emergency response plan in order to minimize the negative impacts of a natural calamity. Thus, the city initiated an important measure of updating the District Disaster Management Plans.



**Nashik,**  
Maharashtra

Year of Start: 2019  
(Not to scale)

### Project Objectives

- I. To improve the preparedness measures during flood conditions in the city of Nashik
- II. To develop a comprehensive integrated long-term plan for Disaster Management for any climatic conditions
- III. To reduce disaster impact on health care facilities, schools, roads, infrastructure etc

### Key Stakeholders

Nashik Municipal Corporation & Municipal Disaster Management Cell, District Collector Office, District Disaster Management Cell, Municipal Smart City Development Ltd.

### Approach

An integrated approach was adopted to strategize the activities being undertaken to cover the various aspects of preparedness. The plan covered various aspects of preparedness measures before, during and after the flood disaster situation in both rural as well as urban areas of Nashik city. Considering the fact that the city had been experiencing very to very heavy rainfall over the year 2019, the municipal corporation along with its disaster management cell formulated a well-organized and integrated disaster management plan for the city. Disaster risk management component contains, multi-level plan preparation, capacity building at various levels through trainings, community awareness, create resources database with coordination at district administration and line departments, multi sector and multi-disciplinary actions for mitigate disasters with pre-during and post disaster activities, resource mobilization and technical assistance.



## Financial Structure of the initiative

- Funding's from State Disaster budget and regular disaster resource from Nashik Municipal Corporation, District Collectorate & Central Governments Smart City Mission Funding
- The Chief Minister of Maharashtra State demanded a special relief package of RS. 4,700 crores for Kolhapur, Satara & Sangli and amount of Rs. 2,105 crores for Kokan, Nashik and some rest of Maharashtra state
- There would be a compensation of Rs. 10,000/- for rural areas and Rs. 15,000/- for urban areas for affected families
- In addition to this, a compensatory amount of Rs. 75,000/- would be given for small businesses that have suffered the respective damages during the flood disaster

## Achievements



### Benefits

- The development of disaster management plan at an early stage led to increased preparedness for the disaster. All the information about damages, diversions, restoration was shared with the public through press conferences, Twitter, Facebook, etc. ensuring the effective implementation of precautionary measures
- Minimization of infrastructural and human health loss was observed due to extensive preparedness for the floods
- Reduced vulnerability and increased accessibility to food supply during the event of disaster

### Co-benefits

- Mass participation and awareness leading to high levels of preparedness to tackle the calamity
- Development of structural changes in buildings of low-lying areas
- Capacity building and skill development of various disaster management teams ensuring the development of efficient and skilled workforce

## Success Factors

- Effective unity among various citizens of various religions, places and ages.
- Mass awareness of management systems amongst the various levels of societies for every disaster and other critical conditions.

### Limitations

- Lack of communication systems for effective and speedy relief operations
- Alternate road infrastructures are to be constructed in quick time where there submerged roads and other infrastructures in high flood conditions

## Future Prospects

Nashik is a city where the normal and high flood situations arises frequently on each and every year. For this, the well organized and well-prepared Disaster management system is necessary. This year's disaster management plan and system has impacted effectively, which can be used a baseline for planning the disaster management initiatives in future.

Source: Case received from the city

<http://www.uniindia.com/flood-over-4-000-moved-to-safety-in-nashik/west/news/1692955.html>

<https://timesofindia.indiatimes.com/city/nashik/Flood-alert-for-low-lying-areas-for-second-day/articleshow/53501390.cms>

<https://www.irjet.net/archives/V6/i4/IRJET-V6I4916.pdf>