

# India needs robust flood management policy

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#### What's in News?

As per a data from the Disaster Management Division, Ministry of Home Affairs, this year, the heavy rainfall has caused devastating floods in several States, resulting in more than 1,439 lives being lost, 365,770 houses being damaged, and crop damage in 307 districts.

#### **Highlights of the Data:**

Assam, Gujarat, Himachal Pradesh, Madhya Pradesh, Maharashtra, and Bihar have been badly impacted.

The highest number of casualties, was in Himachal Pradesh, followed by Assam, Madhya Pradesh, Gujarat and Maharashtra (118).

#### **Major Factors for Floods in India:**

India's rapidly **altering geo-climatic and socio-economic conditions** are among the major causes of increasing frequency and flood-related damage in States.

Furthermore, rapid urbanisation, deforestation, higher population growth, irregular rainfall, and the vast network of rivers are among the major factors resulting in floods in India.

#### India's burden of Floods:

According to the **Global Climate Risk Index 2021**, India was the seventh worst hit country in 2019 due to extreme weather-related events.

Floods are the most recurrent phenomena in India after cyclones and are amongst India's most lethal and costly disasters.

In 1980, Rashtriya Barh Ayog (RBA) estimated 40 million hectares (mha) of land as flood-prone, which has increased by around 14 per cent to 45.64 mha (Eleventh Plan Working Group on Water 2011, estimates).

According to the Central Water Commission Report 2022, death from floods increased from 37 in 1953 to 1,815 in 2020.

India lost around 0.46 per cent of GDP yearly due to floods.

Damage to crops has been estimated to account for around 0.18 per cent of GDP, while that of public utilities and houses at 0.21 per cent and 0.07 per cent

#### **Impact of Floods on Indian Economy:**

**Fiscal Burden:** On an average, the Indian economy's annual loss due to floods was ?6,428.67 crore. There is also a disproportional rise in the fiscal burden of the Central and State governments, through spending on disaster

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management activities.

**Rural Economy:** Floods not only destroy standing crops and physical infrastructure like roads, bridges, rails, etc., but also have an adverse impact on the employment opportunities in the rural areas, thus hastening inequalities, poverty and food shortages due to crop damage and loss of livelihoods.

**Urban Economy:** Urban flooding has become a common threat to city dwellers due to poor town planning and a dearth of investments in infrastructure.

#### Suggestions:

There must be appropriate implementation of the NDMA guidelines on Urban Flooding 2010.

Strict implementation of the Coastal Regulation Zone (CRZ) notification — which was issued in 1991 and subsequently revised in 2011 and 2019 with the primary intention to address coastal zone management issues — is the need of the hour to tackle the situation.

To mitigate the impact of floods, better disaster management policies such as greater spending on building flood-resilient infrastructure, improved flood warning systems, and for creating community awareness programmes.

In addition, the construction of flood shelters in coastal districts, improving river connectivity, construction of river embankments, and providingpucca houses to poor households in low-lying areas will be salutary.

A National Disaster Database, too, will help policymakers and academics devise long-term flood management policies.

Flood risk management strategies would need to expand their scope from river engineering and embankment construction and address the diverse root causes through a set of interventions targeted to address the drivers of vulnerability.

#### Schemes related to Flood Risk Management in India:

#### (i) National Cyclone Risk Mitigation Project (NCRMP)

The National Cyclone Risk Mitigation Project (NCRMP) has been launched by the Ministry of Home Affairs, with support from the World Bank, in two phases, in the cyclone prone coastal states and Union Territories.

The National Disaster Management Authority (NDMA) has been designated as the implementation agency.

The Phase I started in 2011 with the aim of minimizing the vulnerability to the cyclone and making people and infrastructure disaster resilient Components

The project has four principal components namely:

Component A - Last Mile Connectivity

Component B - Structural and Non-Structural Measures

Component C - Technical Assistance for Cyclone Hazard Risk Mitigation, Capacity Building and Knowledge Creation

Component D - Project Management and Implementation Support.

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The NCRMP Phase-II worked as Centrally Sponsored Scheme for implementation in the States of Goa, Gujarat, Karnataka, Kerala, Maharashtra and West Bengal by Union Cabinet during July 2015 with the date of completion as 31.03.2020.

It has same components and cost sharing mechanism like Phase-I.

## (ii) Creation of National Disaster Response Reserve (NDRR)

The 13th Finance commission recommended for creation of a National Disaster Response reserve (NDRR) with a corpus of Rs.250 crore as Revolving Fund to meet the immediate requirement of relief material/equipment after a disaster.

The purpose of creating National Disaster Response Reserve (NDRR) is to mitigate the sufferings of the victims of the disaster which are beyond the coping capacity of the States.

## (iii) Aapda Mitra Scheme

The NDMA has approved a Centrally Sponsored Scheme focusing on training community volunteers in disaster response in the 30 most flood-prone districts of 25 states in India.

Aim: To train community volunteers with the skills that they would need to respond to their community's immediate needs in the aftermath of a disaster, thereby, enabling them to undertake basic relief and rescue tasks from emergency situations such as floods, flash floods, and urban flooding, when emergency services are not readily available.

The project has been approved for the duration of 2 years, i.e, for financial year 2016-2017 and the financial year of 2017-2018

## (iv) National Disaster Management Plan

The National Disaster Management Plan, 2019 provides a framework and direction to the government agencies for all the phases of the disaster management cycle.

It is in accordance with the provisions of the Disaster Management Act, 2005 and the guidance given in the National Policy on Disaster Management (NPDM) 2009.

The plan is based on the four priority themes of the "Sendai Framework," namely: understanding disaster risk, improving disaster risk governance, investing in disaster reduction (through structural and non-structural measures) and disaster preparedness, early warning and building back better in the aftermath of a disaster.

The plan covers all phases of disaster management: prevention, mitigation, response and recovery.



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