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CHALLENGES AND REFORMS IN INDIA'S DISASTER MANAGEMENT: A CRITICAL EVALUATION OF THE ROLE OF NDMA

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ABSTRACT

India, owing to its diverse geo-climatic and socio-economic conditions, faces significant vulnerability to various types of natural and man-made disasters. With 27 out of 36 states and Union Territories (UTs) prone to disasters such as earthquakes, floods, cyclones, and droughts, the country requires robust disaster management systems. The National Disaster Management Authority (NDMA), established in 2005, is the apex body responsible for disaster preparedness, mitigation, and response in India. This study examines the evolution, functions, and objectives of NDMA, and analyzes the challenges faced by the organization in its mission to reduce disaster risks. The study highlights issues such as the lack of timely warnings during the Uttarakhand floods, inadequate flood management in Assam, Bihar, and Uttar Pradesh, and shortcomings in the National Disaster Response Force (NDRF) personnel's preparedness. Furthermore, the misutilization of disaster response funds by some states and the poor post-disaster response following major calamities such as the Kerala and Chennai floods have also been identified as critical challenges. To address these issues, the study proposes several recommendations, including the need for improved policy guidelines, better preparedness, enhanced early warning systems, greater community involvement, and investment in disaster-resilient infrastructure. The study emphasizes the importance of learning from global best practices to strengthen India's disaster management framework.

KEYWORDS: *National Disaster Management Authority, Disaster Management, NDMA, Disaster Preparedness, Disaster Resilience, Early Warning Systems.*

INTRODUCTION

India, due to its distinctive geo-climatic and socio-economic circumstances, is vulnerable, in varying degrees, to floods, droughts, cyclones, tsunamis, earthquakes, urban flooding, landslides, avalanches and forest fire. Out of 36 States and Union Territories (UTs) in the country, 27 are disaster prone. 58.6% landmass is prone to earthquakes of moderate to very high intensity; 12% land is prone to flood and river erosion; out of 7,516 km coastline, 5,700 km is prone to cyclones and tsunamis; 68% of the cultivable land is vulnerable to drought, hilly areas are at risk from landslides and avalanches, and 15% of landmass is prone to landslides. A total of 5,161 Urban Local Bodies (ULBs) are prone to urban flooding. Fire incidents, industrial accidents and other manmade disasters involving chemical, biological and radioactive materials are additional hazards, which have underscored the need for strengthening mitigation, preparedness and response measures. Disaster risks in India are extra compounded by increasing vulnerabilities related to changing demographics and socio-economic conditions, unplanned urbanization, and development within high-risk zones, environmental degradation, climate change, geological hazards, epidemics and pandemics. Clearly, all these contribute to a situation where disasters seriously threaten India's economy, its population and sustainable development.

OBJECTIVES OF THE STUDY

1. Examine the evolution of the National Disaster Management Authority (NDMA).
2. Analyze the functions and objectives of the NDMA in disaster management.
3. Identify challenges faced by the NDMA and propose recommendations for reform.

METHODOLOGY

This study relies on secondary data obtained from various sources, including government reports from the National Disaster Management Authority (NDMA), the NDMA Annual Report for 2022-2023, and other official websites.

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NATIONAL DISASTER MANAGEMENT AUTHORITY

Genesis of NDMA

The basic responsibility for undertaking rescue, relief and rehabilitation measures in the event of a disaster rests with the State Government. The Central Government supplements the efforts of the State Governments by providing logistic and financial support in case of severe natural calamities. The logistic support includes deployment of aircraft, boats, special teams of Armed Forces, Central Armed Police Forces (CAPFs) and National Disaster Response Force (NDRF), arrangements for relief materials and essential commodities including medical supply, restoration of critical infrastructure facilities including communication network and such other assistance as may be required by the affected States and UTs to meet the situation effectively.

The Government has brought about a change in the approach to disaster management from a relief-centric to a holistic and integrated approach covering the entire gamut of disaster management (prevention, mitigation, preparedness, response, relief, reconstruction and rehabilitation). The approach is based on the conviction that development cannot be sustainable unless disaster mitigation is built in the development process. The Government of India (GoI), recognising the importance of Disaster Management (DM) as a national priority, had set up a High Powered Committee (HPC) in August 1999 and a National Committee on Disaster Management in 2001 after the Gujarat Earthquake to make recommendations on the preparation of DM Plans and to suggest effective mitigation mechanisms. However, after the Indian Ocean Tsunami of 2004, the GoI took a defining step in the legislative history of the country, through an Act of Parliament, by creating the National Disaster Management Authority (NDMA) to spearhead and implement a holistic and integrated approach to DM in India.

The Government of India has enacted the Disaster Management Act, 2005 to provide for the effective management of disasters and for matters connected therewith or incidental thereto. It lays down the institutional mechanism for drawing up and monitoring the implementation of the disaster management plans, ensuring measures by various wings of the Government for prevention and mitigation of the effects of disasters and prompt response to any disaster situation.

Constitution of NDMA

NDMA was constituted on 30th May, 2005 by an Executive Order of the GoI. Subsequently, the Disaster Management Act, 2005 was enacted on 23 December, 2005. NDMA was notified on 27 September, 2006 under the provisions of the Disaster Management Act, 2005.

Composition of NDMA

The Prime Minister of India is the ex-officio Chairperson of the NDMA. At the national level, NDMA has the responsibility, interalia, of laying down policies on disaster management and issuing guidelines to be followed by different Ministries/Departments of the Government of India for the purpose of integrating Disaster Risk Reduction (DRR) measures in their development plans and projects. It also lays down guidelines to be followed by the States in drawing up their respective State DM Plans and taking measures for preventing disasters or mitigating its impact as well as building capacity for dealing with any disaster as it may consider necessary.

NDMA Secretariat

The organizational structure of NDMA was approved by the Union Cabinet in May 2008. The Secretariat is headed by a Secretary with five Joint Secretaries/ Advisors including one Financial Advisor. There are ten Joint Advisors (Director level) and fourteen Assistant Advisors (Under Secretary level) along with supporting staff. The organization is also supported by Senior Research Officers. Disaster being a specialized subject, it has also been ensured that the expertise of Specialists is available on contractual basis.

Functions of NDMA

NDMA, as the apex body for DM in India, has the responsibility of laying down the policies, plans and guidelines for DM for ensuring timely and effective response to disasters. Its statutory functions include the responsibility to:

a) Lay down policies on DM;
b) Approve the national plan and the plans prepared by the ministries/ departments of the GoI in accordance with the national plan;
c) Lay down guidelines to be followed by the State authorities in drawing up the State plan;
d) Lay down guidelines to be followed by the different ministries/ departments of the GoI for the purpose of integrating the measures for prevention of disaster or the mitigation of its effects in their development plans and projects;
e) Coordinate the enforcement and implementation of the policy and plan for DM; (f) recommend provision of funds for the purpose of mitigation; (g) provide such support to other countries affected by major disasters as may be determined by the central government;

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f) Take such other measures for the prevention of disaster, or the mitigation, or preparedness and capacity building for dealing with threatening disaster situation or disaster as it may consider necessary;
g) Lay down broad policies and guidelines for the functioning of the National Institute of Disaster Management (NIDM);
h) Exercise general superintendence, direction and control of the National Disaster Response Force (NDRF), constituted under the Act, for the purpose of specialist response to a threatening disaster situation or disaster;
i) Authorize the concerned department or authority to make emergency procurement of provisions or materials for rescue and relief in threatening disaster situation or disaster;
j) Recommend guidelines for the minimum standards of relief to be provided to the persons affected by disasters

NDMA is mandated to deal with all types of disasters, natural or man-made. Whereas, such other emergencies including those requiring close involvement of the security forces and/or intelligence agencies such as terrorism (counter-insurgency), law and order situation, serial bomb blasts, hijacking, air accidents, Chemical, Biological, Radiological and Nuclear (CBRN) weapon systems, mine disasters, ports and harbor emergencies, forest fires, oil field fires and oil spills will continue to be handled by the extant mechanism, i.e., National Crisis Management Committee (NCMC).

NDMA shall, however, formulate guidelines; facilitate training and preparedness activities in respect of CBRN emergencies. Cross-cutting themes like medical preparedness, psychosocial care and trauma, community-based disaster preparedness, information & communication technology, training, awareness generation, etc. for natural and man-made disasters will also engage the attention of NDMA in partnership with the stakeholders concerned. Resources available with the disaster management authorities at all levels, which are capable of discharging emergency support functions, will be made available to the nodal Ministries/ Agencies dealing with the emergencies at times of impending disaster/ disasters.

The objectives of NDMA are

(a) Promoting a culture of prevention, preparedness and resilience at all levels through knowledge, innovation and education.
(b) Encouraging mitigation measures based on technology, traditional wisdom and environmental sustainability.
(c) Mainstreaming disaster management into the developmental planning process.
(d) Establishing institutional and technolegal frameworks to create an enabling regulatory environment and a compliance regime.
(e) Ensuring efficient mechanism for identification, assessment and monitoring of disaster risks.
(f) Developing contemporary forecasting and early warning systems backed by responsive and failsafe communication with information technology support.
(g) Ensuring efficient response and relief with a caring approach towards the needs of the vulnerable sections of the society.
(h) Undertaking reconstruction as an opportunity to build disaster resilient structures and habitat for ensuring safer living.
(i) Promoting a productive and proactive partnership with the media for disaster management.

CHALLENGES OF THE NATIONAL DISASTER MANAGEMENT AUTHORITY

1. **Uttarakhand Flooding 2013**:
   Due to poor planning and incomplete mitigation initiatives, the NDMA's incapacity to issue timely warnings about landslides and flash floods resulted in a subpar post-disaster relief response.
2. **Flood Management CAG Report**:
   In addition to criticizing the NDMA's ineffectual strategy and highlighting project delays, the CAG report also found institutional problems that are causing inadequate flood control in Assam, North Bihar, and Eastern Uttar Pradesh.
3. **Kerala (2018) and Chennai (2015) disasters:**
   The floods in Kerala and Chennai in 2018 and 2015 exposed serious deficiencies in disaster preparedness, with the floods in Chennai in 2015 being classified as a "man-made disaster" because of the insufficient government response.
4. **Challenges with NDRF Personnel:**
   NDRF personnel faced severe shortcomings in terms of training, equipment, facilities, and residential accommodation, limiting their ability to effectively manage disaster situations.
5. **Misutilization of Funds:**
   Some states misused National Disaster Response Fund and State Disaster Response Fund funds for non-disaster expenses, leading to delays in fund release, interest losses, and financial mismanagement in disaster funds.

RECOMMENDATIONS FOR REFORM

1. **Policy guidelines at a macro level:**
   Strategic guidelines should be formulated at the macro level to allow for underscore and for consolidation of development and disaster management plans being implemented or formulated in different sectors, including management plans.
2. **Emphasis on Preparedness and Mitigation:**

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A culture of preparedness and mitigation needs to be established — disaster management needs to be part of our everyday thinking and doing.

3. **Establish Operational Guidelines for Disaster Management**: Disaster management must be integrated in to the developmental process, operational guidelines should be established for the same and program for prevention and mitigation of disasters should be unambiguously drawn up.
4. **Better Early Warning Systems:**
   At the districts, states and professionals, effective early warning systems with well-coordinated action plan need to be established.
5. **Engagement of Stakeholders and Communities**:
   To improve awareness, cooperation, and response effectiveness, communities, NGOs, CSOs, and the media must be actively involved at every stage of disaster management.
6. **Climate Risk Management**:
   To reduce future susceptibility to disasters, climate risk management must be addressed using a combination of adaptation and mitigation techniques.
7. **Disaster-Resilient Infrastructure:**
   To improve disaster response and recovery capabilities, disaster-resilient infrastructure must be developed through appropriate investment in research and technological advancements.
8. **Global Best Practices:**
   Hong Kong, China, Japan, and Korea are among the nations that have established strong systems to effectively manage typhoons and other disasters; India should take note of these best practices.

CONCLUSION

Inadequate preparation, poor staff training, financial mismanagement, and a lack of coordination are some of the issues facing India's National Disaster Management Authority (NDMA). Simplifying operational guidelines, incorporating disaster risk reduction into planning, and creating early warning systems are all ways to make things better. Enhancing disaster-resilient infrastructure and taking a comprehensive approach that involves communities, NGOs, and the media are also essential. India's disaster management framework can be improved by learning from strong nations, guaranteeing that future disasters are handled efficiently and with the least amount of loss and damage possible.

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