

Role of National organizations in Disaster Prevention and Management

DR. Sadhna Tyagi

Associate Professor- Geography Department CRA Colloge, Sonepat (Hariyana) India

Received-09.11.2022, Revised-14.11.2022, Accepted-20.11.2022 E-mail: Sadhnatyagi1963@gmail.com

Abstract: Indian has a highly diversified range of natural features. The Himalayas, which are the young fold mountain and where the phenomena of stress release is very common together with the uncertain monsoon winds make the region highly prone to natural disasters. The region being the most populous in the world further adds to the damage caused by the natural disasters. Drought, Floods, Cyclones, landslides and Earthquake are the major types of disaster phenomena occurring in the region. Almost all parts of India experience one or more of these disasters. Based on the frequency of occurrence and vulnerability to natural disasters, the entire country may be classified into three broad categories. The first is the Himalayan region spreading over 500000 square km. This region is prone mainly to Earthquakes, Landslides, Avalanche and Bush fire. The second category is the north and central Indian Plains. The region is having some great river systems and a rich source of water for drinking and irrigation. However, these rivers, during the monsoon period usually carry water in excess to their capacity causing flood phenomena. The same region also experiences droughts when the rainfall is less. The third category is the great coastline of India which is prone to devastating cyclonic winds emerging in the oceans.

Key Words: highly diversified, natural features, phenomena, uncertain, disasters, populous, occurring.

Disaster Management meaning and concept- Disaster management is a process of effectively preparing for and responding to disasters. It involves strategically organizing resources to lessen the harm that disasters cause. It also involves a systematic approach to managing the responsibilities of disaster prevention, preparedness, response, and recovery.

A disaster is a consequence of a sudden disastrous event which seriously disrupts the normal function of the society or the community to the extent that it cannot subsist without outside help. A disaster is not just the occurrence of an event such as an earthquake, flood, conflict, health epidemic or an industrial accident; a disaster occurs if that event/process negatively impacts human populations. Disasters combine two elements: hazard, and the vulnerability of affected people. "A disaster occurs when a hazard exposes the vulnerability of individuals and communities in such a way that their lives are directly threatened or sufficient harm has been done to their community economic and social structure to undermine their ability to survive. A disaster can be defined as any tragic event stemming from events such as earthquakes, floods, catastrophic accidents, or fires, or it is a phenomenon that disasters can cause damage to lifdamagerty and destroy the economic, social and cultural life of people. Disaster is the exposure of a group of people to a hazard, leading to a serious disruption of the functioning of a society and causing human, material, economic environmental losses which exceed the ability of the affected community or society to cope.





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A disaster results from a combination of hazards and vulnerability that exceeds the capacity of society to reduce the potential negative consequences of risk. Hazard is an extreme event, natural or man-made, with a destructive potential to social, economic and human assets.

Role of Geography in Disaster Prevention and Management-

Assessing Human-created Vulnerability- To a great extent, disasters result from human-created vulnerability which is a consequence of our interacting with the environment by some human activities concerning rapid industrialization and urbanization such as designing and locating our infrastructure, exploiting natural resources, concentrating our population and so on. This distinction is well understood in the hazards community, increasingly so in government and non-government organizations, but generally poorly recognized by the general public. The methods of human geography research and geographic information system (GIS) are widely applied to vulnerability assessments aiming at disaster prevention and management. For example, the research focusing on social geography and disaster vulnerability in Tokyo demonstrates a well-marked spatial distribution of one of Tokyo's social groups (elderly people) and often close relationship between that pattern and a geographical indicator of vulnerability to earthquakes (wooden housing) and suggests that some social groups and some areas of Tokyo are more vulnerable to earthquake disaster than others.

Dealing with Technical Disaster- The development processes of rapid industrialization and urbanization in developing countries usually bring about technological (or anthropogenic) disaster due to lacking adequate or effective countermeasures for risk reduction. Some researches include: assessing the concentration of potentially harmful heavy metals in the soil in order to evaluate the potential risks to residents and tourists; studying the distribution of trace metals in surface soils to assess the soil environmental quality; assessing soil heavy metal contamination and potential risk for human; heavy metals in soils and crops and related public health risk and environmental remediation related to heavy metal pollution.

Developing Disaster Monitoring and Simulation Systems- Remote sensing, GIS and related technologies have been utilized to provide real-time value-added data and information to authorities in areas of natural resources and environmental management and the role of GIS technologies in detecting, modeling and monitoring natural hazards is special. By using simulation system and technology, the simulation systems for major natural disasters and their emergency plans can be constructed according to the possibility of the occurrence of natural disasters and the principle of history recurrence.

Post-Disaster Recovery and Reconstruction- It is necessary for local post-disaster recovery plans to eliciting positive recovery outcomes that the plans include a sound participatory process and establish a nexus between local needs and policy objectives.

Role of National organizations in Disaster Management-

National Disaster Management Authority (NDMA)- The National Disaster Management Authority (NDMA), headed by the Prime Minister of India, is the apex body for Disaster Management in India. Setting up of NDMA and the creation of an enabling environment for institutional mechanisms at the State and District levels is mandated by the Disaster Management Act, 2005. NDMA is mandated to lay down the policies, plans and guidelines for Disaster Management. India envisions the development of an ethos of Prevention, Mitigation, Preparedness and Response.

The Indian government strives to promote a national resolve to mitigate the damage and destruction caused by natural and man-made disasters, through sustained and collective efforts of all Government agencies, Non-Governmental Organizations and People's participation. This is planned to be accomplished by adopting a Technology-Driven, Pro-Active, Multi-Hazard and Multi-Sectoral strategy for building a Safer, Disaster Resilient and Dynamic India.



ISSN NO.-2347-2944 (Print) e-ISSN NO.-2582-2454 (Online) Vol.-15, No.- IV, Issues-26, YEAR- Oct.-Dec.-2022

The NDMA Logo reflects the aspirations of this National Vision, of empowering all stakeholders to improve the effectiveness of Disaster Management in India. NDMA has 5 major divisions viz. Policy & Plans, Mitigation, Operations & Communications & Information & Technology, Administration and Finance.

National Institute of Disaster Management (NIDM): NIDM was constituted to be the premier institute for capacity building, training and development for disaster management in India. The institute believes in a "Culture of Prevention" outlook towards disaster risk reduction.

Directorate General of Fire Service, Civil Defence and Home Guards (DG FS, CD & HG): The Directorate General of Civil Defence was established under Ministry of Home Affairs in 1962 to handle all policy and planning matters related to Civil Defence, Fire Services and Home Guards, including the functioning of the National Fire Service College. An IPS officer in the rank of Director General of Police heads the organization.

National Disaster Response Force (NDRF): The NDRF was constituted under Section 44 of the Disaster Management Act, 2005 for a specialized response to natural and man-made disasters. At present, NDRF comprise of 12 battalions, with each battalion consisting 1149 personnel. All the 12 battalions are located in Assam, West Bengal, Odisha, Tamil Nadu, Maharashtra, Gujarat, Uttar Pradesh, Punjab, Bihar, Andhra Pradesh and Arunachal Pradesh. These battalions have been trained and equipped to response to all man-made and natural disasters. National Fire Service College (NFSC): The National Fire Service College located in Nagpur, was established in 1956 with the aim of providing training to the Fire Officers of the country in advanced techniques of firefighting and rescue, and creating uniformity in the Fire Service organizations and their management across the country.

Coalition for Disaster Resilient Infrastructure Society (CDRIS)- The Prime Minister announced CDRI at the United Nations Climate Action Summit, in New York City on 23rd September 2019. Memorandum of Association (MoA) and Bye-laws for establishing the Secretariat of CDRI as 'CDRI Society' have been finalised. On 03.02.2020, CDRI Society has been registered of India approved the fund provision through transfer of fund as Grants in Aid from MHA to the CDRI Society on a non-lapsable basis (for a period of five years from 201-20 to 2023-24). The Grants to CDRI Society is to execute CDRI Programmes through technical assistance and research projects on an ongoing basis and also towards covering recurring expenditure of Secretariat Operations and Management. So far, fund provision of CDRI activities are routed through NDMA. For this purpose, sanction order issued to NDMA from MHA's Budget Head 2245 "Relief on account of Natural Calamities".

Conclusions- There are no long-term, inclusive and coherent institutional arrangements to address disaster issues with a long- term vision. Disasters are viewed in isolation from the processes of mainstream development and poverty alleviation planning. For example, disaster management, development planning and environmental management institutions operate in isolation and integrated planning between these sectors is almost lacking. Absence of a central authority for integrated disaster management and lack of coordination within and between disaster related organizations is responsible for effective and efficient disaster management. State-level disaster preparedness and mitigation measures are heavily tilted towards structural aspects and undermine non- structural elements such as the knowledge and capacities of local people, and the related livelihood protection issues.

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ISSN NO.-2347-2944 (Print) e-ISSN NO.-2582-2454 (Online) Vol.-15, No.- IV, Issues-26, YEAR- Oct.-Dec.-2022

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