ROLE OF E-GOVERNANCE IN IMPROVING THE DISASTER MANAGEMENT SYSTEM OF INDIA.

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Keywords

Abstract

As the world is now surging towards a progressive and connected economy, electronic media has become an invincible part of this growth. Since 1991, India has become the fifth largest and fastest growing economy in the world. Over the past few decades, the growth of the economy has accentuated the role of electronic media in every aspect. Electronic media has created a huge flexibility in delivering services such as: government to citizen services, government to business services, government to government services and government to employee services. Electronic media has also being adapted by the government for managing disasters in India. Thus, this article has been stated to glorify the role of electronic governance or e-governance in combating natural disasters and improving the disaster management system of India.

INTRODUCTION

As per United Nations report of 2018, '**electronic governance plays a critical role in building inclusive, resilient societies both before and in response to disasters'**. India has always been very vulnerable in terms of natural disasters and by reckoning upon the previous records of the disasters; India had faced most of the severe consequences of these disasters. In persuasion of this statement, 2013's double shock of severe flash floods of uttarakhand and cyclone phailin in Orissa could be used as a typical example. It caused nearly $661 million in damage and loss. Despite of the devastation caused by the natural disasters, India had shown a remarkable victory over it. The government of India has taken significant steps to improve its disaster risk management and

climatic resilience. In this regard, electronic medium has been a useful measure for the government in combating disasters and spreading awareness among people.

Classification of Disasters in India

- Disasters in India are classified as per origin. The most general way to bifurcate them, into natural and manmade disasters.
- **Natural Disasters** are those which occur due to natural factors. Such as cyclones, floods, landslides, etc.
- **Manmade Disasters** are those which occur due to human negligence. Such as Bhopal gas tragedy, fire outbreaks.

Disaster Management in India before 1991.

- As per the historical statistics, India is considered as the most vulnerable country for disasters.
- The first initiative of developing an institutional mechanism of disaster management was taken in 1883 by formulating the first famine code established by a famine commission.
- After independence, India's main focus was on two pivotal problems such as food scarcity and famine.
- To prevent these issues India decided to set up a Scarcity Relief Division under Ministry of Agriculture which later on changed into Natural Disaster Management Division (NDMD).
- Due to rapid growth of the industrialisation, India had to take some regulatory approaches to eliminate the risk of the hazards and soon National Safety Council was set up.
- The Bhopal Gas Tragedy (1984), indicated government to focus on a holistic development in the technology of disaster management and role of people during emergencies.
- Several important legislative changes and stronger institutional mechanisms were taken by the government and it decided to set up crisis groups at centre, state and local levels.

Evolution of the Disaster Management System in India.

- Orissa super cyclone (1999) and Bhuj earthquake (2001) compelled the government to take a comprehensive approach towards the disaster management system in India.
- One of the earliest initiative taken by the government in terms of the changing comprehensive approach was **Centre Sector Scheme on Disaster Management which implemented from 1993-1994**.
- Under this scheme government included the mitigation and preparedness measures.
- These measures will reduce the risk of the adverse impacts of natural disasters and help to build the national capacity.
- **A High Powered Committee (HPC)** on disaster management was set up in 1999.This committee studied the disaster management system globally and had a series of consultations with all stakeholders.

- HPC promoted the culture of prevention in the nation psyche.

National Disaster Management Act (2005).

- It defines disaster management as the continuous cycle and integrated process of planning, organising, coordinating and implementing measures.
- Some of the necessary measures are:
- Prevention of danger or threat of any disaster.
- Mitigation or reduction of risk of any disaster or its severity or consequences.
- Capacity- building.
- Preparedness to deal with any disaster.
- Prompt response to any disaster situation.
- Assessing the severity.
- Evacuation, rescue and relief.
- Rehabilitation and reconstruction.

History of E-Governance in India

- As per the report submitted by Kapil dev Sandhu Addl. Tehsildar, Sinapali, 2018, the origin of e-governance can be traced to computerisation initiatives taken by the government during 1970's.

- The first step towards introducing e-governance in India was taken in 1977 by setting up **National Informatics Centre.**

- In the year 2006, e-governance was introduced at wider scale all over the country.

- The government approved the **National E-Governance Plan in 2006** which included 27 Mission Mode Projects.

Role of E-Governance in Disaster Management.

- E-governance plays a critical role in the consolidation of disaster management, disaster preparedness and emergency relief.

- As per 2018, E-Government survey discusses that how E-Government integrated policies and services across the 3 dimensions of sustainable development.

- The UN department of economic and social affairs produces a report every two years and in this report they assess the e-government development status of 193 of the UN member states.

- The deployment of e-government services helps to build resilient and inclusive societies.

- It enables access to information and communication technology during all phases of disasters.

- It offers unparalleled levels of data availability, insights and coping capabilities to support countries address this challenge.

Recent Electronic Governance initiatives for Disaster Management.

- **Mobile Radiation Detection System (MRDS)** was launched by NDMA to detect the radiological emergencies and inform the 930 police stations in all the capital cities and UTs.

- **The National Emergency Communication Plan**

(NECP) was set up to equip National Disaster Response Force (NDRF) to create a reliable communication link.

- **Sikkim SDMA and India EQ Maps** are the few mobile apps which provide information during disasters.
- **GHS** is a mobile based app to provide information to schools to prepare a basic disaster preparedness plan.

Information and Communication Technology in Disaster Risk Reduction.

- With advancement in information and communication technology in the form of GIS, Remote Sensing, Satellite-based communication links; it can help a great deal in planning and implementation of disaster risk reduction measures.
- These technologies have been playing a major role in designing early warning systems, catalysing the process of preparedness,

response and mitigation.

- GIS - based systems improves the quality of hazard vulnerability analysis, capacity assessments, guide development planning and assist planners in the selection of mitigation measures.

Government actions for disaster risk reduction.

- In order to reduce the disaster risk reduction the Ministry of Home Affairs, being the Nodal ministry for disaster management has taken lead to manage the disasters and mitigation strategies.
- The ministry has made a **National Disaster Management Framework** which covers the prime sectors such as institutional mechanisms at administrative levels, early warning systems, mitigation/prevention,

preparedness and emergency response.

- **United Nations Development Programme** (UNDP) has joined hands with government of India and implemented GOL-UNDP Disaster Risk Management (DRM) programme in 169 most vulnerable districts of 17 states in India.
- This helped in faster response, effective decision making and develop well informed practitioners.
- **(India Disaster Resource Network) (IDRN)** is a nationwide electronic inventory of essential and specialist resources for disaster response, covering specialist equipment, specialist manpower resources and critical supplies.
- It has been initiated by **Ministry of Home Affairs** in collaboration with United Nations Development Programme (UNDP).

CONCLUSION

- Electronic governance has made necessary government services conveniently accessible for people.
- It has made a huge contribution in preparing a holistic disaster risk reduction plan.
- India has always been a vulnerable country in terms of disasters.
- Government has taken many initiatives to combat these disasters.
- The involvement of information and communication technology has fastened the disaster preparedness plan and mitigation strategies. It has succoured the government in transmitting early warnings and information before the occurrence of disasters.

- Electronic governance has also made people more connected to the government and aware about their actions and decisions to tackle any catastrophic situation. Therefore, electronic governance has contributed in creating a close link between people and government.

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