



A CRITICAL STUDY ON DISASTER MANAGEMENT AND ROLE ICT IN MINIMIZING THE RISK

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Abstract

Managing disasters whether they are man-made or natural has become an urgent need and in the modern era the advancement of science has made it easy for us to manage in man-made or natural disasters. Thousands of people die every year in natural disasters. Rescue teams and aid agencies often rely on scientific research and technology to conduct rescue missions and help those affected. Over the years, new technologies have been developed to improve the efficiency and effectiveness of first responders, deepening the role of technology in disaster relief. Although it is not possible to completely avoid natural disasters, the suffering can be reduced by creating proper awareness about potential disasters and their consequences, developing a proper warning system, disaster preparedness and disaster management through the use of information technology tools.

Key words: Disaster Management, Human resources, ICT, Role of society, Administration, planning, environment, floods etc.

Introduction:

Humans have been facing various natural calamities since ancient times. Disasters are not only natural. They are also man-made. Natural calamities include floods, droughts, cyclones, earthquakes, landslides, volcanoes, forest fires, lightning, tsunamis, weather-related air crashes, shipwrecks, etc. Brief examples of the use of information technology in various disaster management phases such as disaster response, recovery, preparedness and risk reduction are presented in this paper. Discussions on the use of information technology are scattered at every stage. There does not appear to be

a holistic approach to the use of information technology in all phases of disaster management. Information systems play an important role in recording, exchanging and processing information. A combination of different roles enhances system performance. In doing so, we argue the importance of having a comprehensive strategy for the use of technology at various disaster management stages and the need for data standards to exchange information between different systems and stakeholders. Man-made disasters include arson, accidents, war, terror, factory accidents, murders, fights, blockades, traffic jams, air-water-soil pollution, property damage, etc. A disaster, whether natural or man-made, is a disaster and threatens human life as well as other life forms.

Problems of the Study:

In modern times, there are many changes in the environment. It causes disasters like floods, cyclones and droughts. However, it is possible to predict such disasters using meteorological satellites launched in space. Hence disaster management has become easier. The science of disaster management is developing as a new science and it is making human life safer. Every country has prepared its disaster management department to deal with various natural calamities in the twenty first century. Our country has also established a National Disaster Management Force. Whenever any natural or man-made disaster occurs anywhere in the countries, these National Disaster Management Force personnel go to the place and help in managing the disaster. A mechanism to help in this way has been determined.

Objectives of the Study:

The main objective of the research is to reduce the risk of disaster management and information technology and some specific objectives have been given by the researchers in this research paper. In the current situation, it is necessary to create awareness in the society about disaster management and disaster management and to provide information to prevent disaster using information technology as well as reduce the risk and keep them safe as much as possible.

1. To Study the Disaster Management and role ICT.
2. To Study the review of Disaster management.

3. To Study the analyze the ICT tools to minimize the risk.

Significance of the Study:

Satellites launched by humans in space have made it possible to predict any natural calamity in advance. For example, the forecasting of a cyclone can lead to massive population displacement. For this, various types of vehicles have been created by science. Thus, the loss of human life is avoided. Satellite communication has brought mobile devices into the hands of today's humans as a means of communication. So the controlling system understands the reality of any crisis and is able to take decisions. Science has played an important role in crisis management for decades, and the scope of that work is expanding. For example, there was a landslide disaster at Mali in Ambegaon taluka of Pune district. This disaster was natural. But using high-speed information communication and modern vehicles developed by science, relief efforts have been carried out and rehabilitation has taken place despite the large number of deaths.

Scope of the Study:

In the districts of Satara, Sangli, Kolhapur, there is always a huge risk of floods. In the last few years, there was a risk of floods in these places due to heavy rains. Hundreds of villages were flooded, human beings and various animals and crops were severely damaged. It is a miracle of science that National Disaster Management personnel have saved people's lives by doing unprecedented performance here. The earthquake in Latur region in 1993 or the earthquake in Bhuj in Gujarat was made possible by the achievements of science in natural disaster management. The work done by India's disaster management department at that place is unparalleled.

Period of the Study:

The year 2018 is assumed by the researcher to study the concept of disaster management and the role of information technology in risk mitigation. The role of disaster management and governance in 2018 includes factors such as the use of technology.

Limitation of the Study:

Disaster management and the role of information technology in risk reduction are closely related. In disaster management, there are many types of disasters, including earthquakes, volcanoes, storms, droughts, etc., but researchers have studied the disruption of people's lives due to floods. Disasters are of many types but the researchers have studied the damage caused by floods while conducting member research, so this is a limitation of this research. Disaster is a sudden event in the world but the researcher has studied some districts of West Maharashtra in India, so West Maharashtra is one of the limitations of this research.

Research Methodology:

To study the role of disaster management and information technology in risk reduction, researchers have used several secondary researches including images, video, audio, annual reports, magazines, magazines, research papers, articles, websites, etc.

Research Method:

While researching disaster management and information technology, the researcher has completed the said research using descriptive analysis method. In this research, the researcher has done a detailed analysis of the administrative department which has the responsibility of disaster management and risk reduction.

Results and Discussion:

In order to contact the members of the disaster, you need to collect the expired number and write through the main access. Sarpanch, Upasarpanch, Police Patil, Gram Sevak, Gram Panchayat Member, Gram Panchayat Officer, Primary Health Center Officer, Veterinary Officer, Talathi, Staff Available Materials and Available Manpower and Taluka Taluka Tehsildar Group Development Officer, Group Education Officer, Police, Emergency Health Service, Blood Supply Service, Anti-Corruption Department, District Officer, Police Chairperson, District Surgeon, Agriculture Superintendent, Women and Child Development Office, Social Welfare, District Supply Officer, District Winter Officer etc. Both levels of numbers must be collected.

Disaster Management and Technology:

Science and technology help us to understand the mechanism of natural hazards of atmospheric, geological, hydrological and biological origin which is made up of a systematic system of facts learned through study, experiment and observation of floods, severe storms, earthquakes. Landslides, volcanic eruptions and tsunamis and their effects on mankind and its activities. Scientific and technical disciplines include basic and engineering sciences, natural, social and human sciences. Advances in information technology in the form of internet, GIS, remote sensing, satellite communication etc. created by modern science can greatly help in planning and implementation of hazard mitigation. For maximum benefit, new technologies should be used for public communication and natural disaster mitigation messages should be conveyed through these measures.

Risk and Management:

GIS systems can improve the quality and power of analysis of natural hazard assessments, guide development activities, and assist planners in the selection of mitigation measures and the implementation of emergency preparedness and response actions. In short, scientific thinking is a sense of causation, thinking that if science and technology are used with a scientific approach, humans can successfully deal with various natural and man-made disasters on earth. It has stood the test of time.

Responsibility and Administration:

When the monsoon starts, all the departments, including the district administration, start working hard for disaster management. Management is essential to deal with various types of natural disasters including floods, storms, lightning strikes, heavy rains. There are various systems ready for this. A Disaster Control Cell is established in the collectorate. Many people in the district are trained. Without stopping at this, the resources and systems required for disaster relief are reviewed through the Disaster Management Plan. Overall disaster management is a responsible job.

Pre-plan Training:

Disaster Management Committee has been established at district and taluka level. Prepares District Disaster Management Plan annually and

conducts training workshops for District and Taluka level officials. Also, training workshops are conducted for talathi, gram sevak and police patil, sarpanch etc.

Disaster Management Authority:

The Central Government has passed the Disaster Management Act in 2005. Accordingly, Disaster Management Authority has been established at national, state and district level. Preparation of disaster management plan, provision of necessary funds for the same is necessary. The Collector is the Chairman of the District Disaster Management Authority.

Epidemic Diseases:

The district is in a flood prone area. This area is covered by the catchment areas of canals and dams. Therefore, the possibility of outbreak of epidemic diseases is more during rainy season. In the absence of a tap water supply scheme, the use of well water is conducive to epidemics. For two years many patients have died due to diseases like swine flu, chicken gunia.

Risk of Flooding:

Godavari and Girna rivers in the district may cause flood conditions. By taking the information of discharge released from various dams, early warning is given to the villages on the banks of the river. A meeting of all the systems of the district is held for flood control under the chairmanship of the District Collector. Information is taken about possible flood situation, its planning, measures, preparations etc. Early warning of flood is given at village level by giving radio and alarm.

Conclusion:

Disaster Managements also the need of the hour to train the disaster management style level. Since disaster is related to human life, it is necessary and necessary to make students aware of the problems faced while living life with books and knowledge, so disaster prevention and management through education is essential. Disaster management is the measures taken to make the environment balanced and safe. Disaster management does not necessarily prevent disaster but disaster management helps everyone understand what kind of care should be taken for any type of disaster. It is through knowledge that awareness of disaster resistance is awakened in everyone in every small and big

disaster. You can achieve many things like resisting disaster, saving people from disaster, reducing the impact of disaster. At the time of disaster, disaster can be remedied only through the responsibility of people, social institutions, educational institutions, government systems. In terms of management science, disaster prevention needs to be of the best quality because disaster victims need to be protected from the maximum possible threat.

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