

## Disaster Management

Rattan A<sup>1</sup>, Dhillon R<sup>2</sup>

<sup>1</sup>(Lecturer, Thapar Polytechnic College, Patiala, India)

<sup>2</sup>(Phd Scholar, Thapar University, Patiala, India)

**ABSTRACT :** The Disaster is the event that occurs without any prediction. The term ‘Disaster’ is loosely used to refer to any incident, manmade accident, or natural occurrence that could affect the operation of the project in whatever way. We do not assess the impact of upcoming disaster. Disaster management is important for minimizing the loss or lives and economy. Author tries to explain Disaster management recovery plan and plan structure including various processes for the safety of people.

**KEYWORDS:** Disaster, Management, Risk, Recovery

---

### I. INTRODUCTION

**Disaster management (or emergency management)** is the creation of plans through which communities reduce vulnerability to hazards and cope with disasters. Disaster management does not avert or eliminate the threats; instead, it focuses on creating plans to decrease the effect of disasters. Failure to create a plan could lead to damage to assets, human mortality, and lost revenue. Events covered by disaster management include acts of terrorism, industrial sabotage, fire, natural disasters (such as earthquakes, hurricanes, etc.), public disorder, industrial accidents, and communication failures. The word ‘Disaster’ derives from Middle French désastre and that from Old Italian disastro, which in turn comes from the Greek pejorative prefix δυσ-, (dus-) “bad”+ αστρί (aster), “star”. The root of the word disaster (“bad star” in Greek and Latin) comes from an astrological theme in which the ancients used to refer to the destruction or deconstruction of a star as a disaster. The introduction of the paper should explain the nature of the problem, previous work, purpose, and the contribution of the paper. The contents of each section may be provided to understand easily about the paper.

### II. DEFINITION OF DISASTER

Disaster is an event or series of events, which gives rise to casualties and damage or loss of properties, infrastructures, environment, essential services or means of livelihood on such a scale which is beyond the normal capacity of the affected community to cope with. Disaster is also sometimes described as a “catastrophic situation in which the normal pattern of life or eco-system has been disrupted and extraordinary emergency interventions are required to save and preserve lives and the environment”

### III. TYPES OF DISASTER

Though, all kinds of disaster require more or less similar skill-sets and rescue-efforts at least a few

days after the event, it is important to understand various kinds of disasters. Depending upon the actual nature of disaster, the immediate reaction needs to be different.

Also, the first few moments of disasters are distinctly different for each kind of disasters. Thus, understanding of each kind of disaster might also help in identifying the onset of a disastrous event, so that a trained person can undertake some key actions, during the initial few moments. This could have a major impact on the final outcome in terms of amount of final loss.

Natural

These are primarily natural events. It is possible that certain human activities could maybe aid in some of these events, but, by and large, these are mostly natural events.

- Earthquakes
- Volcanos
- Floods
- Tornadoes, Typhoons, Cyclones

Man Made

These are mostly caused due to certain human activities. The disasters themselves could be unintentional, but, are caused due to some intentional activity. Most of these (barring coordinated terrorist activities) are due to certain accidents – which could have been prevented – if sufficient precautionary measures were put in place.

- Nuclear Leaks
- Chemical Leaks/Spill over
- Terrorist Activities
- Structural Collapse

### IV. NATIONAL AUTHORITIES

India-The National Disaster Management Authority is the primary government agency responsible for planning and capacity-building for disaster relief. Its emphasis is primarily on strategic risk management and mitigation, as well as developing policies and planning.[90] The National

Institute of Disaster Management is a policy think-tank and training institution for developing guidelines and training programs for mitigating disasters and managing crisis response.

The National Disaster Response Force is the government agency primarily responsible for emergency management during natural and man-made disasters, with specialized skills in search, rescue and rehabilitation. The Ministry of Science and Technology also contains an agency that brings the expertise of earth scientists and meteorologists to emergency management. The Indian Armed Forces also plays an important role in the rescue/recovery operations after disasters. Aniruddha's Academy of Disaster Management (ACDM) is a non-profit organization in Mumbai, India with 'disaster management' as its principal objective.

## V. INTERNATIONAL AUTHORITIES

### The International Emergency Management Society

The International Emergency Management Society (TIEMS), is an international non-profit NGO, registered in Belgium. TIEMS is a Global Forum for Education, Training, Certification and Policy in Emergency and Disaster Management. TIEMS' goal is to develop and bring modern emergency management tools, and techniques into practice, through the exchange of information, methodology innovations and new technologies.

TIEMS provides a platform for stakeholders to meet, network and learn about new technical and operational methodologies. TIEMS focuses on cultural differences to be understood and included in the society's events, education and research programs. This is achieved by establishing local chapters worldwide. Today, TIEMS has chapters in Benelux, Romania, Finland, Italy, Middle East and North Africa (MENA), Iraq, India, Korea, Japan and China.

### International Association of Emergency Managers

The International Association of Emergency Managers (IAEM) is a non-profit educational organization aimed at promoting the goals of saving lives and property protection during emergencies. The mission of IAEM is to serve its members by providing information, networking and professional opportunities, and to advance the emergency management profession.

The Air Force Emergency Management Association, affiliated by membership with the IAEM, provides emergency management information and networking for U.S. Air Force Emergency Management personnel.

### International Recovery Platform

The International Recovery Platform (IRP) was conceived at the World Conference on Disaster Reduction (WCDR) in Kobe, Hyogo, Japan in January 2005, as part of the *Hyogo Framework for Action (HFA) 2005–2015*. The HFA is a global plan for disaster risk reduction adopted by 168 governments.

The key role of IRP is to identify gaps in post disaster recovery and to serve as a catalyst for the development of tools and resources for recovery efforts.

### The International Red Cross and Red Crescent Movement

The International Federation of Red Cross and Red Crescent Societies (IFRC) works closely with National Red Cross and Red Crescent societies in responding to emergencies, many times playing a pivotal role. In addition, the IFRC may deploy assessment teams, e.g. Field Assessment and Coordination Teams (FACT), to the affected country if requested by the national society. After assessing the needs, Emergency Response Units may be deployed to the affected country or region. They are specialized in the response component of the emergency management framework.

### Baptist Global Response

Baptist Global Response (BGR) is a disaster relief and community development organization. BGR and its partners respond globally to people with critical needs world-wide, whether those needs arise from chronic conditions or acute crises such as natural disasters. While BGR is not an official entity of the Southern Baptist Convention, it is rooted in Southern Baptist life and is the international partnership of Southern Baptist Disaster Relief teams, which operate primarily in the US and Canada.

### United Nations

The United Nations system rests with the Resident Coordinator within the affected country. However, in practice, the UN response will be coordinated by the UN Office for the Coordination of Humanitarian Affairs (UN-OCHA), by deploying a UN Disaster Assessment and Coordination (UNDAC) team, in response to a request by the affected country's government.

### World Bank

Since 1980, the World Bank has approved more than 500 projects related to disaster management, dealing with both disaster mitigation as well as reconstruction projects, amounting to more than US\$40 billion. These projects have taken place all over the world, in countries such as Argentina,

Bangladesh, Colombia, Haiti, India, Mexico, Turkey and Vietnam.

Prevention and mitigation projects include forest fire prevention measures, such as early warning measures and education campaigns; early-warning systems for hurricanes; flood prevention mechanisms (e.g. shore protection, terracing, etc.); and earthquake-prone construction. In a joint venture with Columbia University under the umbrella of the ProVention Consortium the World Bank has established a Global Risk Analysis of Natural Disaster Hotspots.

In June 2006, the World Bank, in response to the HFA, established the Global Facility for Disaster Reduction and Recovery (GFDRR), a partnership with other aid donors to reduce disaster losses. GFDRR helps developing countries fund development projects and programs that enhance local capacities for disaster prevention and emergency preparedness.

## VI. DISASTER RECOVERY PLAN

A **disaster recovery plan** (DRP) is a documented process or set of procedures to recover and protect a business IT infrastructure in the event of a disaster.[1] Such a plan, ordinarily documented in written form, specifies procedures an organization is to follow in the event of a disaster. It is "a comprehensive statement of consistent actions to be taken before, during and after a disaster." The disaster could be natural, environmental or man-made. Man-made disasters could be intentional (for example, an act of a terrorist) or unintentional (that is, accidental, such as the breakage of a man-made dam).

## VII. PLAN STRUCTURE

The disaster recovery plan documents the steps for mitigation, preparedness, emergency response, and recovery. It is the result of a process that begins with senior management's awareness that a plan is indeed necessary, and ends with ongoing maintenance, testing, and if need be, implementation should a disaster occur. Cisco Systems (2006) provides steps in a "template" which reflects the general state-of-the-art: Pre-study, Management Awareness, Planning, Assessments and Audits, Priority, Strategy, Plan, Verification, Management Approval, Implementation, and Periodic Reports and Audits. As noted, obtaining the ongoing commitment of senior business management is particularly important. Senior managers not only need to initiate and support the plan (which often consumes significant organizational resources), but are critical for obtaining priorities regarding which applications need to be backed up in what degree and prioritizing regarding which applications need to be up and

running and how soon. A second key element of the planning process is identifying likely disaster scenarios, planning for them, and identifying their likelihood of occurrence and subsequent losses if they do occur. Organizations need to address a broad range of scenarios because a plan appropriate for one disaster scenario may be inappropriate for another. This is especially true if people are not available, if records or equipment are destroyed, or for regional outages such as hurricanes and earthquakes, if suppliers and partners also are disabled.

## VIII. CONCLUSION

Any event or force of nature that has catastrophic consequences, such as an avalanche, earthquake, flood, forest fire, hurricane, lightning, tornado, tsunami, and volcanic eruptions; a destructive event that affects the natural world and human communities. An earthquake that causes damage to property and loss of life is an example of a natural disaster.

A natural disaster is the effect of a natural hazard (e.g. flood, tornado, volcano eruption, earthquake, or landslide) that affects the environment, and leads to financial, environmental and/or human losses. Though developing countries in regions vulnerable to disasters received many development initiatives and investments, the increased frequency and magnitude of natural catastrophes associated with economic loss and human sufferings have considerably hindered those initiatives. This paper has sought to derive conclusions from empirical evidence in order to integrate disaster risk management initiatives into development objectives.

## REFERENCES

- [1]. Abram, Bill (14 June 2012). "5 Tips to Build an Effective Disaster Recovery Plan". Small Business Computing. Retrieved 9 August 2012.
- [2]. Disaster Management: "Managing the Risk of Environmental Calamity" Shubhendu S. Shukla Asst. Professor, SR Group of Institute, Lucknow
- [3]. Wold, Geoffrey H. (1997). "Disaster Recovery Planning Process". Adapted from Volume 5 #1. Disaster Recovery World. Retrieved 8 August 2012.
- [4]. Cisco Systems, (2006), Disaster Recovery: Best Practices White Paper
- [5]. Disaster Planning and Management Holmes E. Miller Muhlenberg College, Allentown, PA 18104 Kurt J. Engemann Iona College, New Rochelle, NY 10801 Ronald R. Yager Iona College, New Rochelle, NY 10801.