# Disaster in Disaster

Mohammad I. Ramay\* Tahir Masood Qureshi\* Mobasher Hassan\* & Mohsin Iqbal Khan\*

#### Introduction

Pakistan is a country of diversity not only of people, cultures and traditions but also topography. The topography varies from coastal beaches, sandy deserts, plateaus, plains, and high mountains to snow-covered peaks. Perhaps a quotation from the book Pakistan Handbook by Dave Winter and Ivan Mannheim can convey what one can observe: 'Everyone paints a picture of stunning natural beauty, an almost unbelievable range of landscapes and environments; mighty rivers, huge deserts; fertile plains, thick forests and towering mountains...and for once nobody has got it wrong.'<sup>1</sup> Pakistan lies between latitudes 24 and 37 degrees north and longitudes 62 and 75 degrees east covering a total land area of 796,095 sq. km. The country shares its borders with Iran to the west, India in the Southeast, Afghanistan in the northwest, and China in the north. The Arabian Sea lies to its south. The country is geographically divided into three areas: the northern highlands, the Indus river plains and the Balochistan plateau.

 <sup>\*</sup> Associate Professor, Faculty of Business Administration and Social Sciences, Mohammad Ali Jinnah University Karachi, Islamabad Campus. ♣Research Associate/ Ph.D Scholar Department of Business Administration and Social Sciences, Mohammad Ali Jinnah University Karachi, Islamabad Campus. ♥Department of Business Administration and Social Sciences, Mohammad Ali Jinnah University.
▲Department of Business Administration and Social Sciences, Mohammad Ali Jinnah University.

<sup>1</sup> M. Mohsin Khan, Audit of Natural Disaster Assistant Projects: Lessons from Pakistan Experience, Islamabad, 2002, p.2.

Like other South Asian countries, Pakistan continues to suffer from a plethora of natural and human induced hazards that threaten to affect the lives and livelihood of millions of people – natural disasters including floods, earthquakes, landslides, cyclones, and drought to human induced disasters such as fires, civil unrest and terrorism, refugees and internally displaced people, health epidemics, transport accidents, industrial accidents and war.<sup>2</sup> Throughout the history of mankind, disasters like these and many others have wreaked havoc claiming millions of innocent lives and causing enormous damage to property and infrastructure.

While all the disasters contribute to misery and helplessness of their victims, not all the disasters are of the same scale. Some of them threaten and are restricted to only a small geographic plain, while others wipe entire colonies and towns from face of the earth, the latter representing a more severe case. Recently the world saw the tsunami wave wash vast population from existence and causing damage unparalleled in a long time. It was a tragedy that would be remembered for a long time since nothing like this was expected so sudden and so harsh – but  $8^{th}$  of October 2005 proved that to be a wrong presumption.

#### What is an Earthquake?

Earthquakes are described as the sudden release of energy occurring from the collision of crustal plates on the earth's surface or from the fracture of stressed rock formations in that crust. Though it can be said that there are many technical differences in the rocking, rolling, jarring and jolting felt during an earthquake, they can be devastatingly damaging and seriously unnerving. (See Exhibit 1)

#### **Earthquakes and Pakistan**

Almost all of Pakistan regularly experiences earthquakes ranging from moderate to severe in intensity and no part of Pakistan is completely safe from earthquakes.<sup>3</sup> Pakistan lies in a seismic belt and therefore suffers from frequent earthquakes of small magnitudes. Mountain ranges of Koh-e-Sulieman, Hindu Kush and Korakuram are significantly vulnerable. The devastation can be immense because of the poor quality of buildings. There was a major earthquake in Quetta, Balochistan, in 1935 when the entire city was destroyed. From 1974 to 1990, approximately 5669 people were killed due to earthquakes in the

<sup>2</sup> WCDR, A Review of Disaster Management Policies & Systems in Pakistan for WCDR, 2005, p.5.

<sup>3</sup> UNDP, Pakistan National Disaster Management Programme, 2004, p.1.

Northern Areas (NA), NWFP and Balochistan. The most recent significant earthquake occurred in February 2004, in NWFP resulting in 24 deaths and over 129,000 becoming affected.<sup>4</sup>

## 8<sup>th</sup> of October 2005: Pakistan's Black Day

It was a fine Saturday morning, the faithful including men, women and children after "sehri" were getting ready to go to the places of work, schools and colleges They were either out on the road or getting ready to move out. Then suddenly the mother earth started shaking left and right. Ceiling fans swayed around and iron gates vibrated. After initial jolts it dawned, it was an earthquake. The earthquake did not just end after some seconds but continued causing alarm and panic and forcing the people out in the open. A couple of minutes more were consumed in aftershocks and then people rushed to switch on their TV sets to hear the news. It turned out to be much more than expected.<sup>5</sup>

The earthquake that struck northern Pakistan and neighbouring regions of India and Afghanistan, measuring 7.6 on the Richter scale, was the most serious earthquake to hit the area in over a century. The epicentre was about 90 kilometres northeast of the Pakistani capital, Islamabad, and close to Muzaffarabad, the capital of Azad Jammu and Kashmir. The earthquake struck at 0850 hours Pakistan time on Saturday, 8<sup>th</sup> of October, 2005. Strong aftershocks continued to be felt throughout Saturday and Sunday, further complicating rescue and relief.<sup>6</sup>

The magnitude of the earthquake was such that it collapsed mountains, altered the course of waterways, and wiped entire villages off the face of the earth. Some 400,000 houses were destroyed and over 73,000 people perished — including some 35,000 children. On that fateful Saturday morning, tens of thousands of families lost an entire generation — children who left for school but never returned. Over 135,000 people were injured — mostly women, children and the elderly — with thousands becoming disabled and paraplegics.<sup>7</sup>

#### What is Disaster Management?

Disaster Management refers to a plan of how a government deals with potential disasters — precautions that ought to be taken so that the

<sup>4</sup> WCDR, *op.cit.*, p.6.

<sup>5</sup> Tanvir Zahid, "Rising Above Self", *The Nation*, October 11, 2005.

<sup>6</sup> ADP Report, ADP.org., p.1.

<sup>7 &</sup>quot;A Daunting Challenge", <u>http://www.earthquakepakistan.com/</u> adaunting challenge.htm.

effects of a disaster are mitigated, if not completely averted and that the government is able to either sustain or quickly resume mission of critical functions. Recently times have marked a large increase in disasters, whether they are human induced or because of nature unleashing its brute force. This has caused disaster management to become a pivotal part of survival in today's world. This increase in the number of disasters has affected people in that it has made them much more interested and aware of disaster management and its effects.

## 8<sup>th</sup> of October 2005: Pakistan's Deplorable Disaster Management

The 8<sup>th</sup> of October earthquake was the worst form of natural disaster Pakistan had ever faced. It was tough for the authorities to manage the crisis as the terrains of tremor-hit northern areas and Azad Jammu and Kashmir were remote and literally inaccessible. The resultant land sliding further exacerbated the already malicious situation blocking off most of the roads. UN Emergency Relief Coordinator Jan Egeland called for better coordination of relief efforts to save lives in earthquake-hit areas of Pakistan and warned that the disaster would require years of reconstruction work. The UN relief chief said the international community had not allocated sufficient resources for relief measures and called on the Pakistan government to renew appeals for aid.<sup>8</sup> The number of helicopters operational needed to be tripled.

The whole of Muzaffarabad and the roads leading to it were clogged and this signalled disaster in itself. Pakistan authorities sent squads of motorway police to help manage traffic on roads to Muzaffarabad, Battagram, Balakot and Bagh. Egeland also called for relief efforts to be prioritized, so that the communities that had not yet been reached could receive immediate relief. As the roads reopened, there was a rush of earthquake survivors in Islamabad because the weather worsened in Kashmir as the winter approached. The authorities dashed to set up two temporary camps in addition to the three it had thrown together already.

Following are some of the documented facts gathered by *PATTAN* Development Organization<sup>9</sup> that highlight the disaster in itself in wake of the 8<sup>th</sup> of October tragedy:

<sup>8</sup> Raza Shahzad, "UN to Revise \$272 million Relief Fund Target", *Daily Times*, October 15, 2005.

<sup>9</sup> *PATTAN* Development Organization, *Earthquake Update-1*, October 12, 2005, pp.1-4.

#### 1. Complete Failure of the State

- i. Looting became commonplace in affected areas
- ii. Law and order was in complete tatters
- iii. Local administration was not visible
- iv. There was lack of coordination among various government departments
- v. No official responsible at local level
- vi. Unidentified roles of local government functionaries in disaster mitigation

## **2.** Distribution of Relief Goods

- i. Glut of edibles
- ii. Perishable items
- iii. No guidance to local donors from around the country
- iv. Overlapping of relief distribution in few areas
- v. Lack of involvement of local people in distribution, allowing relatively less affected people to accumulate relief goods
- vi. Male majority of recipients of relief in religiously conservative affected areas
- vii. Absence of female volunteers in distribution
- viii. Absence of female doctors, nursing staff and paramedics

#### 3. Lack of Coordination between Public and Private Effort

- i. No designated official at the local level supervising relief operation
- ii. Private relief efforts driven by sentiments, not strategy
- iii. No information booths at local level identifying areas with most emergent needs
- iv. Rushed action leading to concentration of relief effort

# 4. Lack of coordination among local and international NGOs, UN and international agencies

i. NGOs and international agencies coordinating in Islamabad but not in affected areas

- ii. Duplication of effort and multiplication of work
- iii. No exchange of information on available stock of relief goods
- iv. No sharing of resources among the aforementioned
- v. Solo action

## 5. Completely neglected pockets of population

- i. Completely neglected partially or completely damaged valleys
- ii. Completely neglected clusters of population on mountain terraces, even in accessible areas
- iii. Severe food and water shortages
- iv. None or inappropriate shelters
- v. Blocked physical access due to land-sliding, road cracks and shifting of rocks
- vi. Rescue teams focusing on easily accessible areas or the ones highlighted by the media
- vii. The injured, mostly with fractures and open wounds of various degrees, in inaccessible areas developing traces of gangrene.
- viii. Scarce facilities in some medical camps to operate patients

#### 6. Migration towards the twin cities

Large number of people from affected areas, tentative and frightened, marched towards the twin cities without any consideration. People left their homes in panic and brought not even the most essential settlement items.

#### 7. Margalla Towers Debacle

The scene at the site of the doomed Margalla towers was even more pitiable. The local CDA (Capital Development Authority) had failed to get any air support and the heavy machinery summoned for lifting the rubble was not only needless and irrelevant but also inadequate.<sup>10</sup> It was revealed in bright day light that even the capital, which happens to be the

<sup>10</sup> Tanvir Zahid, "Rising Above Self", The Nation, October 11, 2005.

most developed city of the country, lacked the sufficient equipment to lift the heavy blocks and clear the debris.

Not only that, but the authorities lacked any heat sensors or motion detectors to perceive any movement or sign of human life. The problem was solved when the British team brought the aforementioned equipment with sniffing dogs.

#### **Disaster Management Policies at National Level**

According to a report "A Review of Disaster Management Policies and Systems in Pakistan" for WCDR 2005 published in January 2005,<sup>11</sup> applied disaster management policy sometimes carries strategic biases that are aimed at protecting locations and infrastructure of greater economic, political and strategic significance at the cost of areas and communities with lesser influence and importance. Within disaster management bodies in Pakistan, there is a dearth of knowledge and information about hazard identification, risk assessment and linkages management, and between livelihoods and disaster preparedness. 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. There is an absence of a central authority for integrated disaster management and a lack of coordination between disaster-related organizations. 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.

Disaster and relief departments and organizations largely remain under-resourced, untrained, and not given required importance within administrative hierarchy. The officials of important organizations engaged in disaster management like Emergency Relief Cell (ERC) are not provided with adequate training. A great deal of uncertainty prevails among government employees about their stay in any disaster related organization/department, which contributes towards working with less interest and efficiency.

## **Organizations with overall Disaster Management Responsibilities in the Country**

A brief description of responsibilities of disaster management organizations in the country<sup>12</sup> is given below:

## 1. Emergency Relief Cell (ERC)

Responsibilities of the ERC in connection with disaster relief are:

- i. To provide in cash as well as in kind to supplement the resources of the provincial governments in the event of major disasters (See Exhibit 2)
- ii. To coordinate the activities of federal divisions, provincial governments as well as governmental, semigovernmental, international and national aid-giving agencies in the conduct of relief operations
- iii. To maintain contact with international aid-giving agencies/voluntary organizations and donor countries for disaster relief measures
- iv. To administer relief funds being maintained at the federal level
- v. To stockpile certain items of basic necessity and establish a central inventory of resources
- vi. To provide assistance to the calamity-stricken friendly countries

#### 2. National Crisis Management Cell (NCMC)

The National Crisis Management Cell, under the Ministry of Interior, has a round the clock operational control room for collecting information on emergencies of all sorts in the country. It coordinates with the Provincial Crisis Management Cells (PCMCs) and other security agencies to gather relevant information. It is also responsible for coordinating plans for emergency response services in case of emergency situations/disasters.

#### 3. Civil Defence

The Civil Defence Department was established through an ordinance in 1951. It is now governed through 1952 Civil Defence Act.

<sup>12</sup> WCDR, *op.cit.*, pp.9-13.

Before 1993, it was mandated to "take measures not amounting to actual combat, for affording defence against any form of hostile attack by a foreign power or for depriving any form of hostile attack by a foreign power of its effect, wholly or in part, whether such measures are taken before, during or after the time of the attack." But then it was assigned with an additional task during peace times to take remedial measures against natural or man-made disasters. Specifically, the Civil Defence is to assist local administration/army in rescue, evacuation and relief measures

#### **4.** Provincial Relief Departments

- i. Provide adequate resource support to area administration through co-ordination with provincial government departments/agencies
- ii. Provision of necessary funds to the area administration for relief work
- iii. Oversee the working of area administration for relief work
- iv. Obtain field reports of losses and apprise the provincial government/federal government
- v. Assess and evaluate losses and suggest to the federal/provincial governments for providing relief to the affected persons

#### **5.** Provincial Health Departments

- i. Establish a system of high readiness and list of personnel to be mobilized when warning is received or impact of disaster reported
- ii. Establish an Emergency Cell (Medical) to ensure better coordination in disaster situations
- iii. Set up medical camps and organize Medical Mobile Teams (MMTs) to be sent to the scene of disaster with a minimum of delay
- iv. Ensure communication links between hospitals and the scene of disaster
- v. Activate emergency field medical units

## 6. Provincial Food Departments

- i. To ensure adequate availability of food stocks in disaster situation
- ii. To organize ration depots at locations required by the local authorities

## 7. Communication and Works

- i. To supervise, direct and control protection of roads and structures
- ii. To coordinate survey investigation to the extent of damage to roads and structures
- iii. To organize emergency repairs for restoration of public transport routes

## 8. Planning and Development Departments

- i. To assist in obtaining of information and data for predisaster survey and planning to serve as a basis for prevention measures and for relief operations
- ii. To assist in evaluation of losses and damages

## 9. Army

- i. Assess resources for relief, rescue and evacuation work
- ii. Position personnel, material and equipment at planned predetermined locations
- iii. Review the logistics of ration, POL, arms and ammunition, medical cover, tentage, communications and allied measures for movement of troops in aid of civil powers

It is perplexing how all these organizations failed to coordinate effectively in the wake of the 8<sup>th</sup> of October disaster. Now discussed under is the audit of natural disasters assistance projects by Mohammed Mohsin Khan, Director General (Government Audit)<sup>13</sup> to ascertain how much of it is owed to corruption or to other factors:

<sup>13</sup> M. Mohsin Khan, op.cit., pp.4-12.

#### **Audit of Natural Disasters Assistance Projects**

No government can be oblivious to the need for disaster management programmes and their efficient, economical and effective operation. The Federal Government of Pakistan launched the "Prime Minister's Disaster Relief Fund" (PMDRF) during the year 1990-92 in all the four provinces of Pakistan. A total of Rs. 245.470 million was allocated for providing relief to those affected by natural calamities. Thereafter additional funds were released also from the Zakat (religious tax levied for poverty alleviation). It was in 1999 that the Auditor-General was requested by the executive agencies concerned to do a special audit of the PMDRF and of subsequent releases.

The audit conducted was basically a regularity audit but a performance audit orientation did exist in case where project audits were conducted. The approach was as follows:

- Auditors identified the objectives of the project
- They audited the project planning and financing processes commenting on project viability
- Identified failures (defective planning, cost overrun, time overrun and linked them to systemic weaknesses)
- Made recommendations in case of on-going projects
- Conducted sample-based audit and categorized irregularities/ audit findings
- In categorizing the audit findings, guidelines issued by the Auditor-General were followed

A sample from the audit report is as shown as follow:

Sr.No.	Title	No. of Cases	Amount: Rs. in million
1	Fraud, Misuse, Embezzlement	2	21.789
2	Violation of Rules	4	3.289
3	Recoverable	2	4.709
4	Non-availability of complete records	1	90.791
	Total	9	120.578

Special Audit Report on Prime Minister's Disaster Relief Fund — Baluchistan Province only

The audit guidelines issued by the Auditor-General, however, contain a comprehensive categorization of audit observations such as Fraud, Misuse and Thefts, Accidents, Overpayment, Accounting Errors, Negligence, Violation of Rules, Violation of Propriety, Recoverable, Non-production of Record amongst others.

Details were provided on the above classification in the audit reports regarding the various categories e.g., i) type of irregularity and modus operandi, ii) place of occurrence, iii) responsibility centres and iv) action taken or otherwise to report criminal action. Major irregularities related to procurement and distribution procedure of relief goods including foodstuffs. Major findings on systemic issues were as under:

- In most cases there was absence of proper accounting record and missing audit trails
- Distribution was made in certain cases without proper survey to identify the real victims of disaster
- Internal control was almost non-existent and where some procedures existed, there was an override and instructions not followed
- Proper guidelines were not prepared
- Lack of training in financial management procedures was identified as a major cause of rule violations
- Most of system collapse occurred because of compromising the standard financial management procedure for Government operations to favour procedures supposed to speed up operations and cut red tape
- Payments were made for the purpose other than disaster relief. In their replies, the executive agencies erroneously tried to establish linkages pointing towards faulty planning (e.g. purchase of air conditioners, water coolers for offices of District Officers given additional duties for disaster relief)
- System did not ensure income tax deductions from contractors

Keeping in view the nature of irregularities committed in disaster management and prevention programmes, the Cabinet Division of the country has asked the Auditor-General to conduct special audits of all the projects financed by the PMDRF. Although the audits, relating to Disaster Relief and Prevention Projects, done by the Auditor-General have mostly an ex-post facto exercise, there is an increasing awareness of the need for real-time audits. An initiative is underway currently to do an evaluation exercise regarding ability and state of readiness of disaster management agencies to handle major earthquakes. In a country that is threatened by so many potential natural and man-made disasters, the state of readiness of the disaster relief agencies must be assured. The Auditor-General has decided to take the initiative in at least establishing the need to address the important issue.

This report was published in 16<sup>th</sup> Annual Conference of International Consortium of Governmental Financial Management in 2002 — three years before the 8<sup>th</sup> of October tragedy. But still the government failed to take any notice. It would not be wrong to articulate that in Pakistan, there exists this deeply profound notion that there is no such thing as a disaster until it actually occurs, so why worry? But that draws us to some significant lessons learnt.

#### Conclusion

There are certain lessons learnt. Disaster management is in fact crisis management. Not all crises can be anticipated. Even those that can be done may not be rigid enough to be free from surprises. The ideal course of action is to go into a preventive mode and prepare a set of guidelines for categorized set of disaster relief or management projects. These should spell out operating procedures for administrative actions by project executing agencies, financial releases to further authorization and payment checks and other internal controls and post-audit.

Especially with foreign aid pouring in the country, the system of audit must be rigorous and visible. Being recipient of huge amount of foreign aid and donations sent from all over the world, Pakistan must make sure that this aid is positively utilized and kept well track of. The allocation to various organizations should rest upon their nature and role in relief efforts and also their reach to the affected areas.

Also, it is evident that Pakistan has excessive number of organizations responsible for handling the disaster management and mitigation of situations, but they do not have active or transparent coordination at any level, often resulting in solo action. There needs to be a central authority that monitors all of them from top-level and summon different organizations for different purposes. Organizations need to receive adequate training for handling the disaster situations and must be well-equipped and always in a state of readiness.

# Appendix

High Probability	High Probability	High Probability		
Low Impact	Moderate Impact	High Impact		
Moderate Probability	Moderate Probability	Moderate Probability		
Low Impact	Moderate Impact	High Impact		
Low Probability	Low Probability	Low Probability		
Low Impact	Moderate Impact	High Impact		

**Exhibit 1: Earthquake Probability and Impact** 

## Exhibit 2: Relief Assistance (in cash) Through Emergency Relief Cell since 1996 (Rs. in millions)

Year	Disaster	Punjab	Sindh	NWFP	Balochistan	AJK	NAs	FATA	ІСТ
1996	Flood	66.211	-	1.709	11.05	-	-	1.098	-
1997	Flood & Earthquake	237.476	0.541	7.913	15.142	0.810	11.787	-	0.196
1998	Flood	-	-	-	21	100	-	-	-
1999	Cyclone	-	500	-	-	-	-	-	-
2000	Drought	-	900	-	905	-	-	-	-
2001	Rain/Flood	20	-	20	-	-	-	-	2
2002	Drought	-	18.2	-	-	-	-	-	-
2003	Rain/Flood	-	110	-	50	-	-	-	-
2003	Sectarian Violence	-	-	-	48.8	-	-	-	-
2003	Diamir Explosion	-	-	-	-	-	6.2	-	-
2003	Earthquake	-	-	-	-	-	74.36	-	-
Total:		323.687	1528.741	29.622	1050.992	100.81	92.347	1.098	2.196