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**Exploring the role of the mosque in dealing with disasters:  
A case study of the 2005 earthquake in Pakistan**

A dissertation presented in fulfilment of the requirements for the  
degree of Doctor of Philosophy

in

Development Studies at Massey University

New Zealand

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## **Dedication**

To the loving memory of my father, may Allah shower countless blessings on his soul. Amin

## Abstract

This dissertation explored the role of the mosque, a community-based religious institution, in disaster management by documenting and analysing its role in rural settings in the aftermath of the 2005 earthquake in Pakistan. The role of community-based religious institutions has been largely undocumented, underestimated and overshadowed in the development and disaster studies literature. This research was informed by post-development theory. The study addressed two research questions. The first examined the role of the mosque in relation to key actors from the state, civil society and private sector during response, relief, recovery, reconstruction and rehabilitation in the aftermath of the 2005 earthquake. The second explored the potential roles of the mosque in similar situations in the future. Using qualitative research methods and a case study design (in three villages of Mansehra district, Khyber Pakhtunkhwa province), this dissertation analyses primary data collected throughout five months of fieldwork (in 2009 and 2010).

Socially and culturally, the mosque served as an entry door, facilitating access to communities for private, government, local, national and international organisations during the earthquake response, relief, recovery, reconstruction and rehabilitation phases. The mosque building was destroyed but the institution of the mosque remained intact. It continued to function, as men in the surviving community gathered to pray on the rubble or in the open, and served as the collection point of the community. Women did not benefit from the mosque, as a physical place, because of the social, cultural and religious limitations in communities. However, the mosque's institutional support was critical for the engagement of women in other culturally and socially appropriate development and disaster risk reduction activities.

Religious interpretations of the earthquake lead communities to turn to God, increasing meditation and prayer, fostering psychosocial and spiritual healing and creating resilience. Conversely, however, religious interpretations of the earthquake also promoted fatalistic tendencies, which negatively affected communities' attentiveness to some of the disaster risk reduction measures advised by the government. Economically, the affected communities exchanged livelihood-related information and coordinated their income generating activities using the institution of the mosque. In the political context, the study questions simplistic pejorative labels attached to the mosque such as it being a centre for preaching radical views in society and argues that such labels belittle and fail to recognise the distinct position of the mosque as a central community institution.

This research suggests that state, civil society and private sector actors and organisations involved in disaster management need to understand the complex relationships involving people and their religious institutions, and their impact on the social environment. This study calls for engagement: acknowledging and valuing the role of community-based religious institutions including churches, mosques, synagogues and temples in building a synergy between secular and religious efforts for disaster risk reduction. This dissertation contributes to

the scarce body of knowledge about the multi-faceted and potential role of a community-based religious institution, the mosque, which could be used to strengthen disaster management to save human lives and reduce the extent of losses from natural hazards in the future.

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## List of Abbreviations and Acronyms

AJK	Azad Jammu and Kashmir
BBC	British Broadcasting Corporation
CBDRM	Community Based Disaster Risk Management
DCO	District Coordination Officer
DDMA	District Disaster Management Authority
DFID	Department for International Development
DRM	Disaster Risk Management
DRR	Disaster Risk Reduction
ERC	Emergency Relief Cell
ERRA	Earthquake Reconstruction and Rehabilitation Authority
FAO	Food and Agriculture Organisation
FGD	Focus Group Discussion
FRC	Federal Relief Commissioner
ICRC	International Committee of the Red Cross
IFRC	International Federation of the Red Cross
ISDR	International Strategy for Disaster Reduction
km	Kilometre
NCMC	National Crisis Management Cell
NDMA	National Disaster Management Authority
NDMF	National Disaster Management Fund
NDRMF	National Disaster Risk Management Framework
NGO	Non-Governmental Organisation
PBUH	Peace be upon him
PDMA	Provincial Disaster Management Authority
PERRA	Provincial Earthquake Reconstruction and Rehabilitation Authority
SERRA	State Earthquake Reconstruction and Rehabilitation Authority
UK	United Kingdom
UNDP	United Nations Development Programme
UNISDR	United Nations International Strategy for Disaster Reduction
UN	United Nations
USAID	United States Aid

# Chapter One Introduction

## 1.1 Background

Why am I interested in this topic? I was in my hometown of Hafizabad, Pakistan, 308km south of the capital, Islamabad (Figure 1-1), on the morning of October 8, 2005. I was asleep after fasting, since it was the month of Ramadan (the Muslims' month of fasting). I slept oblivious to the massive earthquake that was about to occur that morning. A little later, I became aware of the exact time. At 8:50:40am (New Zealand 4:50:40pm), the ground began to move. It felt as if somebody was rocking my bed. Before I could think what was happening, I heard my mother yelling, 'It's an earthquake<sup>1</sup>, run outside, run, run outside!' Within a few seconds, all my family were outside and everyone witnessed an unforgettable scene. There was very intense shaking and I gripped a tree to save myself from falling over. Everybody was extremely scared. I could never have believed what was happening if I had not seen the whole house, like a pendulum oscillating on its farthest axis. Spontaneously, turning to God, every member of my family was reciting 'Allah-o-Akbar' (Allah is the greatest) and 'Astaghfirullah' (Oh Allah forgive me). This was an unprecedented earthquake experience for the people around me. Other frightened people came out of their homes and they began to share their experiences of the worst earthquake in their lifetime. Fortunately, in my hometown, there was no loss of life.

The television soon showed government ministers and officials gathering at the site of the collapsed 11-storey Margallah Towers in the capital, Islamabad. People were angered to see that police officials and rescue workers, who were present at the site, did not have any tools besides shovels and bare hands with which to break the concrete, remove the debris and pull out the buried victims. It was not until the arrival of the British Rescue Rapid Squad with their sophisticated equipment that a 75-year-old woman was rescued alive from the debris — almost 70 hours after the earthquake (Baabar, 2005). Looking at this state of affairs in the heart of the federal capital, a former government minister despairingly told a TV channel, "Imagine a nuclear power [the state of Pakistan] possessing just one bulldozer in Islamabad" (Baabar, 2005, para. 5).

Most of the people in the country and including government officials only knew about the fall of the Margallah Towers in Islamabad. They were unaware of the thousands of people buried under debris in the nine districts including Mansehra (the case study district) in the Khyber Pakhtunkhwa<sup>2</sup> province of northern Pakistan. The two roads to the epicentre of the earthquake, Muzaffarabad, (one from Murree and the other from Abbottabad) were blocked due to heavy landslides resulting from the earthquake. It was only on the third day that the roads could be

---

<sup>1</sup> Earthquake is defined as an "abrupt disturbance within the earth that is tectonic or volcanic in origin and that results in generation of elastic waves often causing violent shaking of the earth surface" (Schneid & Collins, 2001, pp. 5-6).

<sup>2</sup> At the time of the earthquake, was called the North West Frontier Province.

reopened for the transport of relief items. The extent of the disaster<sup>3</sup> soon became apparent, as news filtered through about the devastation in the remote rural areas of Kashmir and Khyber Pakhtunkhwa. The death toll rose to 73,338, which is unprecedented in the history of Pakistan (ERRA, 2007a, p. 3). In addition, approximately 128,304 people were severely injured and 600,000 houses were destroyed or badly damaged, rendering 3.5 million people homeless. Public infrastructure, including government offices, hospitals, police stations and schools, was destroyed. Approximately 17,000 children were killed as school buildings collapsed (NPR, 2005, para. 1). In many such situations, there was no one to claim the bodies of the children removed from these school buildings, since their parents had also been killed.



Source: Wonacott, Larkin, Hussain and Dreazen (2005)

**Figure 1-1: Map of the location of the earthquake and the case study district, Mansehra, Pakistan**

The scenes of the earthquake destruction shown on television and the stories of people who visited and worked in the areas affected by the earthquake deeply disturbed me. The aftershocks and tremors were so terrifying that on my way back to Islamabad on the morning of October 10, 2005, I found many people in the city (sector G-6/4) sleeping out on the grassed road divider. It was a discussion point among construction engineers that the people who were criminally responsible for the death toll were those builders and contractors who erected the buildings, particularly those in the public sector who had built the schools. It was

<sup>3</sup> For the purpose of this dissertation the term “disaster” means a combination of a hazard and vulnerability, which exceeds the coping capacity of a society and results in severe disorder in terms of loss of human lives and properties and requires external help (Wisner, Blaikie, Cannon, & Davis, 2004). A related term “natural hazard” represents a potential threat from a natural event (such as an earthquake, tsunami, flood and cyclone), that can cause damage to property or lives. For the purpose of this dissertation, hazards denote natural hazards excluding human-induced hazards such as terrorism. Further explanation about when a hazardous event becomes a disaster is provided in Chapter Two.

believed that they used inferior materials without any respect for building bylaws<sup>4</sup> (Baabar, 2005). Two questions that concerned almost every person involved were: ‘why did the earthquake occur?’ and ‘is it a test, trial or punishment from Allah<sup>5</sup>?’

While massive international aid was flowing into the country and the Pakistan Army was at the centre stage of the relief effort, the whole nation responded to the needs of those affected in an exemplary way. People transported truckloads of relief items, each using their initiative and understanding of the situation in the absence of a clear needs assessment guide from any central authority. Various organisations and local people were using imams to make announcements and to rally public support for earthquake victims. Many mosques<sup>6</sup> served as collection centres for donations of cash and relief goods. Imams motivated prayer gatherings of fasting Muslims in mosques to help their earthquake-affected brethren in the name of divine promises. As with the Boxing Day Tsunami (on December 26, 2004) when generous donations were made to help people who suffered from the disaster, the calls for donations were met by a huge response from other parts of the country and the world. In particular, there were huge donations from countries having Muslim majority populations. This was due to the ‘Ramadan effect’ when Muslims donate more to charity than at any other time in a year, due to the increased divine rewards from being charitable in this month. Mosques channelled and fostered the process of collective help, action and direction among the local people.

Having witnessed the earthquake in 2005, I experienced the shock, the pain and the consequent destruction, as well as the incapacity of the government regarding preparation for dealing with disasters. At the same time, I observed the strength and support of ordinary people and the mosque at the community level. Subsequently, I became interested in understanding the role of community-based religious institutions<sup>7</sup> in terms of responding to disasters and saving human lives and assets from future disasters.

This research explores the role of the mosque in relation to other key actors in the state, civil society and private sector during all phases of the 2005 earthquake – response, relief, recovery, reconstruction, rehabilitation and preparedness. These are different phases of a disaster management<sup>8</sup> cycle (also referred to as a disaster cycle). This is a useful concept as

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<sup>4</sup> The application of normal safety building bylaws has been quite weak and there were no seismic safety regulations in the country at the time of the earthquake. Issues of weak disaster management structure and policy will be examined in more detail in Chapter Five.

<sup>5</sup> Allah is the name of God in the Islamic faith followed by Muslims.

<sup>6</sup> A mosque is a building in which Muslims worship. At a minimum, it consists of one hall, which is used for prayer by the congregation under the leadership of a prayer leader called an ‘imam’. To fulfil their religious duty, Muslim men gather five times each day and night to offer five obligatory prayers with a congregation; the first prayer occurs before dawn and the last one after dusk. Mosques are differently managed in various parts of the Muslim world. How mosques are built, maintained and managed in the context of Pakistan is discussed in Chapter Three.

<sup>7</sup> For this dissertation, institutions are defined as “the humanly devised constraints that structure political, economic and social interaction. They consist of both informal constraints (sanctions, taboos, customs, and codes of conduct) and formal rules (constitutions, laws, property rights)” (North, 1991, p. 97).

<sup>8</sup> Disaster management is also referred to by some as emergency management (Quarantelli, 1988; UNISDR, 2004; Wisner et al., 2004). However, its usage differs across countries. For example, what is called emergency management in the USA and New Zealand, is called disaster management in Pakistan.

it helps organise different activities, resources and responsibilities before, during and after a disaster situation.

## 1.2 Disaster management cycle in Pakistan

Varying terminologies have been used for different phases of the disaster cycle in different countries such as New Zealand, Pakistan and the United States of America (USA). Therefore, it is important to determine exactly what it means in Pakistan when referring to a phase in the disaster cycle.

In the USA, the disaster cycle consists of four phases; mitigation, preparedness, response and recovery (Federal Emergency Management Association, 2010a). The 4Rs of a disaster cycle used in New Zealand comprise reduction, readiness, response and recovery (Ronan & Johnston, 2005). Although these terminologies appear similar, the terms actually differ in each country's context. For instance, in New Zealand the term 'recovery' is used in a holistic way and the recovery phase is considered to include mitigation (Ministry of Civil Defence & Emergency Management, 2005, p. 10). In the USA context, recovery is more oriented to rehabilitation of the damaged and destroyed infrastructure after a disaster. Likewise, the term 'mitigation' differs in the USA and New Zealand. Keeping in mind the concept of the 4Rs, there is no mention of the term 'mitigation' in the Civil Defence Emergency Management Act 2002 in New Zealand (Government of New Zealand, 2002) although it is referred to in terms of avoidance of risks in the 'National Civil Defence Emergency Strategy' (Ministry of Civil Defence & Emergency Management, 2007). On the other hand, there is a strong emphasis on mitigation in the Robert T. Stafford Disaster Relief and Emergency Assistance Act 1988 (Government of the United States, 1988). In the USA, the term 'mitigation' is used in the sense of adopting measures relating to avoidance of future disasters preferably before a disaster (Federal Emergency Management Association, 2010b), which is different from the New Zealand interpretation of mitigation as patch up. In the USA mitigation means "reducing or eliminating long-term risks to people and property from hazards and their effects" (Federal Emergency Management Association, 2011, p. 4).

In the context of Pakistan, Disaster Management Ordinance 2006 (Government of Pakistan, 2007a, p. 2) specifies four phases of the disaster cycle: preparedness (1), response (2), recovery and rehabilitation (3), and reconstruction (4). The National Disaster Risk Management<sup>9</sup> Framework (NDRMF) does not refer to the disaster cycle specified in the

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For this dissertation, disaster management is used in the broadest sense of management. It recognises that disasters as complex and non-linear phenomena that involve active coordination and collaboration with multiple actors particularly local communities during all phases of the disaster management cycle in order to save lives, and improve livelihoods and assets such as damaged buildings and infrastructure. It involves actions, plans and arrangements organised before, during and after an emergency or a disaster situation through coordination among different actors such as government, non-governmental organisations, communities and the private sector. This is different from (disaster) crisis management, which refers to specific ways to deal with situational issues of emergencies (Quarantelli, 1997).

<sup>9</sup> The term "disaster risk management" (DRM) is applied to depict "pro-active process of risk assessment and risk reduction"(Etkin & Davis, 2007, p. 1).

ordinance and uses different terms including rescue and relief, response, recovery, mitigation, prevention and preparedness (National Disaster Management Authority, 2007). These terms have not been defined as such in the framework. Table 1-1 shows the disaster cycle for Pakistan. The meanings of the terms – preparedness, response, recovery – as used in Table 1-1, have been adapted from the United Nations International Strategy for Disaster Reduction (UNISDR) (UNISDR, 2009) because the framework was prepared with the technical advice of the United Nations Development Programme (UNDP) of Pakistan. However, the UNISDR does not include definitions of rehabilitation and reconstruction. These terms have been explained in this dissertation based on their use by different people to whom I spoke during fieldwork and on preliminary notes recorded in the Earthquake Reconstruction and Rehabilitation Authority’s (ERRA) Community Based Disaster Risk Management Programme documents (ERRA, 2009a, 2009b). ERRA was established as a statutory body on October 24, 2005 mainly to take up the enormous task of rebuilding the earthquake affected region (ERRA, 2005).

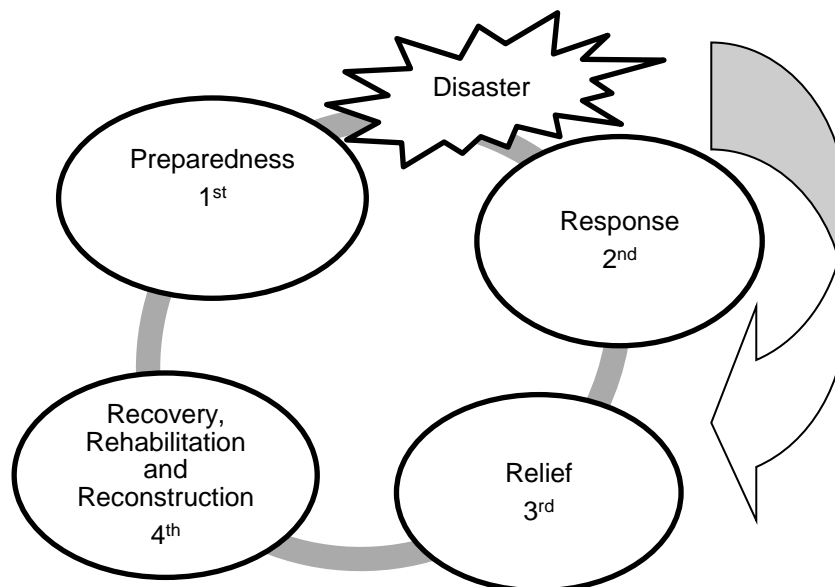
**Table 1-1: Disaster cycle as suggested by the Disaster Management Ordinance in Pakistan**

Disaster phase	Description
1. Preparedness	The knowledge and capacities developed by governments, professional response and recovery organisations, communities and individuals to effectively anticipate, respond to, and recover from impacts of likely current hazards.
2. Response	The provision of emergency services and public assistance during or immediately after a disaster to save lives and maintain public safety. It includes relief activities such as provision of temporary basic life facilities such as food, shelter and medicine before recovery begins.
3. Recovery and Rehabilitation	The temporary restoration of partially damaged public facilities, livelihoods and living conditions of disaster-affected population to bring life back to normal.
4. Reconstruction	The physical reconstruction of completely destroyed infrastructure, particularly government infrastructure like offices, hospitals, schools and bridges which may require a longer period of time based on the principle of ‘build back better’ including measures for mitigation and reduction of disaster risk factors.

Source: Author, based on UNISDR (2009), Government of Pakistan (2007a, p. 2) and ERRA (2010a)

This dissertation, however, uses a modified disaster cycle as explained in Table 1-1. Although there are dedicated government institutions meant for relief, the relief phase has been merged into response and is not mentioned as a distinct phase in the ordinance (Table 1-1). As will be discussed in Chapter Five, the disaster management cycle specified in the ordinance has been influenced by developments in the wake of the 2005 earthquake such as the establishment of ERRA. Therefore, the classification of government disaster related actors in this dissertation is based on their functional responsibilities as explored from primary and

secondary sources during the fieldwork. The four phases of the disaster cycle used in this dissertation are preparedness (1st), response (2nd), relief (3rd) and recovery, rehabilitation and reconstruction (4th) as shown in Figure 1-2.



Source: Author

**Figure 1-2: Disaster management cycle in Pakistan's context as used in this dissertation**

It is important to note that disaster phases are not mutually exclusive because social settings are not homogenous and different individuals and groups can be in different phases of a disaster at the same time (Neal, 1997). Conceptually, it is difficult to separate these phases as they are not neatly distinguishable from each other (McEntire, 2007). Disaster phases are therefore used as an organising concept to highlight the role of the mosque in this dissertation and are not considered deterministically.

### 1.3 Development, natural hazards and Pakistan

The UNISDR asserts that the achievement of the Millennium Development Goals by 2015 could suffer a serious setback if disaster risks<sup>10</sup> are not taken into consideration during

<sup>10</sup> The term “disaster risk” denotes potential losses human (for example lives and health) and material (for example livelihoods and assets), based on the current situation at a place due to a disaster (UNISDR, 2004). This concept is used to broadly map risks faced by a community in view of potential hazards. A related term “disaster risk reduction (DRR)” which has been particularly popularised by the United Nations (UNISDR, 2002, 2005d) calls for a risk avoidance approach through a holistic and strategic method of addressing social and technical aspects of disasters and by incorporating risk reduction measures in development policy before and after a disaster. DRR and Disaster Risk Management (DRM) are also used interchangeably (Schipper & Pelling, 2006). When referring to the future role of the mosque in disaster preparedness in terms of its importance as a community-based role-player, the term “DRR” is used in this dissertation. Further discussion of the term “disaster risk” is provided in Chapter Two.

development (UNISDR, 2005c). All the eight<sup>11</sup> Millennium Development Goals are intertwined with strategies linked to the reduction of disaster risks. Eradication of poverty, hunger, improvement in the lives of slum dwellers and a reduction in the vulnerable population living in high risk areas are dependent on a safe and undistruptive environment. The Honduran President, Carlos Flores, said after his country was struck by Hurricane Mitch in 1998, “We lost in 72 hours what we have taken more than 50 years to build” (Tearfund, 2005, p. 13). The United Nations (UN) Secretary General, Koffi Annan, elaborated on the links between the Millennium Development Goals and natural hazards in the aftermath of the Indian Ocean tsunami:

The devastating impact of the Indian Ocean tsunami has reminded us all of the vulnerability of human life to natural disasters, and also of the disproportionate effect they have on poor people. Unless more determined efforts are made to address the loss of lives, livelihoods and infrastructure, disasters will become an increasingly serious obstacle to the achievement of the Millennium Development Goals (United Nations, 2005a, p. 21).

Pakistan’s exposure to natural hazards has been ranked from moderate to severe (National Disaster Management Authority, 2007). The people of Pakistan, located in the Himalayan region, especially those in the northern part, are exposed to a number of natural hazards like earthquakes, floods, glacial lake outbursts, droughts, cyclones, storms, landslides and avalanches. In addition to physical vulnerabilities, there are immediate pressures that hinder investment by the government in disaster risk preparedness and risk reduction measures. Some of the immediate pressures on the state include terrorism, rapid population growth, urbanisation and industrialisation, environmental degradation and increasing vulnerability owing to climate change (National Disaster Management Authority, 2007). In turn, these pressures restrict the government from investing in loss and vulnerability reduction from future hazards. Vulnerability refers to features of an individual, group or community which affect their ability to, “cope with, resist and recover from the impact of a natural hazard” (Blaikie, Cannon, Davis, & Wisner, 1994, p. 9). Vulnerability is further explained in Chapter Two.

In this context, this study takes a closer look at the lives of the poor communities of Mansehra (district of the Khyber Pakhtunkhwa province of Pakistan) who labour to allocate resources for the reduction of future risks at the cost of their day-to-day struggle to meet immediate needs. It explores how these communities build on their religious beliefs and practices through the institution of the mosque in their disaster prone environment with minimal expectation for any

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<sup>11</sup> The eight Millennium Development Goals are: eradicating extreme poverty and hunger, achieving universal primary education, promoting gender equality and empowering women, reducing child mortality rates, improving maternal health, combating HIV/AIDS, malaria and other diseases, ensuring environmental susutainabilty and developing a global partnership for development (United Nations Millennium Project, 2006).

external help. Against this background, this research examines the significance of the mosque, a local community-based institution, in the everyday lives of the poor. It also studies the social and physical environment that may influence local communities to combine their energies together in order to respond to and face everyday vulnerabilities on a self-help basis for their survival. Overall, the dissertation seeks to highlight the relationships between disasters, development and community-based religious institutions in influencing the well-being of the local people, both in response to hazard events and to protecting people's lives and assets from future hazard events.

#### 1.4 The research project: exploring relationships among development, disaster and community-based religious institutions

Mention of Noah's Ark in the Koran (11:27-51) and the Old Testament Book of Genesis (Chapters 6-9) indicates humans' move to save themselves from an impending disaster such as a flood. It also shows the human perception of a disaster as a sign of God's wrath on sinners. Despite a tradition of significant disasters stories in the three monotheistic religions (Islam, Christianity and Judaism), Gaillard and Texier (2010, p. 81) point out that many seminal scientific studies such as White and Haas (1975), Drabek (1986), Burton et al., (1993), Dynes (1994), Hewitt (1983, 1997), Lewis (1999), Oliver – Smith and Hoffman (1999), Wisner et al., (2004) and Rodriguez et al. (2006) ignored the role of religion in hazards and disaster studies. While there has been a visible shift from understanding disasters as strictly natural processes to a combination of natural and socio-economic factors (Cuny, 1983; Hewitt, 1983, 1997; Hilhorst, 2004; McEntire, 2001), little research has been carried out on the role of religious institutions in the disaster studies literature as noted by Candland (2000), Chester (2005a), Chester, Duncan and Dibben (2008) and Twigg (2004). The religious understanding of disasters has been limited by the western conception of deities' command over and punishment of sinful people and thus, it has been unable to appreciate the "diversity of religious beliefs throughout the world" (Gaillard & Texier, 2010, p. 82).

There have been studies that have analysed and emphasised the role of religion as a component of culture (Cannon, 2000; Chester, 2005a; Homan, 2003; Hutton & Haque, 2003; Oliver-Smith, 1996; Paradise, 2005; Rahmani, 2006; Schmuck, 2000) but religious institutions *per se* have not been adequately considered. The role of religion and religious institutions was effectively overlooked in both development and disaster studies literatures until the start of the new millennium when interest grew in engagement with religious communities (Bano & Nair, 2007; Berger, 2003; Bouma & Ling, 2008; Clarke, 2007; Martens, 2002; Wisner, 2010). This new interest was partly due to increasing recognition of the role and importance of religious institutions in shaping the culture and behaviour of communities (Bano & Nair, 2007; Clarke, 2006). According to McGregor (2010, p. 729), "the current approach to the role of religion within development, and much development research, is out-dated and inappropriate". This

study endeavours to address this gap in the disaster and development studies literature by exploring the role of the mosque, a community-based religious institution, in dealing with disasters, particularly the earthquake in Pakistan.

This dissertation is informed by post-development theory to explore the role of the community-based institution of the mosque in relation to disasters. Post-development theory is characterized by its critical stance on modern western knowledge, and the importance of local knowledge, tradition and communities' social movements and institutions (Escobar, 1995; Escobar, 2010; Esteva & Prakash, 1997; Gibson-Graham, 2011; Ziai, 2007). Through examples, post-development theorists have shown an alternative to conventional development which, they argue, fails to meet the needs of the poor and marginalised. These examples relate to communities' social movements and institutions that are working to bring about social change in their lives on their own terms in different parts of the world.

In the same way, acknowledging human dimension of disasters, engagement with communities and using their knowledge, skills, networks, and resources to build their capacity to reduce hazard risk, cope during a disaster and minimise the loss of lives and assets is emphasised in the disaster studies literature (Blaikie et al., 1994; Cuny, 1983; Haque & Etkin, 2007; O'Keefe, Westgate, & Wisner, 1976). Community-based disaster risk management initiatives and programmes have been a valued tradition and a tool to prepare communities to reduce disaster risk through everyday life routines (Anderson & Woodrow, 1989; Delica-Willison & Willison, 2004; Heijmans, 2009; Maskrey, 1989; Maskrey, 2011). It is in this context of post-development theory that the role of the mosque as a community-based religious institution with the potential to contribute to community-based disaster risk management, is explored in this dissertation.

## 1.5 Research questions and methods

The aim of this research is to explore the role of the mosque<sup>12</sup> in dealing with disasters in the aftermath of the 2005 earthquake in Pakistan. During this exploration, the research examines cultural, psychosocial, economic, social and political dimensions of the role of the mosque. To achieve this aim, the dissertation addresses two primary research questions:

1. What was the role of the mosque in relation to other key actors in the state, civil society and private sector during response, relief, recovery, reconstruction and rehabilitation in the aftermath of the 2005 earthquake in Pakistan?
2. What are the potential future roles that the mosque can play in disaster preparedness, response, relief, recovery, reconstruction and rehabilitation that can be tapped in the future?

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<sup>12</sup> In this study, the expression "the mosque" is used to refer to the mosque as an institution, unless referring to a particular mosque building in a location.

Using a case study approach based on qualitative methods of enquiry, three isolated and mountainous village communities having limited road access and located in the Mansehra district of the Khyber Pakhtunkhwa province of Pakistan, were selected for in-depth examination (see Figure 1-1). In this case study design, different research methods including interviews, focus group discussions and participant observation were employed to collect primary data to develop an understanding of the role of the mosque in the lives of these communities.

The primary data collected during two fieldwork periods of five months in 2009 (including four-weeks of participant observations) and 2010<sup>13</sup>. In total, 83 interviews and nine focus group discussions were conducted. From villages and centres in the case study district, five mosques, seven imams, 13 women and 38 men were involved in interviews and focus group discussions. The remaining 40-interviews were conducted in six districts of Pakistan: Abbottabad, Hafizabad, Islamabad, Mardan, Muzaffarabad and Rawalpindi in order to achieve in-depth insight by visiting places and research participants within given resource and time constraints. Being aware of the complexity of disasters, a broad range of actors were recruited as research participants: from the government (central, provincial and district levels) including Pakistan army personnel; the private sector (local entrepreneurs, contractors, and national and international consultancy firms); academia; research institutes; independent field experts; local and national non-governmental organisations (NGOs); and international multilateral organisations and journalists (from local and international media). Research participants were selected through purposive sampling. Data analysis was carried out through continuous review, coding and category development based on emerging themes. A triangulation method was used to validate and verify information received from primary and secondary sources. Detailed discussion about research methods and fieldwork experience is provided in Chapter Four.

## 1.6 Limitations of the study

There was broad coverage of research participants through two fieldwork periods to achieve a diverse selection of respondents for this study. However, the findings drawn from this analysis cannot represent the views of all the people in the case study area. Whatever the degree of commonality among different populations, each population is unique in terms of its specific socio-economic and geographical features.

In addition, there were security issues in Khyber Pakhtunkhwa because of the military operation against the armed militants supporting the Taliban in Afghanistan in the area during the time of my fieldwork. It was not safe for me, as an outsider from another part of Pakistan to interact independently with local people and I had to rely on my guide and his network. Similarly, sometimes my request for particular information or a document was not granted. For

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<sup>13</sup> The first fieldwork period was April – July 2009. The second fieldwork period was mid- April to mid-May 2010. Details of activities during fieldwork are provided in Chapter Four.

example, the officials of the USA Aid Agency (USAID) did not give me any documents regarding their strategy to engage with imams despite my request. I could not interview some of the officials in certain cases because of their other commitments. Furthermore, at a personal level I had to leave my fieldwork site unexpectedly, postpone my commitments, and take time off due to the sudden death of my father during my first fieldwork period.

The results primarily relate to the case study area in the context of Pakistan. However, as suggested by Yin (2009), if the results are related to theory, the same can be used as a guiding source for examination of other similar cases. Therefore, conclusions drawn in this study may be indicative, have implications, and be relevant at two distinct levels: first, to the role of the mosque in Muslim-majority and Muslim-minority population countries, and second, the conclusions can increase our understanding of the role of local community religious institutions in dealing with disasters in other parts of the world.

## 1.7 Organisation of the dissertation

Chapter Two explores the evolution of views and approaches to disasters and development and pays particular attention to the importance of community-based religious institutions as civil society actors in the lives of communities at the local level. The chapter also introduces post-development theory and its relevance to the study of disasters.

Chapter Three discusses traditional and emerging roles, along with issues of the undocumented contributions of community-based religious institutions. The chapter also discusses the importance and potential advantages of engaging with community-based religious institutions and introduces the mosque, the political controversy of its role, and its position in the development of Pakistan. It also explains the conceptual framework for this dissertation within the context of post-development theory.

Chapter Four elaborates on the choice of research methodology for examining the role of the mosque in dealing with the 2005 earthquake. It explains the fieldwork process including the socio-economic dimensions of the case study site, recruitment of research participants, my experiences, and limitations of this research.

Chapter Five provides an overall understanding of the role of key actors in the disaster management structure and policies in Pakistan. The chapter tracks important milestones in the disaster planning history of the country and highlights major institutional challenges. In addition, it also discusses the problem of the marginalised attention given to local level government and community-based institutions such as the mosque.

The findings of the fieldwork about the role of the mosque in the disaster management cycle are presented in Chapter Six. This chapter addresses the two primary research questions. It demonstrates the role of the mosque during the response, relief, recovery, reconstruction and rehabilitation phases through analysis of the primary data. It also illustrates the experience of

other actors in disaster management, including government, civil society and the private sector in interacting with the mosque in different phases of the disaster management cycle. Furthermore, it identifies potential roles for the mosque in preparing for and responding to future disasters, as identified by the research participants.

Chapter Seven discusses the key findings of this dissertation. The findings about the role of the mosque in the aftermath of the 2005 earthquake are examined in relation to the theoretical framework drawn for this study in Chapters Two and Three. This chapter shows the distinctive contribution of this study to the body of knowledge on disaster and development studies and indicates potential areas for future research.

## **Chapter Two Disasters and development**

### **2.1 Introduction**

This chapter explores different views and approaches to disasters and development, and related trends in development and disaster studies. Particular attention is given to the importance of community-based institutions as civil society actors in the lives of communities at the local level. At the same time, the effect of religious influences such as the notion of acts of God is examined. Approaches to disasters are organised into three broad categories: religious views and approaches, technocratic views and technical approaches, and holistic views and integrated approaches.


Since this dissertation explores the actual and potential roles of mosques as development actors in the face of disaster, it is also important to examine the relevant literature on the meaning of development. The chapter traces the evolution in thinking about development from the appearance of modernisation theory after the Second World War to what some see as the era of post-development. The discussion highlights the emergence and rise of civil society in development and disaster studies. Finally, the chapter elaborates on post-development theory, and its relevance to the examination of the role of community-based institutions in a disaster milieu.

### **2.2 Approaches to disasters**

Human beings have always endeavoured to save themselves and their assets from any physical peril be it a fire, drought, flood or earthquake. The exercising of deliberate choices to avoid and lessen the risk from disasters is not a recent phenomenon. However, the evolution of this thinking, and of these social choices, views and approaches have been far from similar in different societies and within societies at the same time. Patterns of thinking about dealing with disasters have been identified in the disaster studies literature and thus different views and approaches are classified here as these help us understand some of the main themes about approaches to disasters and disaster risk. Nevertheless, this classification is simplistic and should not be used to suggest uniform thinking across various periods. It is indicative only since there were and remain differences in views and approaches about dealing with disasters across societies and within societies. This classification in Table 2-1 is overlapping, as shown by arrows overriding the timeline. The Table summarises the views and approaches to disasters discussed in this section.

**Table 2-1: Views and approaches to deal with disasters**

Views about disasters	Approaches to deal with disasters	Timeline reflecting major tendencies
Religious — disasters as acts of God; people manage disaster risk via rituals to please God and deities	Contingency — singular or ad hoc	Before mid-20 <sup>th</sup> century
Technocratic — disasters as strictly natural processes; strong physical structures to cope with disaster risk	Technical — geophysical and engineering solutions	Mid-20 <sup>th</sup> century to late 1970s
Socio-economic causes highlighted; disasters are not strictly natural; disaster risk and vulnerability are created in everyday life; disaster risk a complex phenomenon; holistic views about disasters	Vulnerability — disasters as a product of hazard and vulnerability; role of communities, local knowledge and skills emphasised as a source of resilience; need to engage with all stakeholders; integrative approaches	1980s to late 2000s



Source: Author

### 2.2.1 Religious views and approaches

People from different religious, supernatural and superstitious contexts have often labelled disasters as ‘acts of God’ in the past. Many thought that disasters were to satisfy superstitious designs and therefore they attributed the loss of life and property wholly to acts of gods and deities. Even the origin of the word disaster has its links with superstitious associations. The original Latin meaning is star. In this context, disasters have been related with the movement of stars, in particular, “ill-starred” (Gibson, 2006, p. 9). People have thus often ascribed their misfortunes to heavenly forces and considered calamities as a punishment from gods.

This does not, however, mean that such societies have been altogether fatalistic. Almost all religions suggest means such as prayers, sacrifices and charities to their followers to please their deities to ward off misfortune, calamities and disasters (Stern, 2007). Sometimes, religions provide examples and illustrations to their adherents for disaster prevention and preparedness measures. The story of the Prophet Yusuf (PBUH)<sup>14</sup> in the Koran (Chapter 12), referred to as Prophet Joseph in Christian and Jewish scriptures, describes food rationing and storage to save people from drought and famine, around 1500 B.C. (Arutz Sheva, 2009). Briefly, as per the story in the Koran (Chapter 12), the King of Egypt saw in a dream that seven fat cows were devoured by seven lean cows and seven green ears of corn were replaced by seven dry ears of corn. Prophet Yusuf interpreted the dream as seven years of good harvest to be followed by seven years of severe drought. The King was impressed with the Prophet’s interpretation of the dream and appointed him to look after the warehouses of

<sup>14</sup> A salutation spoken and written with names of all Prophets in Islamic tradition, abbreviated as PBUH (peace be upon him).

Egypt. The dream came true and enough food was stored in the first seven years of abundant crops. This famine planning saved the people of Egypt during the seven years of severe drought that followed. This example also shows that planning for disasters has been practised by human beings for centuries and is not something that evolved in the 20<sup>th</sup> century (Quarantelli, 2009).

Even in ancient history, in some instances, people showed an organised response to impending disasters. Coppola (2007, p. 3) notes the example of two towns in Italy, Herculaneum and Pompeii, which faced a volcanic eruption in AD 79 from Mount Vesuvius. The leaders of Pompeii coordinated the evacuation of the residents of the town many hours before pyroclastic flows approached their town and thus saved many lives, even though the city was buried in the ash. The inhabitants of Herculaneum, however, could not survive since the town was at the base of the Mount and pyroclastic flows overtook the town in no time.

Learning from experience as well as with the growth of knowledge over time, religious interpretations also showed some adjustments accordingly. For example, an English clergyman, Thomas Robert Malthus (1766–1834), shared his view of disasters as acts of God while suggesting that nature would take away the excess population if human beings did not observe moral restraint. He argued that nature would provide for as many people as it could feed. If human beings exceed the availability of food on earth, nature would balance the proportion of human beings and food by removing the surplus number of humans through floods, droughts, diseases, famines and wars (Malthus, 1958, pp. 5-11).

In the 18<sup>th</sup> century a major earthquake struck the Portuguese city of Lisbon on November 1, 1775, resulting in widespread destruction (Quarantelli, 2009, p. 10). The elite interpreted the Lisbon earthquake on scientific lines, whereas the general population thought it to be an act of God due to people's sins<sup>15</sup> (Grandjean, Rendu, MacNamee, & Scherer, 2008). The famous influential French philosopher, Voltaire (1694–1778) quoted in Grandjean et al., (2008, p. 200), wrote a poem challenging the perception that Lisbon was destroyed because of sins:

Did fallen Lisbon deeper drink of vice  
Than London, Paris, or sunlit Madrid?  
In these, men dance; at Lisbon yawns the abyss

Voltaire compared Lisbon with London, Paris and Madrid asking the question whether the former was worse in immorality than the latter. The Lisbon earthquake had a profound impact. Perhaps for the first time in the world, the government introduced earthquake-building codes during the rebuilding of the city (Chester & Chester, 2010). This may have been the beginning of scientific interpretation, in contrast to an 'acts of God' notion of disasters. It seemed to be the beginning of a new dimension in human thought that there was a need to have some kind of control over nature and not be satisfied with the idea of divine retribution. "The idea of risk

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<sup>15</sup> Here it refers to a human act that is wrong according to the religious laws of any particular faith.

management emerges only when people believe that they are to some degree free agents”, argues Bernstein (1996, p. 35). While scientific explanations regarding the Lisbon earthquake were suggested, the influence of religious interpretations of disasters to varying degrees persisted at different places, and the scientific interpretation of disasters was not widespread and common knowledge.

Even more recently, religious interpretations have still prevailed and many people, both from the developing and developed world, continue to attribute disasters to God. For example, many Indonesian people interpreted the 2004 tsunami as a test of their love for God or a punishment for their sins (Brummitt, 2006). Similarly, in the aftermath of Hurricane Katrina in the United States, some called it divine wrath because of immoral acts (particularly same sex marriages) and some saw it as divine judgement on atrocious human behaviour (Vaught, 2009).

Religious interpretations of disasters were however most common before the mid-20<sup>th</sup> century, when societies dealt with disasters on an ad hoc basis and there was no tradition of the systematic study of disasters (Quarantelli, Lagadec, & Boin, 2007). A multi-hazard approach considering comprehensive measures to safeguard societies from all kinds of hazards was absent. There are, however, historical examples of planned efforts to reduce disaster risk. The 1667 Act for Rebuilding London adopted in the aftermath of the great fire of London in 1666 is an example of a planned approach to reduce the impact of fire hazards in the future (Platt, 1998, pp. 30-31).

Overall, for many people around the globe religious views and practices still constitute an important explanation for disasters; but this perspective has not had much focussed attention from scholars and therefore will be discussed in subsequent chapters. In the context of Pakistan, disasters have generally been perceived as a test or a punishment from God on society, and community-based religious institutions such as the mosque have played an important role, as explored in detail in Chapter Six.

In summary, religious views were dominant before the mid-20<sup>th</sup> century and approaches to dealing with disasters were usually ad hoc, focussed on one type of disaster, and responded to through provision of immediate aid. However, over a period of time, systematic study of disasters led to scientific interpretations of disasters, and religious influences and interpretations of disasters weakened (Quarantelli et al., 2007).

## 2.2.2 Technocratic views and technical approaches

Technocratic views, from the mid-20<sup>th</sup> century until the end of 1970s, treated hazards and disasters as separate and discrete from the social domain of human environment and perceived them only as a result of geophysical processes (Haque & Etkin, 2007). It was commonly believed that natural hazards fell in the domain of natural science, and science and technologies (for example seismology and structural engineering) were thus the primary

means for their prediction, prevention and mitigation. White (1945) had voiced his concerns about viewing floods as acts of God when, to a large extent, flood losses were the result of human occupation of flood plains. However, hazards and disasters were mostly considered a disruption to the human environment by external forces which needed to be overcome through scientific and technical means (Burton & Kates, 1964). There was increasing realisation that tremendous growth in human knowledge could save humanity from the vagaries of nature. The scientific progress in prediction and forecasting future events created a sense of human control over nature, as reflected in the words of Bernstein (1996, p. 1):

The revolutionary idea that defines the boundary between modern times and the past is the mastery of risk: the notion that future is more than a whim of the gods and that men and women are not passive before nature.

The emphasis in the early 20<sup>th</sup> century remained on understanding geographical features such as location, frequency, intensity and probability of events. Therefore, highly technocratic solutions mainly from seismic and engineering sciences were suggested. As a result, huge expenditure was invested in research to find the causes of the rising levels of water in rivers and the consequent losses due to flooding in the USA (White et al., 1958). In addition, engineering works mostly involved land elevation, flood abatement and protective works such as the building of levees and stop banks. Traditional disaster reduction measures such as emergency relief, disaster insurance and seismic-proof buildings were presumed to be able to reduce losses from future disasters (Burby, 1998). Paradoxically, such measures resulted in an increase in losses due to a false sense of full control over disasters. Although economic appraisals were undertaken and almost mandatory for large-scale projects, which were partially responsible for draining the ring-fenced public welfare spending, such appraisals seldom looked at the potential costs of a catastrophic failure of such works (Burby & French, 1981).

Technocrats' expertise was trusted blindly in some cases, as in the example of Saint-Pierre (Scarth, 2002). Foster (1980, pp. 4-12) notes an eruption of Mont Pelée in Saint-Pierre, a small town of around 30,000 people on the West Indian Island of Martinique on May 8, 1902. This example shows the degree of reliance on scientific interpretations of disasters. In fact, it shows how the behaviours and attitudes of people were quite attuned and dependent on technological advancements. Foster (1980, pp. 4-6) notes that there had been hissing sounds and steam coming out of Mont Pelée, for about a month. A team of government scientists investigated three explosions on April 23, 1902 and newspaper reports stated that there was nothing to worry about. Gradually, the smell of sulphur started spreading in the air along with dust settling on the city. It became difficult to breathe. On May 2, 1902, there were flashes of light coming out of the volcano and many public utilities such as shops and schools were closed. Nevertheless, there was no thought of evacuation was being planned by the government. Then a sugar mill along with 40 people was buried under the mud coming out of the volcano on May 5, 1902 and people became concerned. However, less than a thousand

people moved out of the town on their own and the Mayor of the city announced “do not allow yourselves to fall victims of groundless panic” (Foster, 1980, p. 7). The Mayor was backed by a famous French professor who also disregarded any fears about the volcano. Ultimately, at 7:59 a.m., on May 8, 1902, in a bright and clear sky, Mont Pelée erupted and the whole population of 30,000 died, only two people survived.

Despite such limitations, as shown in case of the Mont Pelée volcanic eruption, the technocratic approach constituted the dominant paradigm in the mid-20<sup>th</sup> century. However, there were a few instances where anthropologists and sociologists were engaged on the sidelines of the main disaster studies in the aftermath of any kind of a disaster, for example, the United States Strategic Bombing Survey study in the aftermath of the World War II (Quarantelli, 2009). The United States Air Force commissioned this survey to analyse mainly the impact of bombings on industrial production in Germany and Japan. In addition, due to the involvement of anthropologists and sociologists, the survey included a social dimension by investigating civilians’ responses to bombings.

Overall, the central argument in this approach was that nature could be controlled by understanding its physical characteristics through scientific inquiry along with traditional disaster reduction measures such as warnings, insurance and emergency relief. Therefore, based on scientific input, the main responsibility for dealing with natural hazards remained in the domain of the state. It was mostly the experts of different natural sciences who were central in suggesting strategies to reduce the risk of losses from hazardous events (Kates & Burton, 1986). Towards the end of 1970s the understanding of disasters as complex phenomena involving the interaction of both physical and social environment improved (Haque & Etkin, 2007).

### 2.2.3 Holistic views and integrated approaches

Before discussing holistic views and integrated approaches to disaster, it is important to elaborate three related and shared concepts in development and disaster studies literatures; vulnerability, capacity and resilience, referred to in this dissertation. Table 2-2 provides a summary of the different dimensions of these concepts.

**Table 2-2: Explanation of the terms vulnerability, capacity and resilience**

<b>Concept</b>	<b>Explanation</b>	<b>Key references</b>
Vulnerability	Socio-economic conditions, institutional structures, norms and customs embedded in everyday lives of people determine their susceptibility to losses in case of a disaster.	Anderson and Woodrow (1989), Balikie et al., (1994), Cuny (1983), Cutter (1996b), Hewitt (1983) and Sen (1983)
Capacity	Includes all the internal and external resources available to a community including local knowledge, skills and social networks. It is not the opposite of vulnerability since there could be vulnerable communities that possess capacity to minimise risk (such as strong traditions of mutual help and traditional knowledge).	Gaillard (2010) and UNISDR (2009) Berkes (2008) and Dekens (2007)
Resilience	In a disaster context, this refers to the capability of a community to absorb a shock, minimise the risk from a potential hazard and recover from a disaster. Resilience can be built by strengthening capacity and reducing vulnerability.	Pasteur (2011), Pooley (2006) and Paton (2006)

Source: Author

In the last quarter of the 20<sup>th</sup> century, the dominant paradigm, considering disasters as the result of natural processes and mostly applying scientific solutions, began to be challenged in disaster studies. Despite putting in place a glut of technical measures, there was an increasing realisation that human efforts to control disasters were falling short of expectations. The magnitude of human and financial loss increased significantly from the 1960s to 1990s while there was insufficient evidence that there had been a rise in the number of extreme events (Burton, Kates, & White, 1978; Haque, 2003; Hewitt, 1983; McEntire, 2001). Therefore, more attention was paid to the earlier concerns of Gilbert White, who had questioned the rationale of flood protection works to acquire wetlands for agriculture and later suburban development (White, 1936). He argued that the economic benefits of such flood plains were over-estimated at the risk of underplaying flooding. Keeping in mind the out-of-proportion losses from floods in the USA, the need for a broader policy towards flooding was emphasised by Burton, Kates and White (1968) who argued that that flood control policy needed to look beyond structural measures and required new initiatives with the support of locals. Inadequate consideration of the full social costs and benefits of measures such as the building of dams not only increased the vulnerability of displaced populations, it also damaged natural resources, livelihoods and, habitat. Thus in many cases the benefits proved to be short-lived and out-numbered by losses.

There was a clear indication that top-down, centralised and bureaucratic solutions to reduction of disaster risks were proving to be insufficient.

Burton et al. (1978) analysed hazards in relation to resource use and related vulnerability with regard to population density, space and organisation of the society. They found the consequences of ignoring the human dimension in the examination of hazard risks to be an increase in economic losses. It was emphasised that disaster losses cannot be fully attributed to nature and therefore, an 'out of harm's way' environment cannot be attained without analysing human-induced vulnerability to disasters. Burton et al. (1978, p. 215) asserted, "nature is neutral and natural events become hazardous only when they interact with man [sic]".

Discussion about the critical role of vulnerability in the reduction of losses from disasters was enhanced by other research. Cuny (1983) argued that the rise in disaster-related losses was strongly related to the vulnerability caused by human-inspired development. Cuny (1983, p. 14) noted that only 48 people were reported dead during an earthquake of 6.4 magnitude in San Fernando, California in 1971. The city had a population of about seven million. On the other hand, six thousand people died during an earthquake of 6.2 magnitude in Managua, Nicaragua, two years later. Such incidents shifted the emphasis towards the analysis of vulnerability in the approaches to disaster management. Later, Maskrey (1989, p. 34) expanded the concept of vulnerability (in production processes) while analysing the causes of related hazards and disasters. He argued that a holistic view of vulnerability needed to keep in mind the historical relationships among people, firms and the means of production, and to form part of disaster research to make it useful for society.

In the late 1970s and early 1980s, this alternative view of interpreting disasters in relation to human vulnerability flourished. Arguments that with the advancement in scientific knowledge about the physical and geographical features of disasters, human beings would be able to deal with disasters (Clark, 1989) were challenged. The term "natural disasters" was strongly opposed (Twigg, 2004). It was argued that only natural hazards exist, not natural disasters, and a disaster occurred when a group of people were struck by a hazard of such magnitude that it was beyond their capability to cope (Twigg, 2004). The alternative view of disasters guided by the vulnerability perspective view criticised the dominant paradigm for ignoring the role of vulnerability. It was stressed that disasters are complex phenomena and there are many stakeholders (such as communities, governments and international organisations) who can influence the extent of losses from a disaster (Collins, 2009).

Socio-economic and political processes also generate and reinforce inequality, isolation and exposure to risk over a period of time. These lead to structural isolation and underdevelopment of particular segments of a society, which serves to amplify the effects of a disaster. In the case of Hurricane Katrina (2005) in the USA, African-Americans were already marginalized on the basis of race before the actual disaster (Powell, Hassan, Daniel, & Eric,

2006). Systematic and institutional processes deeply embedded in history had marginalized African-Americans in New Orleans, with Hurricane Katrina compounding and exposing the existing situation. Comparing the 1976 earthquake of Guatemala with that of Hurricane Katrina, similar patterns of vulnerability appear. In the Guatemala earthquake, 90,000 people became homeless and as the majority of victims were slum residents, it was called a class earthquake (Twigg, 2004, p. 16). In both cases, economic pressures had left people with no choice except to settle in cheap but risky areas. It becomes evident that vulnerability is often a compulsion rather than a choice. Twigg (2004, p. 16) observes that weaker communities in society are the most affected as a result of a disaster. Generally, these communities include the poor, very young and old, and those discriminated against on the basis of religion or culture.

The addition of the vulnerability dimension in disaster studies reformed the perception of disaster risk. Disaster risk was not viewed only as the result of purely geophysical and natural processes but as a compound function of hazards and vulnerability. The new conceptualisation of "disaster risk" articulated that risk was a product of hazard and vulnerability (Wisner et al., 2004, p. 49).

$$\text{Risk} = \text{Hazard} \times \text{Vulnerability}$$

Scientific knowledge and methods of calculating disaster risk, such as likelihood of a flood or an earthquake, were now regarded as insufficient for assessing real risk to human settlements. In simple terms, mere exposure to a hazard would not constitute vulnerability. For example, an earthquake in a desert would not be a disaster. However, there still remains a disagreement about what exactly constitutes a 'disaster'; different factors such as perception of people (Oliver-Smith & Hoffman, 1999), media attention, location and international response all influence what would be called a 'disaster' (Perry, 2007).

Another way of looking at reduction of vulnerability to hazards is by increasing the capacity or capability and resilience of people (Haque & Etkin, 2007; Wisner et al., 2004). Buckle (2001-2002, p. 17) considers resilience as the ability to effectively handle a stressful situation resulting from a disaster and even strive to diminish the potential of loss at the initial phase. Resilience is emerging as another key part of the integrated approach to disasters (Paton, 2006). In simple terms, for the purpose of this dissertation this means looking for ways to strengthen local knowledge, skills and collective attributes and relationships within a society to make it prepare for and withstand hazards. At the local level, this involves engagement with stakeholders, including key decision makers, and gatekeepers, those who make or influence decisions about reduction of disaster losses (Collins, 2009).

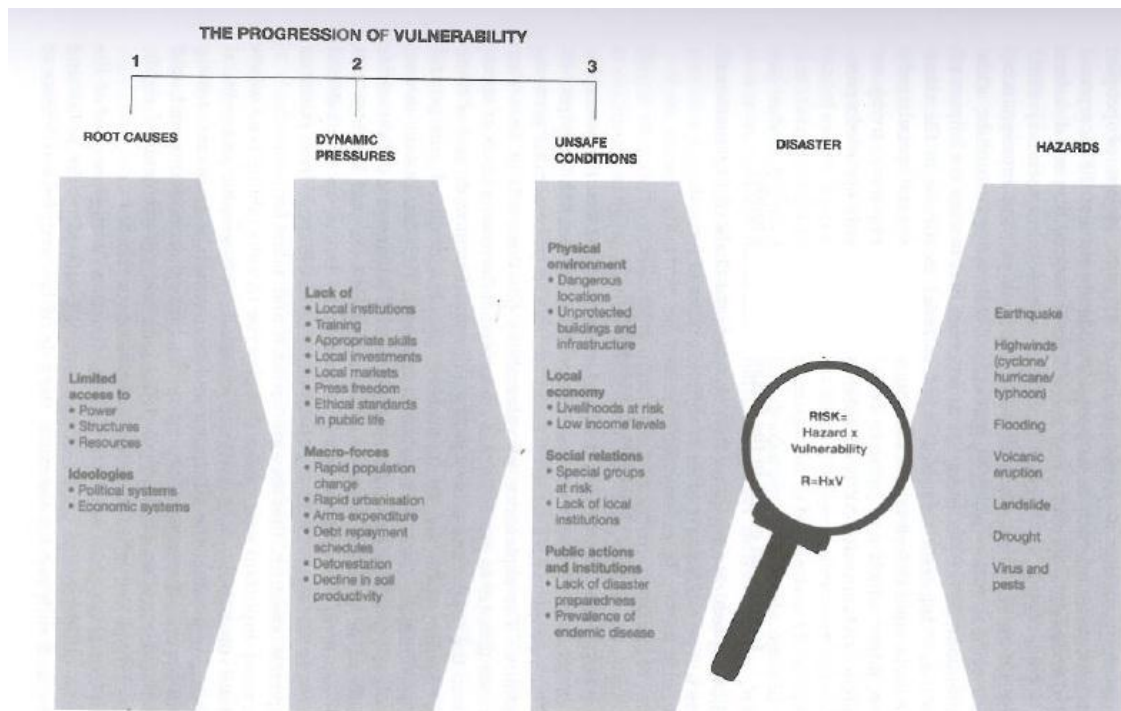
At the international level, concerted efforts to reduce disaster losses were highlighted when the UN designated the 1990s as the United Nations International Decade for Natural Disaster Risk Reduction (UNISDR, 2005d). This decade still held the dominant view of disasters and focussed on the physical aspect of disaster, as shown in its title, which emphasised natural disasters (Schipper & Pelling, 2006). However, during a mid-term review in 1994, the

Yokohama strategy for disaster reduction was adopted at a world conference, and the human dimension of disasters was incorporated, at least theoretically. As the decade progressed, a growing realisation developed that scientific and technical solutions had their limits and there was a need to engage more broadly and to take an integrated view of disasters, keeping in mind the socio-economic vulnerability of the people at risk. In view of the foregoing emphasis, and recognising disasters as complex phenomena at the international level, an integrated approach to disasters emerged in the late 1990s (Blaikie et al., 1994; McEntire, 2001; Trim, 2004; Wisner et al., 2004). The leading “Pressure and Release Model” by Blaikie et al. (1994) aptly demonstrated root causes, dynamic pressures and unsafe conditions – all three arising from economic, social, political and physical environment – constituting progression of vulnerability in the face of a hazard (Figure 2-1). The alternative view (which developed in the 1980s) considered the role of human development and the socio-economic conditions of societies as one of the determinants of the consequences of natural hazards later referred to as the “human ecology of endangerment” (Hewitt, 1997, p. 141). Such a holistic view of vulnerability concluded that disaster was the product of hazard and vulnerability, also called social vulnerability – a vulnerability caused by social factors (such as age, race and health) and place inequalities such as built environment and income growth rates (Cutter, 2006; Cutter, Boruff, & Shirley, 2003).

The UN likewise changed its approach in order to achieve broader, integrated participation from international to local levels, and in 2000 established an inter-agency task force to prepare an international strategy for disaster reduction. An integrated approach incorporating structural<sup>16</sup> and non-structural measures to reduce disaster risk was reflected more clearly in the Johannesburg Plan of Action in 2002 and in the UN report ‘Living with Risk’ (UNISDR, 2002). This report acknowledged that the International Decade for Natural Disaster Risk Reduction was mainly influenced by the scientific and technological groups that focussed on technical solutions to disasters as discussed in the previous section. The UN convened a world conference on disaster reduction in 2005, set up the Hyogo Framework of Action 2005 – 2015 and laid the foundation for the Global Platform for Disaster Reduction in 2006, which had its first meeting in 2007 (UNISDR, 2011). The UNISDR integrative approach to disasters is a global initiative to reduce human, social, economic and environmental losses due to hazards and disasters by building resilient communities in partnership with national governments.

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<sup>16</sup> “Structural measures refer to any physical construction to reduce or avoid possible impacts of hazards, which include engineering measures and construction of hazard-resistant and protective structures and infrastructure. Non-structural measures refer to policies, awareness, knowledge development, public commitment, and methods and operating practices, including participatory mechanisms and the provision of information, which can reduce risk and related impacts” (UNISDR, 2005d, pp. 10-11).



Source: Blaikie et al., (1994, p. 23) and Wisner et al., (2004)

**Figure 2-1: Pressure and Release Model**

The integrated approach reinforces an all-encompassing view of disasters by further building on the contribution of vulnerability and technocratic approaches to disasters. The approach suggested risk reduction and prevention measures such as hazard assessment, vulnerability analysis, improvement of coping capacity and the enhancement of resilience among communities. The integrated approach did not underestimate the importance of technological and scientific knowledge for risk reduction but called for inclusion of the socio-economic dimension in disaster management (McEntire, 2001). It also emphasised the need for a fair and equitable distribution of resources to eliminate poverty and inequality, which are largely responsible for increasing the degree of vulnerability (United Nations, 2005c).

This approach aims to work through the key actors in the state, civil society and private sector (Pearce, 2003). It calls for “developing institutional partnerships to integrate public sector with non-governmental organisations, the private sector and local communities” in order to effectively reduce disaster losses (Haque & Etkin, 2007, p. 277). Community participation and bottom-up approaches are gradually accepted in disaster management planning, although disaster management had usually been associated with top-down, agency-driven (mainly government) and technocratic practices (Pearce, 2003). Now, within the integrated approach, disaster management includes provision for proactive engagement with communities as a part of preparatory measures to reduce future threats (Coppola, 2007). Since the 2000s, the emphasis is on mainstreaming risk reduction measures in development policy which is still a nascent concept in most of the developing world (United Nations, 2005c).

Briefly, this section has shown the evolution of thinking about disasters. Although different perceptions of disaster risk and ways of coping with risk exist within and across various societies, a multi-hazard holistic approach, combining both physical and social aspects of hazards, is now advocated at the international level. Vulnerability is understood to be shaped by the whole environment of people's lives. Economic, social, cultural, political, ethnic, institutional, and historical factors can create, nurture and reinforce vulnerability in the fabric of everyday life. While vulnerability is not exclusively an attribute of the poor, the poor happen to be vulnerable most of the time. Particular emphasis is laid on the integration of civil society in disaster management decision-making process with local people, who are hit the hardest during disasters.

The next section traces the evolution of thinking in development studies relevant to disaster management; and in section 2.4 explores the link between the study of disasters and development. In the next section, particular attention is paid to post-development theory, which emphasises the role of local people and community-based religious institutions in development.

## 2.3 Approaches to development

A set of Eurocentric ideas on progress and prosperity emerged in the 1950s and 1960s encompassing a number of fields of study such as economics, sociology, politics and geography. This was broadly referred to as modernisation theory (Ferguson, 1999). Under the influence of modernisation theory, developing countries were encouraged to pursue a linear path of economic growth based on the experience and success of the Marshall Plan in Europe after the Second World War. Traditional practices and slow patterns of change were diagnosed as the main causes of underdevelopment in developing countries (Shanin, 1997). In a bid to offer standardised and universal solutions, reasons for underdevelopment were fully related to internal causes and not to external causes such as the impact of the colonial past (McClelland, 1970). Therefore, all developing countries were urged to follow a path of high economic growth, which would bring prosperity as measured by levels of high mass consumption and material well-being. One of the famous modernisation theorists and economists in this regard was W. Rostow, who wrote a book describing stages of economic growth. As per his prescription, in simple terms, all developing economies had to move from traditional societies to pre-condition for take-off and then to the take-off stage (Rostow, 1956). Since it was the beginning of the 'jet age' terms such as 'take-off' and 'flight' were quite current in western societies.

Around the 1960s and 1970s, modernisation theory came under attack from dependency theory, which challenged the notion of modernisation theory that underdeveloped countries could not develop because of internal reasons such as being slow in following the development patterns of developed countries (Santos, 1970). Dependency theory emphasised external reasons for underdevelopment in developing countries, explaining that developing

countries were integrated into a world system where the development of countries (the centre) was through the social, economic and political exploitation of developing countries (the periphery) (Amin, 1976).

Development practitioners began to realise that development gains were not reaching the poor and the marginalised in the late 1970s (Chambers, 1984). By the 1980s, an impasse emerged in development thinking, with disenchantment with economic growth policies such as structural adjustment programmes, which had resulted in rising inequality and poverty (Sachs, 1992; Schuurman, 2000). It was acknowledged that the westernised post-Second World War development project could not benefit the whole of the developing world (Mahboob, 2010). Development measured by economic growth rate and gross national product per capita would not necessarily make a difference into the lives of the ordinary people of developing countries and neither could the ideology of progress and modernity adopted by the West (Norgaard, 1994; Shanin, 1997).

An alternative approach emerged in the 1970s and 1980s. The alternative paradigm suggested redefining the goals of mainstream development from gross domestic product growth rate to human development, and alternative strategies such as participatory and people-centred approaches to make development beneficial to the poor (Pieterse, 1998). This call for giving due place to the poor in the development process was also espoused in the sustainable livelihoods framework that mainly evolved out of the work of Chambers and Conway (1991). This framework suggested a way of building on people's own strengths – human, natural, financial, social and physical capital – to reduce vulnerabilities and the effects of shocks by supporting their access to assets in the given environmental and institutional context (Department for International Development, 1999b). The suggestions of alternative development were somewhat welcomed in mainstream development, and consequently the 1980s witnessed the rise of civil society organisations and the loosening of state control in favour of local development actors (Pieterse, 2000).

The foundation for the formal acknowledgement and role of civil society was laid in 1945 when the term “non-governmental organisation” was introduced in article 71 of the UN charter (United Nations, 1945). A strong emergence of civil society began since the 1980s as a parallel partner to states when the international development organisations engaged more fully with non-governmental organisations (Tisdall & Bell, 2006, pp. 104-106).

The concept of civil society has been widely used and has been generally, aligned to a parallel entity that safeguards citizens' interests against the excesses of the state, serving as a watchdog over state policies and organizes citizens on matters of public interest (Foley & Edwards, 1996). By definition, civil society is seen as bridging public–private segregation. As Walzer (1995, p. 7) explains:

The words 'civil society' name the space of un-coerced human association and also the set of relational networks – formed for the sake of family, faith, interest and ideology – that fill this space.

Civil society has often been preferred over the state for transparency in public affairs, efficient delivery of common goods, and better outreach to the poor in development pursuits (Zafarullah & Huque, 2001). This was an alternative approach, which emphasised the broader participation of people in decision-making.

In the 1990s it was suggested that because of poor governance development interventions had failed to bring desired changes such as eradication of poverty, inequality, and human rights abuses (Mukhopadhyay, 2004). This changed the focus of traditional approaches towards the exploration of the intricate dynamics of power, influence and decision-making in the allocation of economic resources. Governance as distinct from government has been generally considered as a process of decision-making at different levels, which should ensure broad participation and transparency, among other things (Forsyth, 2005, p. 298). According to Schuurman (2000, p. 16), the concept of governance is now more often equated to “new forms of synergy between economic, political and social actors” than that of a typical welfare state. Assertion of the importance of good governance in order to achieve good development is essentially a neo-liberal<sup>17</sup> stance. Governance ideally involves a broad-based political, social and economic consensus of both internal (government, political parties and civil society) and external actors (foreign development partners such as donor agencies) for systemic reforms (Nishtar, 2008).

The whole idea of development including modernist, alternative development and neo-liberal thinking, came under severe criticism from post-development theorists in the 1990s. A new school of thought, post-development theory, rejected the four decades of mainstream development since the Second World War (Escobar, 1992; Esteva, 1991; Sachs, 1992). Post-development theory is characterized by its critical stance towards modern western knowledge, and highlights the importance of local knowledge, tradition and community social movements (Escobar, 1995, 1997; Esteva & Prakash, 1997).

Unlike mainstream development theories, which explained development processes across the globe in general terms, a broad range of issues acknowledging diversity of the developing world was deliberated by post-developmentalists. Esteva and Prakash (1998) viewed globalization, universal human rights slogans and individualism (three sacred cows) as the three core values of development thinking that were in fact detrimental to the development of the poor. They asserted that western discourse applied these values universally, ignoring diversity in the South. These values assumed a self-conceived concept of a good life based on

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<sup>17</sup> The typical neo-liberal stance considered 'government' the main culprit in the failure of development because of inefficiencies and mismanagement of resources (Bauer, 1984; Lal, 1983). However, the stance is now more often related to policies advocating less state control, free markets and a greater role for civil society (Chang, 2002; Chhibber, 1997; Malik, 2008).

the western philosophy of progress. Esteva and Prakash (1998, pp. 280-281) insisted that these core values had no solution for the problems of the social majority. This social majority came into being suddenly after President Truman's speech on January 20, 1949 when he referred to all the poor of the South in a singular category of undeveloped countries (Esteva & Prakash, 1998). The post-developmentalists slated western development for oversimplification that portrayed "a squatter in Mexico city, a Nepalese peasant, and a Tuareg nomad" as equal to each other since they were declared poor, primitive and under-developed (Escobar, 1997, p. 92).

Post-development theory was itself then criticised mainly for its anti-development stance, romanticism about traditional knowledge and values, ignorance of scientific achievement (which, for example, led to control of some diseases and improvement in the quality of life) and an inability to offer solutions to the problems it identified (Corbridge, 1998; Kiely, 1999; Pieterse, 1998; Ziai, 2007). Corbridge (1998), for example, criticized Esteva and Prakash (1998) for not being able to feel the attraction of "a Western life" to any poor people of the Third World. Corbridge (1998, p. 144) affirmed that he was yet to see a man in India, where he had worked for a long time, who did not want a fan in summer. The author disapproved of post-development for not acknowledging the accomplishments of mainstream development like increases in life expectancies of men and women. Pieterse (1998, p. 366) viewed post-development a "misnomer" since it did not offer any solutions. Pieterse (1998, p. 366) acknowledged the contribution of the post-development agenda in order to promote indigenous culture and local knowledge but was concerned this could lead to "ethno-chauvinism", creating problems by highlighting differences rather than similarities. Schuurman (2000) took a cautious approach while challenging the role of civil society suggested by post-development thought. This author argued that the building of social capital, central to viable civil society, was a long historical process. He criticised post-developmentalists such as Escobar (1995, 1997) and Esteva and Prakash (1997; 1998) for placing too much emphasis on the role of local people (civil society) in the development process without recognising the role of the state. Schuurman (2000, p. 19) noted that it "...would be highly premature for development studies to replace the paradigmatic importance of the state by that of civil society" in the Third World.

However, towards the end of 1990s post-development theorists began to offer alternatives to development, clarified their stance, and responded to their critics. Matthews (2004) argued that post-development theorists' interest in community organisations meant that they aspired to a positive social change from within and not one engineered from outside, so they should not be not perceived as anti-development (Matthews, 2004). Regarding the type of development wanted by post-development theorists, Matthews compared this with the process of a bud developing into a flower, a child into an adult, and a caterpillar into a butterfly (Matthews, 2004, p. 376). In the search for alternatives to development and to offer practical solutions in the light of post-development theory, different possibilities have been explored,

some without altogether rejecting mainstream development settings (Binns & Nel, 1999; Gibson-Graham, 2005; Gibson-Graham, 2007; Lie, 2007). Section 2.6 discusses other positive post-development views, and provides examples of development that explains the kind of development proposed by post-development theorists.

In brief, this section has shown the evolution in thinking in development studies while highlighting the role of civil society and post-development theory. Post-development theory emphasises the role and control of local people over the development process.

The next section underscores the important place of civil society as espoused in disaster and development studies literature.

## 2.4 The place of civil society in the study of disasters and development

When modernisation theory was prevalent in the development field, disaster managers applied highly technical solutions based on geophysical and engineering sciences to reduce disaster losses while ignoring the socio-economic context of societies (Burton & Kates, 1964). Similarly, when there was disenchantment with modernisation theory in development studies, disaster studies challenged the dominant technocratic views and technical approaches to disasters.

The role and potential of civil society organisations in dealing with disasters has often been under-rated, under-reported and under-utilized (Rigg, Law, Tan-Mullins, & Grundy-Warr, 2005; Stalsett, 2006; Vos, 2005; Wisner, 2003; Yapa, 1998). In the late 1970s voices were raised against an insensitivity to recognise the “untapped power of people’s science” (Wiener, O’Keefe, & Westgate, 1977, p. 47). However, disasters were considered too technical for people’s science and therefore the ‘experts’ remained in control. Vulnerable communities were regarded as possible victims of disasters and it was felt that the state had complete responsibility for them. Communities were not considered as a source of dexterity, skill and local knowledge that could be available for risk mitigation (Ozerdem & Jacoby, 2006). The benefits of engagement with local communities in terms of effectiveness, accountability, good governance, and sustainability were not fully appreciated (Maskrey, 1989; Wagle & Sachin, 2006).

Discussed in vulnerability approaches to disasters in section 2.2.3, purely physical interpretations of disasters have been strongly opposed since the late 1970s (Wiener et al., 1977). The inability of huge investments in structural measures (such as building dams) to reduce economic losses to infrastructure due to disasters, turned attention to human dimensions of disasters (Blaikie et al., 1994; Cuny, 1983). Consideration for the social, economic and political aspects of the human environment that increase or decrease vulnerability to disasters and disaster losses was emphasised (Oliver-Smith, 1996; Oliver-Smith, 2004). Integrative approaches having holistic views of disasters were strongly promoted in disaster studies (Cuny, 1983; Cutter, 1996a; Wisner et al., 2004). Since the 2000s,

integrative approaches acknowledging the social, political and economic aspects, along with physical features, of disasters have been advocated more broadly and have been pursued through international forums such as the UNISDR (Haque & Etkin, 2007; UNISDR, 2005b; United Nations, 2000).

Sen (2001) argues that no amount of commodity production can save the poor and vulnerable from famines if they do not have a voice in policy matters. It is the process of involvement of the poor in matters of their everyday life, that guards them from the vagaries of the environment, one that can pose risks to their life. Sen (2001, pp. 509-510) gives the example of India, which has not faced any drought since independence. On the other hand, in neighbouring China, the largest famine in recorded history occurred during 1959–62, claiming between 23 and 30 million lives. This was despite the fact that China had performed better than India in many sectors of the economy at that time. While having shortcomings, democracy in India allowed people to speak out about hardship, and for civil society to be more engaged in public affairs than they were in China. Having a communist system of governance in China, the role of civil society was minimal in the public domain. These comparative examples of China and India by Sen (2001) reinforce the importance of the engagement of civil society in development processes through democratic means including situations where a disaster might occur.

Disasters cannot be avoided simply through single, isolated and one-sided intrusive efforts by the state, since the dynamics of socio-cultural life are not uniform. Armitage et al. (2007) argue that top-down and bureaucratic management of resources cannot handle and respond to ever-changing and complex human socio-ecological interactions. In order to achieve and retain the gains of development, the integrative approach since the 2000s has emphasised the role and input of all stakeholders (Blaikie et al., 1994; McEntire, 2001; Trim, 2004). It is widely acknowledged that the disaster community is comprised of a range of actors from international aid agencies, governments at all levels, the private sector and civil society organisations, including non-governmental organisations and religious institutions.

The relationship between the state and civil society has been complex and often fraught with conflict over the boundaries of roles and responsibilities (Foley & Edwards, 1996). States have resisted acknowledging and recognising the role of civil society in disasters. Conversely, civil society organisations often do not deem it meaningful to engage with the state. Professor Ian Davis (cited in Ozerdem & Jacoby, 2006, pp. xii-xiii) notes that the neglect of civil society, which he calls “the third sector” as partners in DRR initiatives, is not fully the responsibility of the state. For example, the third sector, despite its demands for participation and partaking with others, has often been reluctant to engage with the state in its goal setting. Likewise, the state believes all moves taken by the third sector without consultation with the state imply encroachment on its sovereignty.

There are instances of friction between the state and civil society in environments that have long-established traditions of disaster management. For example, Ozerdem and Jacoby (2006, pp. 48-50) analyse the allowance for civil society in Japan after the Kobe earthquake in 1995 and find that there is an improved recognition of civil society. However, there are still issues such as bureaucratic compartmentalization and dynastic influence over policy making, which need for reform.

Despite the complex relationship between civil society and the state, to achieve the goal of a life safe from disaster losses it is of the utmost importance to engage with civil society. Chester (2005b, p. 430) argues that we need to look beyond purely theoretical models, referred to as “laboratory volcanoes”, and work together with ordinary citizens in order to realize the aim of safe life. As he further articulates:

Because of population growth, on-going economic development, and global shifts in wealth and poverty, the need for an understanding of the relationship between volcanoes on one hand and society on the other has never been greater or more pressing (Chester, 2005b, p. 412).

Civil society has an important role in strengthening DRR and disaster management. Disasters are not merely physical happenings to be perceived as unexpected occurrences. Disasters are complex phenomena and represent a series of physical, social, economic and political processes, that collectively determine their occurrence and the extent of damage to various segments of a community (Armitage et al., 2007; Oliver-Smith, 2004; Wisner et al., 2004). Vulnerabilities are generated and reinforced in everyday life. Therefore, civil society has immense potential to contribute to DRR by addressing vulnerabilities through local knowledge, resources and skills (United Nations, 2005b; Wiener et al., 1977; Wisner et al., 2004; World Bank, 1994).

The next section discusses post-development theory criticism of the absence of local knowledge and people’s voices in their development.

## 2.5 Post-development and disaster studies

Post-development’s critical stance towards mainstream development also accords with disaster studies literature regarding the portrayal of vulnerability and danger. It is argued that development is crafted to make room for the import of technical advice and expensive consultants from the developed world and for keeping the power dynamics of control in the hands of the First World countries by constructing a technical view of disasters (Bankoff, 2001, 2004a; 2004c). Bankoff (2004c) posits that the west has manipulated the discourse on disasters to make a case for its intervention in the South. Hewitt (1995) notes that the international geographical hazard maps have been drawn on the basis of scientific information regarding seismology, volcanic eruptions, flooding, and other natural hazards. These maps, which have been prepared under the influence of the dominant discourse, do not relate these

hazards to the socio-economic conditions of the people living in those areas. Bankoff (2004a) is critical of the western interpretation of world geography, which depicts the North as safe and the South as dangerous and which thus suggests that western knowledge be used for non-western people.

As shown in Table 2-3, it was the tropical nature of societies during the 17<sup>th</sup> to 19<sup>th</sup> and early 20<sup>th</sup> centuries that supposedly called for western intervention, and colonialism was offered as the panacea. It is suggested that western discourse constructed the concepts of vulnerability and capacity to introduce a plethora of expertise in the name of helping the disaster-prone South. The “western medicine” offered this time was “relief” (Bankoff, 2004a, p. 33).

**Table 2-3: ‘Dangerous regions’ in western discourse**

<b>Concept</b>	<b>Period (Century)</b>	<b>Issue</b>	<b>Cure</b>
Tropicality	17 <sup>th</sup> –19 <sup>th</sup> /early 20 <sup>th</sup>	Disease	Western medicine
Development	Post– World War II	Poverty	Western investment/aid
Natural disasters	Late 20 <sup>th</sup> to present	Hazard	Western science

Source: Bankoff (2004a, p. 34)

The dominant paradigm of disaster studies did not consider vulnerability to hazards and socio-economic circumstances that generated marginalisation and isolation in a systematic manner. It was presumed that vulnerability has been opted for as a free choice rather than a choice forced on a community by the socio-economic conditions of life (Hewitt, 1995). Hurricane Katrina reminded many that vulnerability does not belong to developing countries alone (Bankoff, 2006). Hurricane Katrina was a convergence of physical and social vulnerabilities (Cutter, 2006). Social vulnerability was constructed through several factors including limited or no employment, poor education and public housing for an African-American population living in vulnerable places (for example on reclaimed land and close to industrial units) in the city of New Orleans. Technological solutions have their limits and disaster losses cannot be reduced without understanding both social vulnerabilities and local resources and strengths including the role of local actors and organisations. Post-development’s contribution as a critical approach to mainstream development has been acknowledged (Nustad, 2001). However, there is also increasing demand on post-development theory to suggest alternatives to development (Pieterse, 1998). Thus, more recently, post-development theorists (Gibson-Graham, 2011; McGregor, 2007; McKinnon, 2008) have come up with real life examples from development practice, as discussed in the next section, to insist that the post-development stance is not anti-development.

## 2.6 Exploring possibilities of positive social change within post-development through community-based development and disaster management initiatives

This section highlights how post-development theory offers a new way of thinking about development by presenting different case studies of communities' post-development initiatives, which are rooted in communities' strengths. Through these examples, the relevance of using post-development theory as a theoretical framework will be clearer. This is explained further in Chapter Three, in section 3.9.

Esteva and Prakash (1998), were inspired by the struggle of indigenous ethnic groups against Mexico's signing of the North American Free Trade Agreement on January 1, 1994. The group, Ejercito Zapatista de Liberacion Nacional or Zapatista not only rebelled against President Carlos Salinas but also challenged 40 years of development that had excluded them from normal life as they were made to live on hollow dreams of progress. The authors note that the Zapatistas rejected the development promised by the International Monetary Fund and the World Bank. Zapatistas demanded protection of their own social life, traditions, means of living and structures of mutual help, self-reliance, and protection of "informal networks for direct exchange of goods, services, and an administration of justice... [that] calls for compensation more than for punishment" (Esteva & Prakash, 1998, pp. 285-286). Learning from the Zapatista example and its replication in other parts of the Third World, the authors see the success of development in a community mode of development. Esteva and Prakash (1998, p. 293) appearing to agree with Binns and Nel (1999), conclude that the development that carries promise for the marginalised and the poor of the Third World is "... organized by the people themselves, for their own survival, flourishing, and enduring; both independent from the state... open to diversity... expressed in reclaimed... commons... with the common good, both natural and social".

Binns and Nel (1999) make the case for post-development as a triumphant alternative approach to mainstream development by citing the successful experience of 'Local Economic Development' (LED) at the rural Mpofu District of the former Ciskei Homeland, which was incorporated into the Eastern Cape province of South Africa with the demise of apartheid in 1994. They provide the example of a black community that was marginalized and isolated because of a long political and historical process. They show, how under the local leadership of a primary school teacher, Sandile Mkonto, a community-based development programme was initiated in December 1994 in Balfour. Binns and Nel (1999, pp. 404-405) find that "the development process [in Balfour] clearly displays the ability of communities to identify, implement and manage a sustainable and self-perpetuating process of LED... lead [ing] to an improvement in overall socioeconomic conditions". They contend that the experience is replicable.

Gibson-Graham (2005) gives examples from the Jagna community in the Philippines where overseas contract workers from the Jagna community and locals are involved in building their community according to their traditions of gifting, sharing and volunteering. This community did not pick up their development plan from “the shelf of any aid agency, government bureaucracy or university” (Gibson-Graham, 2007, p. 158). A Philippines based non-governmental organisation “Unlad Kabayan Migrant Services Foundation Inc.” works with other organisations for the people of Jagna Municipality to provide with them training for a variety of entrepreneurial ventures. The NGO launched a Migrant Savings for Alternative Investment (MSAI) programme that pools savings of various overseas workers’ groups. Gibson-Graham (2005) observes that from the working of the NGO the poor see their economic interdependence as strength. The Jagna groups value their natural environment and shared knowledge and customs in the process of development. Similarly, inspired by other community initiatives for local development for the low income groups in Quebec (Canada), Universidade Regional do Noroeste do Estado do Rio Grande do Sul (Brazil) and Massachusetts (United States), Gibson-Graham (2011) asserts that post-development does not mean quitting development but practising development differently while appreciating complexity and experimenting with new, place-based pathways.

Lie (2007), McGregor (2007) and McKinnon (2008) also draw attention to examples of practising development differently, thus showing the possibilities of the application of post-development theory without abandoning and severing links with what is available or offered. They stress that development actors on the ground are not completely controlled by the social and cultural environment around them and there are possibilities for the application of development strategies, that work for the people within the context of post-development.

Lie (2007) draws on the case of an interaction between the local staff of an organisation in Ethiopia and a foreign development consultant hired by the donor agency to watch its interests. The consultant collaborated with the staff of the local organisation and discussed the mind-set of people in the donor agency. Eventually, the consultant and the staff deliberately twisted the facts of the funding proposal to make it acceptable to the donor agency in order to get money. In this example Lie (2007) shows that local people are not always helpless and at times, have opportunities to tailor or modify development according to their choices. In this case, the consultant and the staff of the local organisation knew what type of development would be offered to them, had some control over the utilisation of funds, which motivated them to seek them, and thus agreed to file funding application based on partial truths.

Similarly, McKinnon (2008, p. 287) finds during her research in Northern Thailand with hill tribe minorities that development professionals employed by the state often become “community advocates” instead of minding institutional interests at the cost of community interests. She cites an example of an agricultural project where development professionals played a key role in seeking acknowledgement by the Thai state authorities of the communal fire management practices of the hill tribe. Instead of a top-down procedure, McKinnon notes that several

discussions took place between the Thai state officials and the communities before both arrived at an agreed mechanism for the protection of the state-reserved land from fire, building on traditional knowledge and practices (McKinnon, 2008). Thus, she points out a possibility of pursuing post-development goals where local people and communities are in control of the kind of development offered to them.

During his fieldwork in Timor-Leste, McGregor (2007) explored the possibilities of post-development ideals within the work of the mainstream development aid industry. He found examples of local organisations that would only work with those donor agencies who would support their goals of development and not vice versa. For example, Sahe Institute of Liberation did not accept donor funding and only collaborated with those international NGOs that allowed the institute to pursue its own goal and mission.

Later, during his fieldwork in Aceh, McGregor lamented the obliviousness of “multibillion-dollar emergency response” of international development organisations towards rebuilding of local religious institutions in the aftermath of the 2004 tsunami (McGregor, 2010, p. 735). This was despite the fact that these institutions had immense importance in rebuilding of lives of the local communities. They provided the disaster-affected people with a platform to reconcile their relationship with God and share their woes with each other by participating in different religious events. However, McGregor (2010) notes that some NGOs moulded their agenda (of not building religious places) to win backing of communities for their development programmes. These NGOs supported building and repair of religious places, but in their reports to their donors, they referred to this activity as the building of ‘community centres’ instead of ‘religious places’.

In view of the criticism of anti-post-development thinking and the call for alternatives to development, the discussion in this section has shown that new possibilities for positive social change can be implemented by communities themselves, without absolute rejection of mainstream development. These examples call attention to development initiatives where local people make decisions for themselves, while sometimes working with supportive outside collaborators. They also show how local actors and agencies can tailor or manipulate their relationships with external forces in order to support their own interests. Post-development theorists are strongly inclined towards the creation of possibilities of positive social change and development. They present new imaginings without rejecting all existing development. As McGregor (2007, p. 169) stresses:

The greatest potential of post-development would seem to lie not so much in destroying or discarding the architecture of development, as utilising its power and prestige by attracting the support of those who work within it.

The discussion in this section so far has shown that partnerships with local organisations, social movements, institutions, and recognition of local knowledge, resources and traditions, have been offered as an alternative to mainstream western-imposed development in the

context of post-development theory. The integrated approach to disaster management in disaster studies as discussed in sub-section 2.2.3 also emphasises use of local knowledge, institutions and networks to reduce disaster losses, create resilience and prepare communities to deal with disasters (Haque & Etkin, 2007; Pearce, 2003). Similarly, as shown through discussion in section 2.5, top-down, technocratic, command-and-control and technology-based approaches with a marginal role for communities have been strongly criticised by post-development proponents in disaster studies (Bankoff, 2001; Bankoff, 2004c; Cutter, 2006; Hewitt, 1995).

Furthermore, since the 1980s strong voices have been raised for realising the potential, resources, skills and knowledge of local communities in disaster relief, recovery and more broadly in development programmes, in order to address the root causes of vulnerability (Anderson & Woodrow, 1989; Cuny, 1983; Delica-Willison & Willison, 2004). While exploring the origins, politics and framing of community-based disaster risk management (CBDRM) initiatives, Heijmans (2009) identifies that the Philippine CBDRM tradition seeks to empower communities to be able to challenge the status quo. This tradition uses CBRDM not only to address immediate needs of the vulnerable groups but as a tool of bringing a social change in the society where the poor and the weak can demand safety and oppose “development aggression” (Heijmans, 2009, p. 16). The term “development aggression” refers to the large-scale development projects (such as mining and dams) from 1992-1998, which lead to displacement of slum communities.

The need to engage with local communities and their existing organisations to address gender specific issues is increasingly highlighted. In post-2010 earthquake Haiti, Horton (2012) observes that local women’s organisations were mostly ignored since major foreign funding was given to the big international organisations which have little grassroots outreach. Due to this, disaster relief lead to further marginalisation of women in Haiti, where they have already remained marginalised due to the government policies of gender-discrimination in different regimes among others. In addition, in several instances, gender programmes remained weak and ineffective because they did not take into view the historical, cultural and social features of the Haitian society.

This section has shown the linkages and overlap between the post-development and disaster studies literature in the context of community-based initiatives. This argument about a stronger role for local community-based institutions and particularly those of religious institutions including the mosque will be further developed in Chapter Three and the theoretical framework will be presented in the context of post-development theory.

## 2.7 Summary and conclusion

Over time, views about disasters and approaches to dealing with disasters have been far from uniform. There have been different levels of risk perception and consequent varying

responses to coping with disasters within and across societies. Religious influences, as such, have not always been a cause for pessimism towards disaster preparedness. On the contrary, they have been a source of generating new ideas about disaster preparedness in some cases such as drought planning by Prophet Yusuf of Egypt around 1500 B.C. Therefore, the notion of conceptualising disasters as “acts of God” and their association with religion has not resulted in altogether fatalistic behaviours. However, human framing of disasters has not been uniform across societies in different times. Human perceptions of disasters have evolved alongside the growth of the world’s scientific knowledge. From the mid-20th century, a technocratic approach emerged that ruled out the role of ordinary people in coping with disasters – ‘the experts’ dealt with disasters. However, disproportionate losses occurred in some situations compared with other disasters of similar intensity. This gave rise to an alternative view of disasters that considered them as products of vulnerability and hazards as opposed to the mainstream view that considered disasters to be the result of natural processes only. Since the 2000s, holistic views and integrated approaches to disasters have been popularised at the international level by the UN. More organised and concerted efforts have been made with the establishment of the UNISDR in 2000, the Hyogo Frame 2005–2015 for DRR, and the Global Platform for Disaster Reduction in 2006.

In the development studies literature, development was equated with industrialisation and high levels of economic growth under the influence of modernisation theory in the 1950s and 1960s. In the 1970s, dependency theorists argued that the world system was structured to benefit developed countries at the expense of developing countries. Modernisation theory also came under attack through the alternative view of development in the 1980s because development formulas such as structural adjustment programmes had failed to improve the quality of life of the poor. Opposed to top-down and centralised approaches, the alternative view emphasised bottom-up and participatory approaches to development along with consideration of socio-economic factors and the engagement with civil society.

Towards the mid-1990s, mainstream development approaches and technocratic thinking about disaster management came under severe criticism from post-development theorists. However, post-development theory was itself criticised for not offering alternatives to development. In response to this criticism, post-development theorists have shown through examples the kind of development communities have constructed as an alternative to conventional development. These examples relate to community-based social movements and institutions that are working to bring a positive social change in the lives of people in their own terms, often drawing on their own resources and skills and carefully controlling or structuring their relationships with mainstream development actors. In addition, post-development theory allows examination of the role of the mosque in both disaster and development contexts. In both development (post-development) and disaster studies (integrated approach to disasters) literature, the emphasis is on building on local knowledge, resources, strengths and resilience. The application of post-development theory is explored to highlight roles played by local actors

such as religious institutions. It is in the context of post-development theory that the role of the mosque as a community-based religious institution, which responded to the 2005 earthquake in Pakistan, is considered.

The discussion of post-development theory in this chapter provided the basis for the conceptual framework developed in the next chapter after explaining the importance of the mosque as a religious community-based institution in disaster and development contexts. The next chapter highlights the importance of community-based religious institutions in dealing with disasters.

## **Chapter Three Disasters and religious institutions**

### **3.1 Introduction**

This chapter aims to illustrate the increasing significance of engagement with community-based religious institutions in disaster management. The discussion elaborates why community-based religious institutions cannot be ignored and shows their distinctive roles in dealing with disasters. In addition, it discusses the significance of the mosque as an important community institution. Moreover, the chapter introduces the 'mosque' and explains why it has been referred to as a 'religious institution' as opposed to a faith-based institution in this dissertation. It also unfolds the political controversy about the role of the mosque. The analysis in the chapter confronts different allegations levelled at mosques such as fuelling hatred against western countries. Notwithstanding these issues, the discussion illustrates why the mosque remains a trusted institution for influencing public opinion and therefore, offers an opportunity for strengthening disaster management at community level.

The chapter presents examples of contributions of the mosque from Pakistan in different facets of development to illustrate its potential use in saving lives and reducing losses during disasters. It also elucidates how the mosque or other such community-based religious institutions may have potential to fulfil the much needed gap of translating international DRR goals, such as 'connect and convince', into reality at the local level (UNISDR, 2010a). Lastly, the chapter discusses the significance and relevance of the post-development theoretical framework for examination of the mosque as a community-based institution in a disaster context.

### **3.2 The important but underrepresented role of religious institutions in dealing with disasters**

Despite the fact that the integrative approach to disasters has attempted to consider social, cultural and economic factors since the 1980s, the role of religious institutions remains over shadowed and underestimated in the disaster studies literature along with the role of religion itself (Candland, 2000; Chester, 2005a). In a special issue of the journal 'Religion' on the themes of religion, natural hazards and disasters, Gaillard and Texier (2010) pinpoint that the role of religious institutions has been neglected for a long time in disaster studies. This is despite the fact that religious institutions have been serving the people long before the European tradition of humanitarian aid, as stated in the Oxfam (2012, p. 25) paper:

The humanitarian project is not just a European tradition. It is rooted in the universal behaviour to help other human beings in distress. It has been encapsulated in all faiths, from Dana, one of Hinduism's and Buddhism's vital practices, to Islam's Zakat, and Christian charity. It is no coincidence that local religious organisations are at the forefront of providing relief.

Although often ignored in the development and disaster studies literature, religious institutions have been contributing to different phases of disasters including response, recovery and rehabilitation at the local level, where religion has significant influence in shaping perceptions of vulnerable communities (Chester et al., 2008). During times of disasters, religious institutions contribute to the disaster mitigation drive in a number of ways such as feeding hungry victims, providing shelter and supporting the communities holistically, along with other stakeholders. Religious institutions have played an important role in developing social cohesion by building social and safety networks within communities (Bano & Nair, 2007; Candland, 2000). Wisner (2010, p. 81) asserts that religious communities, groups, institutions and leaders have an “untapped potential” for the task of disaster risk reduction at the local level. He emphasises that religious groups and organisations are usually the first responders because of their immediate availability and strong local networking. However, he identifies the need for engagement of religious communities in community preparedness for disaster prevention so that the untapped potential of these communities could be used for saving lives and reducing vulnerability and economic losses.

This section has shown that the role of community-based religious institutions has not received due attention and it has been under-represented, under-documented and underrated despite significant contribution to the alleviation of people’s sufferings in the aftermath of disasters at the local level.

### 3.3 International development organisations and religious institutions

As per international humanitarian law, no discrimination can be based on religion at the time of humanitarian assistance: it has to be based on human dignity only (International Committee of the Red Cross, 1988). This has meant that many humanitarian relief organisations have been reluctant to engage with religious institutions. However, political factors are persuading international humanitarian and development organisations to break away from their secular view of development in a fast changing, complex world and to start engaging with religious institutions. An increasing concern for them is how to stay neutral while performing their professional responsibilities during humanitarian assistance.

In an unconventional move, since the 2000s, international humanitarian development organisations, have become more involved with religious institutions by forging working relationships with the latter. Three major explanations are provided in the following sub-sections, which account for the expanding role of religious institutions in public life and their increasing recognition and involvement with international development organisations.

### 3.3.1 Breaking the myth: religious institutions and faith-based organisations voicing public issues

Since the late 1990s, religious institutions and faith-based organisations, conventionally concerned with private matters only, have begun to engage with public and political affairs in a more pronounced manner (Bano & Nair, 2007; Clarke, 2007). The Jubilee 2000 campaign asking for debt relief for poor countries was an impressive move to show the influence of faith-based organisations. Founded on Jewish and Christian faith traditions, Jubilee is a year when acts of charity widely occur. The Biblical Jubilee year of joy included forgiving of debts and setting free debt slaves every fifty years as decreed in the Old Testament (Barrett, 2000). Founded in 1996, Jubilee 2000 gained substantial support from churches and secular institutions in Western Europe, sub-Saharan Africa and North America. By the end of 2000, Ann Pettifor, Director Jubilee 2000 Coalition United Kingdom (UK), noted that Uganda was given a cancellation of \$ one billion debt and Mozambique had a reduction of \$ 67 million in debt repayments, among others (Barrett, 2000, p. 3).

In 1997, the UK's White Paper on International Development titled "Eliminating world poverty: a challenge for the 21st century" specifically described creation of partnerships with non-conventional stakeholders as a key to success. The Department for International Development (DFID) acknowledged the historical contribution and attachment of religious institutions to development, and planned to benefit from their outreach and social cohesion for realisation of success against the common enemy of poverty. DFID (1997, p. 7) emphasised that "it is about creating partnerships with developing countries and their peoples" to achieve the goal of development. The White Paper envisioned a partnership with civil society for achieving the common good. To fulfil the aim of the government policy, DFID prepared a strategy paper to engage with various stakeholders of civil society besides national governments. In this strategy paper, DFID came up with the objective "to build and support a worldwide alliance with the Christian church and other faiths to eliminate poverty" (Department for International Development, 1999a, p. 8).

A formal acknowledgement of the role and potential of religious leaders of primary religious institutions in disaster management was observed at the eve of a conference at Nairobi, 6-10 March 2000. This conference was jointly organised by the World Bank and the Council of Anglican Provinces of Africa at the invitation of the Archbishop of Canterbury, Dr George Carey, to the President of the World Bank, James Wolfensohn, in May 1999. The conference observed the role of religious institutions in disaster management (Belshaw, Calderisi, & Sugden, 2001, p. 12):

The church is one forum where leaders and followers in society can dialogue in a mutual exchange of information and support, thus empowering citizens and requiring accountability of leaders.

At a conceptual level, religious views (in Christian traditions) and structural causes of disasters moved closer to a new framing of disasters which emphasises the role of human vulnerability. Chester and Duncan (2010) note that increasing numbers of Christian faith organisations and their leaders interpret disasters as a consequence of sinfulness on behalf of institutions, the corporate sector and governments pursuing material interests and wealth unjustly, referring to structural vulnerability. Rather than holding individual sinfulness responsible for disasters, the authors see in this shift in understanding of disasters a new opening of religious resources (churches and leadership) for engagement with secular efforts in reducing disaster losses.

### 3.3.2 The community-based position of religious institutions

The community-based position of religious institutions is another important reason for international multilateral humanitarian and development organisations to seek engagement with the former. Based at the local level, religious institutions are well positioned to perform an instrumental role in disaster response and recovery. Twigg (2004, p. 70) observes that due to the “extensive grass-roots outreach of such groups in many societies it is reasonable to assume that they could play a role in risk reduction”. For example, Hindu temples have provided grains for the hungry at times of famine in India. Also, these religious institutions and groups have been a source of volunteers and local leaders in emergencies.

To enhance organisational understanding of DFID, an independent study was commissioned to assess awareness among various faith-based organisations in the UK (Bonney & Hussain, 2001). The objective of the study was to record and review the engagement of faith-based organisations in development so as to facilitate DFID to find an opportunity to forge partnerships with these organisations. The study examined different faith communities in the UK including Bahá'í, Buddhist, Christian, Hindu, Jain, Jewish, Muslim and Sikh. Bonney and Hussain (2001) find that each faith community has a strong inclination towards development and elimination of poverty, though they may not be exactly aware of the Millennium Development Goals. After considerable efforts towards understanding the roles of religious institutions in development, DFID has engaged with religious organisations inside and outside the UK. DFID envisages potential benefits of engaging with such religious institutions that bring along community outreach, a wealth of local knowledge and social networks. For example, DFID entered into a Partnership Programme Agreement 2005-2011 with the Catholic Agency for Overseas Development, which identifies its mission to “promote human development and social justice in witness to Christian faith and Gospel values” (Department for International Development, 2005, p. 9).

Based on the case study of the engagement with community-based religious institutions in foreign-funded health projects in Cambodia, Jacob and Prince (2003) conclude that development projects perform better when partnering with community-based local religious institutions than those newly established project-based organisations. The study found that the project which involved Buddhist pagoda volunteers (in district Kirivong) was more successful

in terms of community participation, sustainability and effective use of local knowledge and resources than the same project (in district Maung Russay) which involved NGO workers.

Concerns were raised, for example, when international humanitarian organisations such as Oxfam and the United Nations High Commission for Refugees (UNHCR) provided services to the 2005 earthquake relief camps organised by Muslim militant organisations such as Jamaat-ud-Dawah, the renamed Muslim militant group Lashkar-e-Taiba involved in the Kashmir freedom struggle from India (Bamforth & Qureshi, 2007). However, this facilitation by the UNHCR was in view of the fact that the said organisation had a pre-existing presence and a grassroots network in the Kashmir region, and was already there at the time of the earthquake to be the foremost responder to remove the victims from the debris, and to provide food, medicine and shelter to the homeless.

### 3.3.3 Similarities between objectives of religious and secular organisations

The search for ideological similarities, such as being driven by commonality of objectives, between the conventionally opposing entities – religious versus secular organisations – is another reason for closing gaps and working together at national and international levels. In a broader sense, the common ideology of both secular and religious development is to alleviate human suffering. Developing this ideology, DFID is forging closer links with Muslim groups. Building on Muslims' religious principle that "humanity is like a body; discomfort or pain in any part of the body causes the whole body to suffer" (Department for International Development, 2001, p. 3), DFID prepared a strategic document titled "target 2015" in partnership with other faith-driven organisations like Muslim Aid and Islamic Relief and noted that (Department for International Development, 2001, p. 3):

Shouldn't it be our moral and religious duty to ensure that we are part of a world where no one has to live in poverty? A world in which all have access to food, shelter, clean water; to a livelihood, health and education.

McGregor (2010) examines roles and secular policies (not to engage with religious institutions such as mosques in Aceh) of the international aid organisations of New Zealand (New Zealand Aid) and Australia (Australian Aid) in Aceh after the 2004 tsunami. He concludes that international aid and humanitarian organisations might miss huge opportunities for supporting physical and psychosocial recovery and increase marginalisation of the affected communities by refusing to acknowledge religious authority or engage with religious institutions. McGregor (2010) finds that those NGOs which avoided religious networks in post-tsunami Aceh lost many opportunities resulting into weak development programmes. This was so since these organisations could not benefit from the essential persuasion and critical impact of the established Muslim grassroots network based on Islamic teachings. However, there were a few foreign NGOs that did incorporate Islamic teachings in their approach including one for

example which was working for children's rights, that incorporated the Koranic message that those who did not care for orphans were "religious hypocrites" in its publicity material (McGregor, 2010, p. 742). On the whole, there is a gradually increasing realisation among both religious and secular development organisations to explore ways to engage with each other for achieving better results of their common efforts for helping humanity.

### 3.4 Reasons for engagement with religious institutions

The International Committee of the Red Cross (ICRC) initiated a full-fledged quarterly with the theme 'religion' in 2005 (IRRC, 2005, Editorial). Broadly, the issue covered matters around the working of humanitarian organisations in Muslim, Hindu, Jewish and Christian communities. It was noted by the editorial team that the ICRC was not attached to any faith since its inception. However, it was predisposed by the protestant impression of John Calvin, an influential reformist of Christian theology during the 16<sup>th</sup> century (Parker, 1987). This shows a strong intertwining between religious motivations and humanitarian work present behind one of the largest multilateral humanitarian organisations, the ICRC.

After having an overview of increasing appreciation of and engagement with religious institutions in the international development context, this section focuses on the distinctive characteristics of religious institutions that make a strong case for their involvement while dealing with disasters. Examples are presented to show that these attributes of religious institutions influence disaster management at local, regional, national and international levels.

#### 3.4.1 The need to show sensitivity

Religion is usually a sensitive matter in societies. It is becoming difficult to dissuade suspicion attached to the development agenda of international development agencies working in recipient countries (Bonney & Hussain, 2001). Underestimating and ignoring local sensitivities can provoke extreme reactions from communities. In one incident at Mansehra, one of the earthquake affected districts of Pakistan, four members of an international non-governmental organisation engaged in relief work in the earthquake affected areas were killed, and eight injured, during an attack on its office by unidentified persons (APP, 2008). The reason for this particular attack was not immediately known although such attacks have often been carried out with the involvement of local dissidents, apprehensive about these international non-governmental organisations who were allegedly pushing their agenda (foreign culture and ideas) in the guise of aid workers (Rana, 2009). Similar instances of attacks on the headquarters of the central disaster authority also occurred in the post-tsunami Aceh due to ignorance of local religious sentiments (including NGOs avoiding to build sacred places as mosques and due to the presence of proselytising groups) (McGregor, 2010). A USA faith organisation, WorldHelp, announced that it was to move 300 Muslim orphan children from Aceh to a Christian children's home in Jakarta with a plan to inculcate the gospel and faith in Christ in their minds (McGregor, 2010, p. 738). This did not happen since the community

became aware of it and was successful in resisting the move. Wisner (2008) notes another incident in 1971, while in northern Kenya during fieldwork for his PhD. He found USA-based Christian missionaries were demanding that Borana pastoralist families pray before they could receive famine aid. Once the facts became public, the missionaries were removed from the country.

Wigger (2005) emphasises that in its operations, the ICRC should conduct deep analysis of socio-cultural trends in Muslim societies. Berger (2007) notes that the ICRC arranged a series of conferences in Asia (Pakistan, Afghanistan, Iran) through to the Middle East (Yemen, Morocco) and Africa (Tanzania) in 2006. These conferences essentially focussed on bringing together Muslim imams, scholars and experts in Islamic jurisprudence to increase understanding of international humanitarian and Islamic laws. This, the author emphasises, could help in carrying out the work of humanitarian assistance more effectively. After the 9/11, 2001 attacks, the physical presence of the USA in Iraq and Afghanistan and an open 'war against terror', there is an increasing need for humanitarian organisations to engage in dialogue with religious scholars, think tanks and youth of Muslim countries to clarify their position and to understand their point of view (Wigger, 2005).

On the whole, religion and religious norms are often a sensitive issue to communities. Any intentional or unintentional confrontation with religious institutions can spark conflict among stakeholders and may erode the necessary confidence of the local community and other development partners. The involvement of religious institutions such as mosques through imams could be instrumental in resolving issues of sensitivity and thus improving the relationship among different stakeholders involved in disaster management. Bradshaw (2008, para. 21) notes that an imam, Mahmoud Ahmed Abdul-Kadir, of Lamu Island off the coast of Kenya, says that "we want from westerners their knowledge, but not their culture".

The platform of religious institutions such as mosques may be considered for addressing broader issues of cultural awareness about ethnic minorities that can help when responding to disaster situations. The Western Australia Fire and Emergency Services Authority conducted a workshop in coordination with Muslims and mosques to sensitise its staff to different matters relating to Muslims, 1.7 percent of the Australian population, such as entering mosques and how to treat Muslim women when physical contact might be necessary (Fozdar & Karen, 2010).

However, there are concerns about discrimination and proselytizing which are partly responsible for the cautious approach of other actors in managing disasters in engagement with religious institutions. Twigg (2004) highlights the lack of knowledge about the role of religious institutions and groups and also cautions about the possibility of discrimination in the distribution of relief aid on the basis of religion and faith. In a case study of the village Katni in Bangladesh, Hartman and Boyce (1983) relate the higher death toll of minority population (Hindus) in a Muslim majority community during times of food shortages (due to drought or

bad harvest). Similar instances of discrimination occurred with the Hindu (minority groups) affected by the 2010 flooding in Pakistan (Suhail, 2010). These affected Hindus complained about being provided with cow meat, which Hindus do not eat, and Muslim's left-over food. Later, Hindu temples in big cities like Karachi accommodated most of the affected Hindus and provided them with food, shelter and medicine.

Although there are challenges in engagement with religious institutions, sensitive engagement and not disengagement seems to be the way to benefit from the grassroots position of community-based religious institutions while minimising chances of conflict between local communities and humanitarian development actors.

### 3.4.2 The need to understand people's perceptions of disasters

As discussed in Chapter Two, modernity and enlightenment in the post-industrialisation era have altered the general idea of ascribing disasters to God, spirits or religion. Concerns have increasingly moved to a mix of scientific, socio-economic and cultural perspectives of natural hazards (Blaikie et al., 1994; Burton et al., 1968; Haque, 2003; Hewitt, 1983). However, Chester et al. (2008) challenge the notion that religion no longer has a role in influencing people's response to disasters. They argue that religious beliefs still form an imperative element of people's perception of disasters.

There is a broad academic consensus in the disaster studies literature that disaster risk perception is fundamental to determination of people's responsiveness, preparedness and ultimately, to growth of disaster prevention culture (Cannon, 2000; Chester, 2005a; Oliver-Smith, 1996; Paradise, 2005; Rahmani, 2006; Schmuck, 2000). The influence of religious institutions on disaster perceptions may be seen from two angles – general view of disasters and belief in fate.

#### ***Different views of disasters***

There is an increasing recognition of the views of the primary stakeholders in disaster management (United Nations, 2005c). The challenge remains how to moderate between modern and traditional knowledge. Traditional knowledge is usually based on fate, religion, belief, culture, and history, while modern knowledge has its mainstay on scientifically verifiable evidence.

It is important to engage with religious institutions even though they may have different views on disasters. There is a difference of opinion regarding perception of disasters even within one religion. Chester et al. (2008) observed the case of Catholics in Southern Italy. Among Catholics, one school of thought has very similar views on disasters to that of mainstream disaster studies. This school of thought, "liberationist", notes the disproportionate impact on the poor and marginalized in disasters and considers that disasters are the result of institutional sins rather than that of individuals (Chester et al., 2008, p. 225). The other group

of Catholics, Irenaean, still deems that natural hazards serve a larger good such as earthquakes helping mountains to grow and volcanic eruptions helping to establish planetary atmosphere (Chester, 1998, p. 505; Chester et al., 2008, p. 225). Despite these divergent views, there was a broad sense of cooperation with authorities from the general public and no confrontation was observed from religious institutions towards evacuation calls following various volcanic emergencies. Having these different kinds of interpretations of volcanic eruptions even within followers of the same religion, should not deter authorities from engaging with them. According to Chester et al. (2008, p. 226):

It is possible for hazard planning to recognise that many people will continue to view eruption losses in religious terms, yet at the same time integrate the leadership roles of clergy and the experience of the church in charitable works into effective programmes of disaster relief.

Building on their earlier research, Chester and Duncan (2010) have shown that religious views of disasters in Christian traditions have come closer to the human vulnerability view of mainstream disaster studies and there are strong opportunities for cooperation, integration and partnership between religious institutions and secular organisations for reduction of disaster losses.

### ***Fate***

The other aspect through which religious institutions influence people's perception of disasters is the concept of fate. Paradise (2005) finds that community risk perception can critically affect the success of national or regional disaster policy and practice in faith-based societies. The author conducted a survey in the city of Agadir, Morocco, which is comprised of Muslims. The author's focus was to assess the risk perception of the community 40 years after a deadly earthquake in 1960. The study found that out of 243 interviews, 56% of women and 51% of men did not answer the question about whether they expect another earthquake in their lifetime, instead replying "Allahu a'lam" or "God is the wisest" (Paradise, 2005, p. 11). This answer was given despite the fact that Agadir is situated on active faults. These respondents thought that it was *haram*<sup>18</sup> or prohibited to predict and speculate about earthquakes. They felt earthquake prediction is equivalent to fortune-telling. Such perceptions among the majority of community members are more than mere academic findings. Paradise (2005) cautions that the situation warrants a serious reflection on the success of disaster management policies. For organized and sustained disaster management, nurturing of a disaster prevention culture is a rudimentary foundation (Bendimerad, 2004), in which religious institutions and actors have a critical role by way of influencing human behaviour.

Religious institutions and beliefs do not necessarily suggest communities become fatalistic and they are not enemies of modern knowledge *per se*. A number of socio-economic factors

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<sup>18</sup> Haram means forbidden or prohibited by Islam.

affect the attitude and behaviour of communities towards their immediate environment and such tendencies are often misinterpreted by outsiders (Berkes, 2008). In trying to understand complex reality, people might ignore insiders' logic, which is based upon ancestral knowledge, religious beliefs, taboos and social conventions. There is a need to understand the deep underpinnings of local knowledge which may not be precisely modelled through modern statistical and econometric techniques but is still relevant and logical. Berkes (2008, pp. 97, 189) refers to such phenomena as "fuzzy logic analysis" and "complex systems thinking" which involves alternative coping patterns evolving out of indigenous social, cultural and religious beliefs which may not fit into a mathematical representation.

Local or indigenous knowledge takes a holistic view of life and environment and thus engages with a number of qualitative contextual variables such as kinship, mutual respect, sharing and reciprocity in the world and hereafter (particularly in faith-based societies). Berkes (2008) argues that indigenous knowledge conceives holism by considering a large number of factors qualitatively and perceives unity in life and nature while western sciences tend to concentrate on a small number of variables quantitatively. Bankoff (2004b) reinforces that nature and disasters are incorporated in everyday life and thus there emerges a social construction of response to hazard and vulnerability.

People having religious inclination can follow a "parallel practice" which means invoking divine help from their belief in God and adapting standard precautionary measures like secular communities do in times of disaster (Chester et al., 2008, p. 225). Thus, about 7,000 Sicilians gathered for a mass prayer under the leadership of the Archbishop of Catania, at a sanctuary in Belpasso to stop the lava flow from Mount Etna (Kennedy, 2001, para. 2). On some occasions, people in southern Italy were even found to be keeping deities before the lava as a means to stop it, while also listening to and following the evacuation calls by the government authorities (Chester et al., 2008).

Anthropologists have begun to resolve the myth that believing in God indicates that people are inert or passive in the face of an impending disaster. The river-side communities of Bangladesh ascribed their fate to Allah but did not turn fatalistic at all (Schmuck, 2000). Schmuck observed that the people living along the banks and islands of Jamuna river followed a variety of coping strategies despite believing in God as ultimate controller of their future. Using a participant observation technique rather than using a structured questionnaire to elicit the responses of people, the author observed that people moved to other forms of livelihood, used their saved stock of food from the winter crop and banked on extended family networks at times of flooding (Schmuck, 2000). The author's finding is in contrast to the earlier view that believing in God necessarily meant one was a fatalist. Later, Hutton and Haque (2003) affirmed the findings of Schmuck (2000). They conducted a study of communities living along river-banks in riverine zones of Bangladesh. The authors observed that most of the people stated that their future rested on the will of Allah but still they adapted all types of safety measures. Similar perspectives of religious beliefs, which did not transform communities into

fatalists were observed while interviewing people in Cairo about their risk perception of a future earthquake after the 1992 earthquake in Cairo. Homan (2003, p. 147) found that “religious explanation is meaningful to people but very few felt that this precluded practical action”

On the whole, it is evident that religious institutions are important partners in disaster management since many people will continue to see disasters and disaster losses in religious terms. There are opportunities for making wise choices and preparing communities for impending disaster at the time of religious-driven activities such as prayer gatherings (Bankoff, 2004b; Dekens, 2007). In Asian cultures, fate is not perceived as something which renders human beings inert and inactive. This context of fate is far from the conception of fate in western discourse. As Wisner (1998, p. 3) explains:

Fate is, actually a very western idea rooted in the classical Greek and Roman world. It is something personal and often, as in the classical tragedies, something connected to a flaw in one's character. By contrast, disasters just happen in the mainstream Asian view, the way that trees, birds, day, and night happen and in the way that people are born, grow old, and die.

### 3.4.3 Opportunities for psychosocial support, spiritual healing, resilience and charity

Many people have a tendency to get close to religion at a time of stress such as disasters and calamities (Gibson, 2006, p. 10). Not only that, attachment to religion offers a unique opportunity for fighting against stress, trauma and tension. Religious connection forms an important constituent in the framework of generalised resistance resources proposed by Antonovsky (1979). This framework refers to “any characteristic of the person, the group, or the environment that can facilitate effective tension risk reduction” (Antonovsky, 1979, p. 99). “Culture is a distributed system of models and the cultural dimensions of mind are simply those mental models that derive from shared institutions”, observes Shore (2002, p. 227). Religious institutions affect and influence culture and also receive influence to varying degrees in a given set of socio-cultural dimensions. Over a period of time, religious institutions become shared institutions that have a bearing on people's behaviour and their orientation towards life and its processes. In a particular cultural environment, religious attachment gives a “sense of coherence” to life and helps to manage stress by presenting it in a meaningful way (Antonovsky, 1979, p. 123). He notes that:

A culture provides its members, group and individual, with ready answers, clear, stable, integrated; with meaning for a death, an explanation for pain, a ceremony for crop failure, and a form for disposition and accession of leaders (Antonovsky, 1979, p. 118).

Antonovsky's (1979) generalised resistance resources framework can be usefully linked and understood in relation to some of the current research about how religious beliefs and institutions provide an environment which promotes psychosocial support, spiritual healing and resilience in a disaster context. For example, Schmuck (2000) notes that religious beliefs serve the purpose of an effective survival strategy for the Muslim communities along the banks of the river Jamuna in Bangladesh. In the post-tsunami Aceh, people wanted to build a 'meunasah' (a small local village mosque for five daily prayers) before their own houses. It was a place for them to "grieve, heal and interpret what has happened" (McGregor, 2010, p. 735) – essential psychosocial support and spiritual healing for a community to recover from shock and trauma. This was central to the lives of the Acehnese, where community meetings would be held, decisions about their lives would be taken and community members would perform marriages (Sangadji, 2005). The meunasah was a source of promoting resilience and provided the much needed community space to relate to others and ease the stress and trauma from disasters.

The idea of resilience comes from the fact that certain disasters are unavoidable and communities have to come across them at one point in time. For example, Paton (2006, pp. 7-9) points out that San Francisco (United States) and Wellington (New Zealand) have been built on previously active fault lines. The author argues that future developments can be informed by scientific improvements and therefore vulnerable places can be avoided. However, the author emphasises that human beings have to learn to co-exist with hazards where people have no other choice. In this context, the idea of resilience comes to the fore when viewing people actively engaged in resisting disasters rather than considering them as a *fait accompli* (Cottrell, 2006; Weichselgartner & Obersteiner, 2002, p. 74).

Resilience is not a static attribute, rather it is shaped by culture, social networks and personal attributes (Cottrell, 2006). Communities with high vulnerability may still possess and reflect higher levels of resilience at the time of a disaster. The conventional belief that higher levels of vulnerability are associated with lower levels of resilience may not hold true for all the cases. Resilience is a dynamic attribute, which varies from place to place, culture to culture and people to people. A uniform degree of resilience should not be conceptualised, as resilience differs among individuals and communities (Pooley et al., 2006).

Religion has been found a major source in creating resilience in individuals and communities in different kinds of post-disaster situation trauma and stress. For example after Hurricane Katrina, attachment to religion and religious institutions by contemplating and visiting churches was a great source of strength and resilience for African-Americans coping with mental stress (Laditka, Murray, & Laditka, 2010). Similarly, another study exploring stress coping strategies among unaccompanied minors of asylum seekers in Ireland found that religion and going to church was the key source of creating resilience (Ni Raghallaigh & Gilligan, 2010). Likewise, university students facing terrorism threats in Karachi (Pakistan) also coped with mental stress through increased faith in their religion (Ahmed et al., 2011).

Many religions also stress the importance of believers being involved in charitable acts (Stern, 2007). In an incident of stampede at Jodhpur Chamunda Devi temple in India, which claimed 186 lives, Sain (2008) reported that Muslims were the first responders and rescuers, ferrying victims to hospitals and queuing up to donate blood. When one of the Muslims was asked why he was helping Hindus, he replied “we are all creations of Allah Who does not differentiate between Hindus and Muslims” (Sain, 2008, para. v). A similar instance of hospitality towards Hindus from Muslims inspired by religious teachings occurred during the 2011 floods in the Sindh province (Khan, 2011). At that time, the local government officials left the people on their own after the flood hit the town. A local mosque played the role of a community-based institution and the imam provided the much-needed leadership to the benefit all local people irrespective of religious divide. Khan (Para. 9-11, 2011) visited the town and described the situation:

The remaining five or six police constables in the city police station also tried to rescue people as much as they could. The army too rescued people in the initial few days but it was the city mosque that became the centre of popular government. The foremost point was that they were neither Hindus nor Muslims at this time – they were all calamity-affected people, the mosque speaker and Mufti Shujja-ud-Din tried to tell the citizens. The Mufti emphasized that the first thing the citizens had to do was to fight hunger and they even had to feed those passing through the city in search of refuge. The people began to cook 128 cauldrons of food every day. The mosque courtyard was opened to Muslims as well as Hindus.

Overall, religious institutions cannot be ignored in disaster management since they represent, interpret and negotiate socio-cultural sensitivities of people, influence disaster risk perception and are a main source of psycho-social healing in making societies more resilient. In addition to this, religious institutions may play a defining role in determining cultural practices in faith-based societies.

In the light of the preceding discussion, it is evident that community-based religious institutions can play a distinctive role in disaster management. Religious institutions motivate individuals to volunteer and help disaster victims and thus nurture a culture of altruism. In addition, religious institutions inspire individuals to be selfless and foster linkages and bridge social gaps in a society that may be diverse and at odds at times. Religious institutions offer support through a religious worldview, provide psychosocial healing, create resilience through a shared meaning of life and foster the process of normalisation of human behaviour. People of all ages and both sexes in different cultural and social settings have referred to religion as the main source of resilience for them in various stressful conditions. From preparedness, response, relief, recovery and rehabilitation to reconstruction, religious institutions have several roles to play as summarised in Table 3-1.

**Table 3-1: Roles of community-based religious institutions in disasters**

<b>Disaster phase</b>	<b>Roles of community-based religious institutions in disasters</b>
Preparedness	Influence people's perceptions of disaster risk and behaviour on the basis of religiously-inspired worldviews. There is a diversity of beliefs about disasters within religions but generally religions uphold belief in fate which does not necessarily construct believers as inert. Influence people's choices regarding what is socially and culturally appropriate for a community.
Response	Very often, forefront provider of shelter and food to disaster victims because of their grassroots position. Motivate and prepare volunteers to different tasks including removing victims from debris and ferrying injured to hospitals.
Relief	Provide local leadership which promotes sentiments of mutual sacrifice, charity and inspires communities to help others on the basis of divine promises.
Recovery, rehabilitation and reconstruction	Main source of psychosocial support, spiritual healing and resilience by providing a meaning to life and death with religious interpretations. Build social cohesion and safety networks critical for saving lives and reducing vulnerability. Support of religious institutions earns broader community involvement, participation and trust and therefore, their engagement increases the chances of success of projects.

Source: Author

Some of the complexities concerning how these roles of religious institutions unfold in different contexts and even within similar settings are explored by this research in Chapter Six. After having this overview of the role of religious institutions, mainly in a disaster context, the next section introduces one such religious institution, which is the case study for this dissertation, the mosque.

### 3.5 Introducing the mosque

It is important to explain how the term "mosque" is used in this dissertation because it is at the core of this study. The succeeding discussion provides a brief overview of the role of the mosque and its political implications, an explanation on the classification of the mosque as an organisation or an institution, a faith-based organisation or a religious institution, and finally, what type of institution or organisation it is.

Primarily a place of worship, the mosque has been a spiritual, educational, cultural, social and administrative institution in Muslim societies, historically well-documented and recorded since the time of the Prophet Muhammad (PBUH) fourteen centuries ago (Mahr, 2005). Mosques have been a focal point for different activities such as teaching of religious and general knowledge to men, women and children, housing and feeding of the poor, and conducting social gatherings like weddings. In addition to this, the mosque has been a place for war-injured soldiers and travellers to rest, for negotiation with foreign delegates, for announcements of important decisions and for sporting competitions. The imam of the

mosque was usually the administrator of the area. However, the nature of the role of the mosque has changed over time, so now the mosque is more active in Muslim-minority countries than in Muslim-majority countries (Abdel-Hady, 2010). Generally, in Muslim minority countries, such as the majority of western countries, the mosque also provides a social and cultural space for Muslim communities, whereas these activities have shifted outside of the mosque in Muslim-majority countries.

Muslims can offer prayer at any clean place although Allah and His Prophet Muhammad (PBUH) have enjoined believers to establish prayers with a congregation in the mosque. It is an act of great merit to establish mosques. A verse of the Koran (9:18) reads, “only those shall visit and maintain the mosques of Allah who believe in Allah and the Last Day...”. The Prophet Muhammad (PBUH) built a mosque in Medina as his foremost act after emigrating from Mecca. Although women can pray with the congregation in the mosque, it is not binding on them like men. In this context, the mosque remains a permanent feature of any Muslim community irrespective of its material status: the richest or the poorest.

Mosques are differently managed in different countries and they can be broadly divided into two categories; state-run mosques and community-run mosques. In many Arab countries such as Egypt, Oman, Qatar, Saudi Arabia, and the United Arab Emirates, mosques are state-run, built and maintained, and imams are appointed by the government. In the case of Pakistan, only important mosques such as the Badshahi Mosque in Lahore are state-run, managed by the *Auqaf* department (Government of the Punjab, 2010). The vast majority of mosques are built and maintained by communities with imams appointed locally. This actually reflects the situation in western countries where mosques are also owned and maintained by local communities. In state-run mosques, the state has control over sermons and on messages an imam can deliver from mosques, whereas it has minimum control, if any, in the case of community-run mosques including those connected with urban centres. Local mosques attached to small village communities are not likely to have any strings attached. Each mosque is an independent entity with no hierarchical relationship with other mosques in the area.

### 3.5.1 Is the mosque an “organisation” or an “institution”?

Civil society includes various organisations and institutions established by people themselves other than those run by the state. It is an important question to consider whether the mosque is an “organisation” or an “institution” and what is the distinction between an “institution” and an “organisation” since both the terms are sometimes used interchangeably and confusingly. North (1991, p. 97) suggests that institutions involve the human-devised constraints that structure political, economic and social interaction. They consist of both informal constraints (sanctions, taboos, customs, traditions, and codes of conduct), and formal rules (constitutions, laws, property rights). On similar lines, Thomson (1995, p. 13) defines institutions as “sets of rules that influence and organize human behaviour”. However, if institutions are the “rules of

the game”, then organisations are the players of the game, argue Leftwich & Sen (2010). They point out that lack of distinction between an “institution” and an “organisation” has led to an overemphasis on the role of institutions in development for the last 20 years whereas that of organisations, groups and individuals has been overlooked. This failure to distinguish between the two is illustrated by Thomson (1995, p. 13) who argues that some institutions are also organisations, for example, public administration, political parties, the congregation of a mosque or a church, and the family. Such viewpoints show that the dividing line between institutions and organisations became very slim in development policy and practice, sometimes resulting in undermining the role of organisations. This has certainly been the argument of Leftwich and Sen (2010, p. 11) who assert that “institutions are not self-generating or self-sustaining and they achieve little on their own”. They conclude that it is the interaction of institutions with organisations, groups and individuals that shapes, determines and influences development outcomes of institutions. As players of the game, organisations are a vehicle for expression and articulation of collective interest in a formal or informal way. Both institutions and organisations can be formal, usually with written laws and regulations which can be enforced by third parties, and informal, usually with unwritten routines, norms, conventions and customs which are embedded in everyday practices and beliefs of life and its manifestations. By the same token, both can be social, political and economic.

Civil society organisations comprise different types of voluntary associations including religious ones. Owing to the large number and complexity of these organisations, defining non-governmental organisations was dubbed as “mission impossible” by Martens (2002, p. 271). Equally, religious organisations’ multiplicity of functions makes them hard to define. Drawing on the work of Martens (2002), Berger (2003, p. 16) attempts to provide an overarching definition of religious organisations:

Organisations whose identity and mission are self-consciously derived from the teachings of one or more religious or spiritual traditions and which operate on a non-profit, independent, voluntary basis to promote and realise collectively articulated ideas about the public good at the national or international level.

Recently, efforts have been made to define and determine the parameters of religious organisations in order to identify the ones of interest. Clarke (2006, pp. 840-845) classifies religious organisations into five faith-based categories: representative organisations or apex bodies, charitable or development organisations, socio-political organisations, missionary organisations which spread key faith messages beyond the faithful by seeking converts to it, and terrorist organisations which engage in illegal practices on the basis of religious beliefs.

However, using North’s (1991) definition, this dissertation classifies the mosque as an institution since it has a set of rules, written and unwritten. Employing the analogy used by Leftwich and Sen (2010), a community and an imam are considered as players of a game in an organisational vehicle that operates through the institution of the mosque. The mosque

articulates and governs the community's religious, social, cultural, spiritual, psychological, economic and political aspects of life through its organisational vehicle. The mosque is primarily a civil society and a community-based religious institution with overarching effects on the economic and political spheres of its actors. It is both a formal institution, since there are written injunctions regarding the role of the mosque in Islamic jurisprudence, and an informal one, because the social character of the mosque in a specific rural community setting largely remains unwritten.

It is this social character which is under scrutiny in this dissertation and is shaped by several factors such as perception of communities and imams. Unlike historical and architectural mosques managed by the government, most mosques in Pakistan located in both urban and rural areas are built, maintained and run by communities themselves. Therefore, the government has no say in the affairs of mosque as such. In this way, it is purely in the domain of the concerned community to determine the boundaries of the social character of their mosque.

The community and imam, a group and an individual respectively, are two basic players that shape and determine the role of the mosque as an institution and influence outcomes of development initiatives by other actors in disaster management. There are a number of features uniformly found across all the case study sites included in this study making a case for the mosque to be called both a formal and informal institution. These include facing Mecca (formal), being led by a male imam (formal), being chosen by the community (informal), gathering male Muslims five times a day through *Azaan* (formal), having female Muslims listening to Friday sermons (informal), involving children through learning of the Koran (informal), and the mosque being sustained by the concerned community without any government patronage or support (informal).

### 3.5.2 Is the mosque a “faith” institution or a “religious” institution?

Difference in interpretation and usage of terms “religion” and “faith” has led to a difference in the nature of organisations and institutions attached to these terms. Bano and Nair (2007, pp. 8-9), after tracing the historical evolution of faith-based organisations in three countries of South Asia — Bangladesh, India and Pakistan — prefer the term “faith” over “religion”. They contest that the term “faith” is broader than that of “religion”, thus allowing flexibility to extend beyond major religions. Berger (2003) has used the term “religious non-governmental organisations” to conduct an exploratory analysis of 263 UN-affiliated organisations from different religions. Clarke (2006; 2007) has consistently used the term “faith” instead of “religion” or “religious” to denote faith-based organisations belonging to different religions.

This dissertation prefers the term “religious” since it describes the mosque, a place of worship primarily, more strongly than the word “faith”. In the academic literature, for example, in a study on the role of the mosque in local governance in Afghanistan, the mosque is referred to

as a religious institution (Rahmani, 2006, p. 9). This selection is useful because this research analyses the role of one religious entity, the mosque, in a Muslim society and therefore does not require a loose term like “faith”, which appears more suitable for comparison among various religious institutions or organisations. The term “religious” is useful in denoting the mosque in a direct way enabling this research to stay focussed and avoid confusion with other faith-based organisations. On the whole, this dissertation examines the role of the mosque in the disaster management cycle in the capacity of a religious institution.

### 3.6 Political controversy about the role of the mosque

This study queries whether the community-based religious institution of the mosque has a role to play in disaster management. However, it does also acknowledge the political controversy, if not risk, implicit in this proposition. In the aftermath of the 9/11 attacks in the USA, the subject of the political instrumentalisation of Islam has received greater attention (Platteau, 2010). Mosques in Muslim-majority countries are known to have been used effectively by radical Muslim organisations such as Hamas in Palestine, Hizbullah in Lebanon, the Muslim Brotherhood in Egypt, Taliban in Afghanistan and Jamaat-ud-Dawah in Pakistan, to enhance their influence amongst the public (Gupta & Mundra, 2005). In Muslim-majority countries such as Pakistan, mosques having a pro-USA political stance — mainly against the armed struggle against the USA occupation of neighbouring Afghanistan — have been attacked by dissidents and worshippers killed (Usmani, Imana, & Kirk, 2010). In addition to this, mosques and attached seminaries are alleged to fan sectarian violence like the Shia-Sunni conflict in Pakistan (Haleem, 2003). Mosques in Muslim-minority countries, such as Europe, have been accused of fuelling hatred of the West and serve as recruiting grounds for potential terrorists. Instances include the bombings in Madrid (2004) and London (2005) (Dunn, 2001; Haddad & Balz, 2008).

Responding to concerns over the role of the mosque, western countries adopted a two-prong strategy: firstly, immediate measures such as increased surveillance of mosques and detention and deportation of alleged radical imams, and secondly, strategic measures to engage by investment in mosques and training imams to achieve better integration of Muslim communities into society (Innes, 2006). In this way, mosques have been instrumental in promoting the political and social integration of Muslim minorities in western countries such as the USA (Jamal, 2005).

Likewise, mosques and imams have been deemed an important source for influencing public opinion in either Muslim-majority or -minority countries (Amaney, 2005; Haqqani, 2005; Wong, 2010). If western countries with a minority Muslim population have chosen to engage with the mosque to address their issues (of national security and social integration), Muslim-majority countries would seem to have an even stronger reason to engage with the mosque for the religiously virtuous cause of securing lives and assets from disasters.

## 3.7 Multi-faceted role of the mosque in Pakistan

The mosque has played a multi-faceted role in society in Pakistan. People in Pakistan tend to trust religious institutions and donate generously to such an extent that mosques (and attached seminaries) impart basic literacy to the one third of the uneducated children of the country (Grare, 2007). As little research has been carried out on the role of the mosque in disaster management, this section explores the general role of the mosque in community development and acts of public welfare in different parts of Pakistan.

### 3.7.1 Water conservation

Active civil society institutions such as mosques may become critical where state institutions lack capacity and public faith to uphold the rule of the law. Shah et al. (2001) demonstrate a valuable achievement of mosques and religious schools in facilitating the implementation of the public policy about water conservation at the local level. A group of people who happened to socialise at the local mosque of a small town in Faisalabad (Pakistan), were concerned about the wastage of municipal and irrigation water supplies. This group of people (including the lead author, Shah) were not related to any formal or informal organisation. They studied the issue through a survey of 4,113 people and divided people into four groups on the basis of their distance from the water reservoir as shown in Table 3-2.

Several people lodged complaints with the concerned government department about the water shortage and illegal installation of suction pumps by the people but all in vain: officials did not take any action. In this situation, Shah et al. (2001) approached the imams of the area concerned, to solicit them to discuss the issue of water conservation, in the framework of Islamic values, during Friday sermons. The lead author along with his team members also further educated imams on the issue of water conservation. The major focus was to spread awareness among the community on the rights of fellow Muslims and the importance of valuing precious resources, such as water, from the Islamic point of view. They wanted to mobilise and build on internal controls through promises of divine rewards and fear of punishments. The results of the first survey as compared to the second survey conducted two months later were:

**Table 3-2: Influence of the local mosque on water conservation**

Groups	Water shortage problem (percentage of people)	
	Before survey	After survey
1st group (closer to water)	0	0
2nd group (close to water)	0	0
3rd group (away from water)	50	20
4th group (further away from water)	75	42

Source: Author, based on Shah et al. (2001)

It is evident from Table 3-2 that there was significant decline in the water wastage and the people in the 3<sup>rd</sup> and 4<sup>th</sup> group substantially benefitted from this moral persuasion by the imams. Particularly, the tail-end users became the main beneficiaries. The authors concluded that the mosque and “Imams are more capable of reaching the public than water specialists” and that they had taken the policy from words to actions (Atallah, Khan, & Malkawi, 2001, p. 57). Religious institutions may help to reduce the trust gap between the state and civil society. Atallah et al. (2001) emphasised that such a partnership with state institutions would not only facilitate effective implementation of policy but instil a pro-environment behavioural change among community members which is fundamental to improvement in disaster management .

### 3.7.2 Fighting blindness

Sightsavers, a UK-based charity fighting blindness, has been working in Pakistan since 1985. Sightsavers chose to work in a small village, Killa Virkan, which was suffering from one of the highest levels of trachoma in the country, a type of local health disaster. Trachoma is a bacterial eye infection which is primarily caused through unsafe water and unhygienic conditions and leads to blindness (Sightsavers, 2008).

The organisation engaged the community through local leadership including the Nazim (locally elected leader, equivalent of a Mayor), village health committees and the imam of the village mosque (BBC, 2008; Sightsavers, 2008). Syed Abbas Ali Shah, imam of the local mosque quoted, by the BBC (2008), ,inspired villagers to keep their streets, bazaars and homes clean by presenting them with the Prophetic narrations about cleanliness and hygiene. The organisation claims that the SAFE strategy (Surgery, Antibiotics, Face washing and Environmental hygiene) remained successful and the disease has been virtually eradicated from the village (Sightsavers, 2008).

### 3.7.3 Fighting poverty

Akhuwat, which means brotherhood, is a registered non-governmental organisation working to alleviate poverty with interest-free loans, developing entrepreneurial skills and capacity

building since 2001 (Akhuwat, 2010). It is based on the Islamic concept of Muslim brotherhood that refers to the earliest example of brotherhood established by the Prophet Muhammad (PBUH) between Meccan immigrants and citizens of Medina fourteen centuries ago. At that time, the citizens of Medina shared their wealth, businesses and houses with Meccan immigrants who were forced out of Mecca because of their conversion to a monotheistic religion, Islam, from polytheism, which was prevalent in the society.

The distinguishing feature of this organisation, mainly operating in the Punjab province at present, is its interest-free loans and use of the mosque as its office. The organisation's key lending methodology is to approach a community at the time of congregational prayer, either in a mosque or a church (Akhuwat, 2010, para. 1). People are given an introduction about the details of the lending programme and its costs. In the particular ambience of a religious place, borrowers feel an additional moral responsibility to return the loan. In addition, using the mosque as a space saves the organisation a huge operational cost in case it was to use different premises.

### 3.7.4 Campaigning on birth control

Religious influences have been recognised as a formidable challenge to the success of the government birth control policy in Pakistan. The Ministry of Population Welfare has been working on population welfare and stabilisation issues but a formal acknowledgement of the role of religious community leaders/scholars/imams as a part of civil society at the highest level became explicit in mid-2005. The Ministry organised an international conference on population and development inviting Islamic religious scholars/leaders from all over the world to Islamabad in May 2005 (Ministry of Population Welfare, 2005). The Islamabad declaration emphasising the role of Muslim religious scholars in population planning was issued. A year later, the Federal Minister informed the follow up meeting of the Islamabad Declaration of religious leaders that (Ministry of Population Welfare, 2006, p. 23):

The awareness and training programme for local Ulama (religious scholars) has been strengthened to sensitize them on population issues for seeking their (public) support. I am glad to inform you that we have made remarkable progress in achieving this objective and *Inshallah* (with the support of Allah) very soon we will achieve the target of training 13000 Ulama all over Pakistan. Yet another important related development is the involvement of female Ulama in the programme activities who shall serve as a catalyst for behavioural change and community mobilization at the grass roots level.

## 3.8 Potential role of community-based religious institutions regarding 'connect and convince' functions

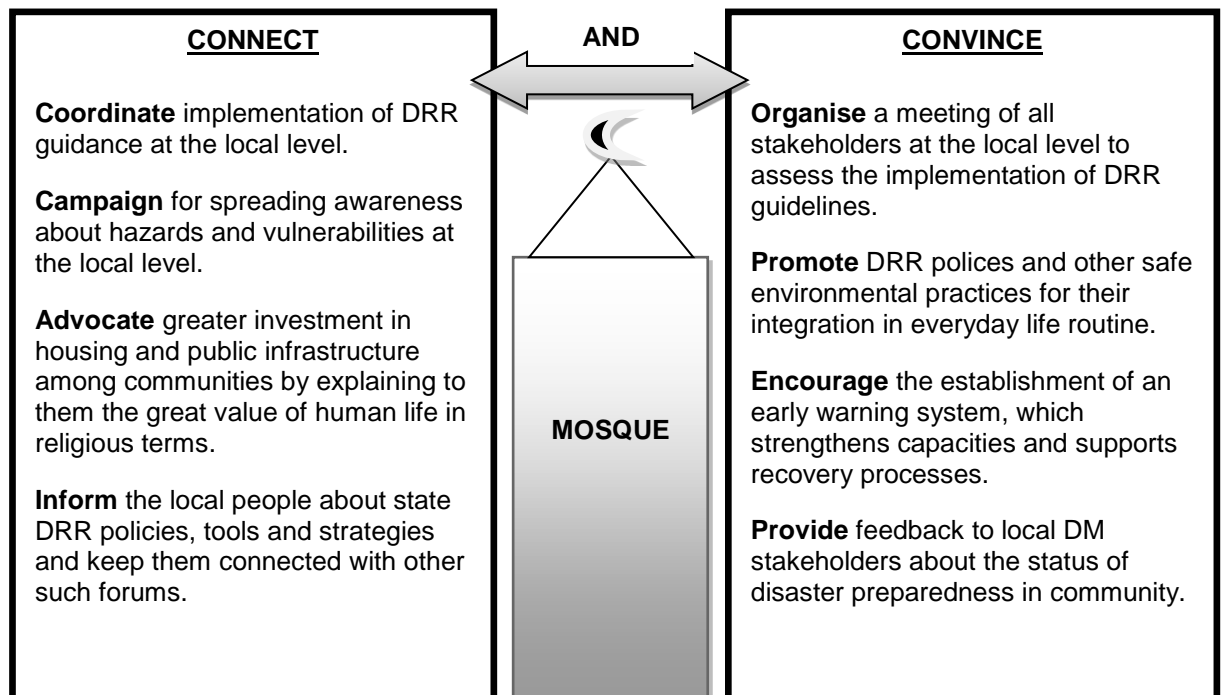
The UNISDR, the custodian of the Hyogo Framework 2000-2015, proposes a 'connect and convince' typology to spread its message of saving lives and reducing the impact of disasters

to all stakeholders including communities, governments, donors and experts (UNISDR, 2010a). The connect function emphasises four dimensions – coordinate, campaign, inform and advocate – and the convince function also mentions four aspects – organise, promote, encourage and provide – so that disaster management will achieve a disaster-safe future for all.

All connect and convince functions may be effectively performed by a grassroots religious institution such as the mosque, which has a central position in a Muslim community. Since outreach of the mosque message includes men, women and children five times a day (through repeated call for prayers) it may connect – coordinate, campaign, advocate, inform and convince – organise, promote, encourage and become an important channel for promoting DRR activities and culture in Muslim communities.

Although each of these functions is important, coordination is essential for effective disaster management but it is equally a challenging task. Coordination means to carry out particular tasks with mutually agreed upon cooperation and not just sharing of information (Quarantelli, 1997, p. 48). However, there are limits to the effectiveness of disaster management and it should not be assumed to work out ideally as per principles. Despite having knowledge of different social, economic and political factors, these factors may not be taken into account during implementation because of the complexity of a disaster situation (Quarantelli, 1997).

Figure 3-1 shows the potential roles of the mosque regarding connect and convince functions. In this context, other community-based religious institutions such as churches, synagogues or temples may be able to perform connect and convince functions on a permanent basis if engaged in disaster management.



Source: Author, adapted from UNISDR (2010a)

**Figure 3-1: The mosque and the UNISDR connect and convince functions**

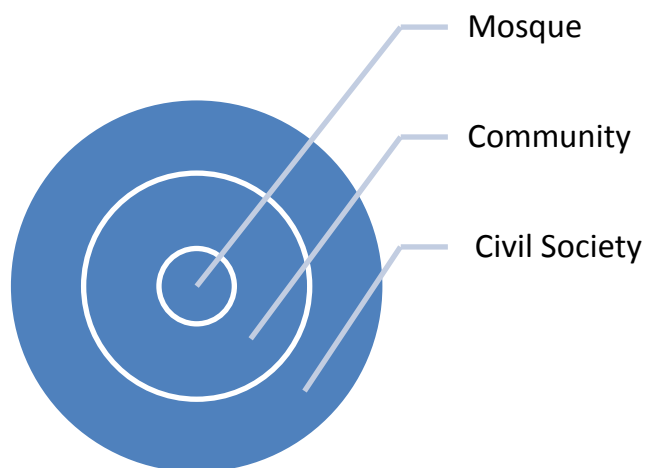
### 3.9 Post-development theoretical framework for the role of the community-based religious institution of the mosque

As noted earlier in Chapter One, the theoretical framework of this research is drawn from development and disaster studies literature. The post-development approach advocates breaking away from the conventional western notions of development, known as “intentional development” (Cowen & Shenton, 1995, p. 39), which presumes the Third World is primitive, under-developed and unscientific. It argues for inclusive, local and people-led development through community institutions where people are in control of change in their lives (Escobar, 1992; Esteva & Prakash, 1997; Maiava, 2002; Sachs, 1992). The approach has moved beyond its earlier anti-development stance, and post-development theorists are increasingly interested in positive alternatives to development that build on the resources and strengths of communities. The examples presented in section 2.6 demonstrated that the desired post-development ideal is where people can influence development processes and where they have some control over the outcomes of such development. Recent literature shows that post-development theorists (for example see Gibson-Graham, 2011; Gibson-Graham, 2007; McGregor, 2007; McKinnon, 2008) are increasingly identifying alternatives to development through selective engagement of communities with civil society organisations. In this context, this study is the first to explore the role of a community-based religious institution (the mosque) in a disaster context through the lens of post-development theory.

Since the late 1970s, attention has been drawn to understanding socio-economic and political factors behind vulnerability to hazards in addition to physical attributes of vulnerability. Therefore, this call for due acknowledgement and incorporation of local, community-based civil society (for example Haque & Etkin, 2007; Haque, 2003; Pearce, 2003) and religious institutions (for example Gaillard & Texier, 2010; Wisner, 2010) in disaster management is also espoused in the disaster studies literature. Due to local positioning, grassroots access, and being in a position of trust, community-based religious institutions are often well placed to provide immediate help in response, to create resilience and to offer psychosocial healing during the relief, recovery, reconstruction and rehabilitation phases of a disaster (for example Checkel, 2008; Chester & Duncan, 2010; Rowel, Mercer, & Gichomo, 2011a; Twigg, 2004).

In this context, this study explores the role of a local actor that is often overlooked in development and disaster perspectives. This is the key community institution of the mosque, an essential feature of any settlement where Islam prevails, and the basic religious institution for 1.6 billion Muslim people (23.4 percent of the world's population in 2010) (Pew Research Centre, 2011, p. 11). Furthermore, it influences their decision-making in respect of disaster preparedness, response, relief, reconstruction, rehabilitation and recovery phases. Within this framework, this research will explore the role of the community-based institution of the mosque in relation to civil society, the private sector and the government at the local level in district Mansehra (as explained in Chapter Four). In addition, this study has broad relevance to the role of other community-based religious institutions such as churches, temples and synagogues, which are key adherents of Christianity, Hinduism and Buddhism, and Judaism respectively, in dealing with disasters.

Figure 3-2 shows that a community is a sub-set of civil society and that community-based religious institutions such as the mosque are at the core. Within the context of post-development theory, this study explores the role and voice of community religious institutions, especially the mosque, for coping with disasters and reducing future disaster risk. At the local level, the study investigates whether community-based religious institutions have the potential to contribute to effective and efficient disaster management. Effective and efficient disaster management means that it should not only achieve its objective but do so without consuming unnecessary resources (Quarantelli, 1997).



Source: Author

**Figure 3-2: The mosque as a community-based role-player in disaster management**

Thus post-development provides the theoretical framework for the examination of the role of the mosque in the aftermath of the 2005 earthquake in Pakistan. The choice of post-development theory allows the requisite analytical space for examination of the role of the community institution of the mosque in disaster management, as well as more broadly in development contexts. Within this analytical space, this dissertation explores the possibility of building on community strengths, resources, knowledge, institutions, networks and resilience rather than considering local people and their institutions as weak, passive and helpless.

### 3.10 Summary

This chapter attempted to illustrate the increasingly important role of community-based religious institutions in disaster management. While civil society began to receive attention with the emergence of the integrated approach to disasters, the role of religious institutions as a member of civil society largely remains ignored and undocumented. Although underreported in disaster and development literatures, community-based religious institutions have been contributing to disaster preparedness, response, relief, reconstruction, rehabilitation and recovery. Since religious influences are usually strong at the local level, people's worldviews and perceptions about disasters are often religiously-inspired.

With the beginning of the new millennium, religious and faith-based organisations received world attention, including the famous Jubilee 2000 campaign asking for debt relief for poor countries. Bilateral development organisations such as the DFID formally acknowledged the privileged position of the local level religious institutions, which are based at grassroots level, and enjoy strong community support. Despite the conventional divide between religious and secular organisations, both began to find commonality in their objective of helping humanity and have started to forge closer links in the new millennium. In a rare move, DFID formed a strategic alliance against poverty with Muslim faith-driven organisations including Muslim Aid and Islamic Relief.

Religious institutions usually represent local and cultural sensitivity. It is increasingly difficult for international development and humanitarian organisations to be perceived as neutral, given the change in the political climate of the world since 9/11. In this context, ICRC suggests humanitarian organisations engage with religious leaders and institutions to dissuade any political impressions that may be attached to these organisations.

Religious institutions are an important determinant of culture. They shape and influence communities' worldviews, risk perception and attitudes towards disaster preparedness in faith-based societies. Risk perception is fundamental to behaviour towards disaster preparedness. If religious institutions promote fatalistic attitudes in communities, the disaster management policy of the state is not likely to achieve its desired level of safety and preparedness of the people. Nevertheless, religiously-driven holistic worldviews of life may offer psychosocial healing, promote resilience and a kind of survival strategy for disaster victims.

This study categorises the mosque as a civil society, community-based and religious institution. As shown in the conceptual framework (section 3.9) within the context of post-development theory, a community is a sub-set of civil society and that community-based religious institutions such as the mosque are at the core. This study explores the role of the mosque, as a key community-based religious institution where Islam prevails, for coping with disasters and reducing future disaster risk. Furthermore, this study also has relevance to the role of other community-based religious institutions such as churches, temples and synagogues in dealing with disasters.

Given the lack of literature on the role of the mosque in disasters, this chapter has explored the general developmental role of the mosque in Pakistani society so as to set the stage for the empirical investigation of the role of the mosque in the aftermath of the 2005 earthquake. Mosques have been used for advocacy campaigns such as water conservation and elimination of blindness. Imams have been found to have significant influence on public opinion at the local level. The Ministry of Population Welfare has formally acknowledged the role of religious leaders including Ulama and imams as important public opinion makers and therefore engaged with them. Through training and engagement, imams as influential individuals and mosques as community institutions may contribute to a community's improvement in quality of life such as strengthening cohesion, and promoting brotherhood and social safety networks. This improvement may become more valuable where the state does not have capacity to deliver due to lack of resources or inefficiency.

On the whole, the chapter has demonstrated that community-based religious institutions such as the mosque can influence communities' social, cultural, psychosocial, economic and political aspects of life. These aspects of the earthquake-affected communities' lives will be analysed during the process of data collection about the roles of mosques in the disaster management cycle, in the aftermath of the 2005 earthquake in Pakistan. Post-development theory, which emphasises inclusive, local and people-led development through community

institutions, will be employed to analyse the role of the mosque in the disaster management cycle.

Chapter Four will elaborate on the fieldwork process and fieldwork findings will be reported in Chapter Six.

## **Chapter Four Research methods and fieldwork**

### **4.1 Introduction**

The aim of this chapter is threefold: firstly, to explain the rationale behind the selection of qualitative research methods, secondly, to shed light on my fieldwork experience and thirdly, to provide background information about the case study sites. The chapter demonstrates why qualitative methods are more appropriate when 'how' and 'why' questions have to be explored. It does so by discussing previous studies where use of quantitative methods lead to misleading conclusions in a disaster context. Furthermore, this chapter illustrates how theoretical constructs informed the data collection process followed for this study. In introducing the case study sites, I discuss how Banda-1 was initially selected after consultation with representatives of local organisations. Later Banda-2 and -3 were included to further enrich data collection and to have a comparative analysis of an active mosque with a less active mosque. The chapter explains the process of fieldwork research approval by the Massey University Human Ethics Committee. Overall, this chapter provides necessary background information for understanding the process through which I arrived at the fieldwork findings in Chapters Five and Six.

### **4.2 Rationale for selection of qualitative methods and the case study design**

Selection of research methods influences the outcomes of research (May, 2001). Whether a researcher chooses structured surveys such as asking 'yes' or 'no' questions or semi-structured interviews makes a difference to the results of the research. Therefore it was important to consider which methods of research should be employed for researching the role of mosques and imams in shaping risk perceptions of the earthquake survivors.

This study used qualitative methods applied to case studies. This choice of qualitative methods over quantitative ones was made to suit the research questions of this dissertation. Religious aspects of disaster risk perception were not likely to be revealed through standard surveys unless deliberate follow-up questions were asked (Chester, 2005b; Chester et al., 2008). Fundamentally, it appeared unlikely that researchers could critically examine the character of a religious institution such as the mosque, a spiritually revered place, and reflect on its role in disaster management, through a survey tool.

Quantitative data are typified by many as objective, representative, concise and exact whereas qualitative data are referred to as subjective, biased and descriptive (Overton & Diermen, 2003, p. 38). While objectivity may be achieved through quantitative data, there is a risk of losing some data essential for adequate understanding of a phenomenon at hand, argues Gillham (2000, pp. 11-12). Thus, the appropriateness of quantitative methods for researching issues of disaster risk perception has been challenged. Schmuck (2000) argues

that quantitative methodology applied for exploring the disaster risk perception of riverside communities in Bangladesh in the 1980s and 1990s could not fully capture the socio-cultural realities of their life and perceived the communities as fatalistic and deterministic (for example see Haque, 1988, 1991). Schmuck (2000) used qualitative methods, mainly semi-structured interviews and participant observation, to analyse the disaster risk perception of these communities. The author found that these communities were not fatalistic, an entirely different result from previous studies which relied solely on quantitative methods.

Quantitative methods essentially engage with numbers and measurements in order to provide precise answers to questions such as how many people live at a particular place and what the ratio of females to males is. On the other hand, qualitative methods of research are used to explore underlying causes of a phenomenon such as why a certain number of people are living at a particular place and what is the reason behind higher/lower female to male ratios among them (Bryman, 2008). Since the 'how' and 'why' questions of this study could not be accurately answered numerically because they entailed operational links to history, culture and belief systems, the use of quantitative methods was not appropriate. Furthermore, qualitative methods are useful to explore "the myriad personal impacts of impersonal structures" (Brockington & Sullivan, 2003, p. 57). Gillham (2000) exhorts that qualitative analysis is fundamental to properly appreciate human thoughts and feelings which are partly determined by their context in real life.

However, quantitative data such as collected through detailed multiple choice questionnaires incorporating socio-economic dimensions have also been successfully used to study hazards, when combined with qualitative methods. Hutton and Haque (2003) studied hazard responses of 238 displaced persons from the four displacee-squatter settlements in the city of Serajganj and 230-non-displacees from the district Shariakhandi in Bangladesh. The authors used trained university students to record responses of the research participants through structured interviews while each interview lasted for 40-60 minutes. By using detailed interviews, the authors sufficiently captured the invisible factors, such as belief in Allah and its impact on their hazard-related decisions, which could have been missed had the researchers relied on collecting data by questionnaires only.

This research chose qualitative methods to reveal the role of imams and communities in "hidden histories"<sup>19</sup> of the mosque-driven activities in the aftermath of the 2005 earthquake, and to document the functions of mosques through the whole spectrum of the disaster management cycle – preparedness, response, relief, recovery, rehabilitation and reconstruction phases. Keeping the intricate and exploratory investigation of this research in view, qualitative methods allowed subjective views of the earthquake survivors to be revealed. Semi-structured interviews, participant observation and focus group discussions helped to unearth factors shaping the risk perception of communities regarding any future earthquake in

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<sup>19</sup> Chester (2005a, p. 322).

the given economic and socio-cultural milieu and the varying role of mosques in different phases of the disaster management cycle.

A case study is an investigation into a real life phenomenon in its on-going context. There are no clear boundaries between the phenomenon under study and its context (Yin, 2009). Gillham (2000, p. 12) suggests “working inductively” in the research settings, along with continuous reflection on the collected data in conjunction with the literature review already undertaken, should inform the direction of research questions during the fieldwork. Therefore, the case study method of data collection was chosen to examine the complex questions of this research about the role of the mosque in everyday life and disasters. The qualitative aspect of the case study method allows analysis of underlying meanings and invisible decision-making processes which may not be captured through a set of controlled variables in laboratory settings (Brockington & Sullivan, 2003, p. 57). Case studies are a preferred choice of research when ‘how’ or ‘why’ questions have to be asked and when the researcher has limited or no control on variables of research in real life settings (Yin, 2009).

In a case study design, no single source of evidence and method of data collection is likely to be sufficient. Gillham (2000, p. 10) compares a case study researcher with that of a judge who does not disregard any facts *per se* but evaluates how much confidence can be placed in each piece of evidence. Within the research design, different sub-methods were employed including interview, participant observation, triangulation, and analysis of documents and archival records, as recommended by Yin (2009).

As shown in Chapter Three, the conceptual framework sees the mosque as part of the community in disaster management in the context of post-development theory. While these theoretical constructs, such as use of qualitative methods and choice of research participants, informed my case study design, I was aware that I should not superimpose these constructs on my data analysis during the fieldwork. I examined and related my key concepts to my data through coding, comparison, category development and theoretical sampling, as elaborated by Strauss and Corbin (1998).

### 4.3 Introducing the research site

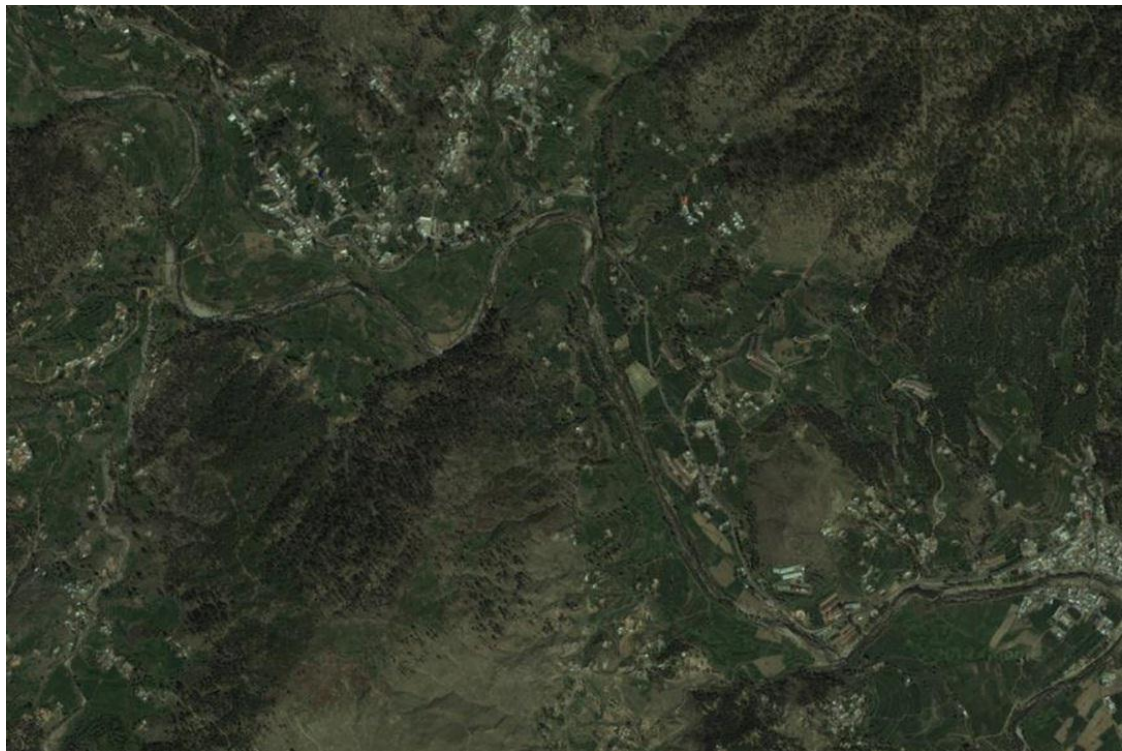
A total of nine districts were affected by the earthquake in Pakistan, in addition to the destruction of one residential building in Islamabad. Five of these districts namely Abbottabad, Battagram, Kohistan, Mansehra and Shangla were from Khyber Pakhtunkhwa. A comparison of social indicators including population (total, rural and urban), area, average household size, literacy rate and loss of lives after the earthquake in the affected areas is shown in Table 4-1. It is evident that Mansehra is the largest district in terms of area and population, and it was worst affected with regards to the number of casualties during the 2005 earthquake. The earthquake affected areas were mostly hilly and rugged, with small, dispersed village settlements (Figure 4-1). Possible identification marks have been blurred in the pictures used

in this dissertation to safeguard the confidentiality of the place and the research participants except that of the author's picture that has been left unchanged.

**Table 4-1: Comparison of social indicators of the Khyber Pakhtunkhwa earthquake affected districts**

Earthquake affected Districts	Total Pop. (000)	Rural Pop. (%)	Urban Pop. (%)	Area (Sq. Km)	Average Household Size	Literacy Rate (%)	Loss of lives in earthquake
Abbottabad	881	82	18	1967	6.4	37.26	7000*
Battagram	307	100	-	1507	6.6	18.31	3564
Kohistan	472	100	-	7492	NA	11.01	596
Mansehra	1152	94.67	5.33	4579	6.7	36.3	15997
Shangla	434	100	-	1586	7.0	14.5	444

Sources: ERRA (2007b, 2007c, 2007d, 2007e, 2007f); Aziz (2005)\*



**Figure 4-1: Typical terrain of the remote case study villages in district Mansehra**

Source: Google Maps (<https://maps.google.com/>)

Despite this background information before the fieldwork, the final decision about the exact location was left until after my entry into the field. The data collection in qualitative research is informed by the researcher's previous knowledge but pre-conceived notions and frameworks should not be forced on the data to preclude its natural emergence from the social processes (Glaser, 1992). The data collection may begin with initial benchmarks determined beforehand including selection of research site and related literature to broadly chalk out the main categories of participants and demographic profiles of the target population (Draucker,

Martsof, Ross, & Rusk, 2007). I began my fieldwork by visiting several earthquake areas inside Khyber Pakhtunkhwa, Azad Jammu, and Kashmir to find out the most appropriate location for my in-depth case study. During these visits, I interacted with different people from government and non-government organisations and sought their opinion about the appropriate location for researching the role of the mosque in the disaster management cycle in the aftermath of the 2005 earthquake.

I also wrote to 11 different public and private sector organisations from New Zealand in March 2009 soliciting their cooperation during my fieldwork and sent them information sheets about my research (Appendices B, C, and D). Although I received only one reply before entering the fieldwork, other organisations I approached during the fieldwork acknowledged that they had received my introductory letter. In my opinion, writing letters provided me with an edge in establishing early contact with these organisations.

During the first four months of fieldwork from April to July 2009, it was not until I reached the Food and Agriculture Organisation workshop on May 27, 2009 in Abbottabad that the final decision was made to choose district Mansehra (Banda-1) for detailed investigation. This workshop was organised by the Food and Agriculture Organisation to review its project, Community Based Livelihoods Recovery Programme, and I was invited to attend by one of my interviewees who was involved in this programme. A rural, isolated (not having road-connectivity) and mountainous village, Banda-1<sup>20</sup> was selected after deliberations and consultations with representatives of local organisations at the workshop. I also had formal and informal discussions with officials of different organisations working in the earthquake-affected areas. Most of these people were inhabitants of the area, suffered from the earthquake themselves and were later involved in different phases of the disaster management cycle such as response, relief, reconstruction and rehabilitation. These local people had in-depth knowledge of the local area. The local NGO people attending the workshop informed me that Banda-1 was likely to offer a useful case study since it was remote, isolated and had three mosques inside the village, offering opportunity for intra-village mosque comparison. The workshop participants shared the common view that informal religious community institutions such as mosques were likely to have a more pronounced and active role in inaccessible locations where the state was unlikely to come up to expectations. On the whole, 67.5 percent of the total population lives in rural areas of Pakistan whereas for Khyber Pakhtunkhwa, the primary research site, 83.1 percent live in rural areas (Ministry of Economic Affairs and Statistics, 1998)<sup>21</sup>. Being a remote and isolated rural site in Khyber Pakhtunkhwa, Banda-1 was to offer an opportunity to study a religious-cum-community institution's role before and after the 2005 earthquake.

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<sup>20</sup> 'Banda' is a common name for a village in Pashto language, the *lingua franca* of Khyber Pakhtunkhwa. The names of the case study villages have been codified as Banda-1, Banda-2 and Banda-3 for confidentiality.

<sup>21</sup> In Pakistan, the last population census was held in 1998.

Qualitative research is open to addition and subtraction of research sites and participants in a given situation in order to enrich data. During my engagement in Banda-1 and concurrent discussions with local NGOs helping me to interact with communities, I had an opportunity to visit Banda-2 and Banda-3, two other villages in the same district. Among the three Bandas, inclusion of Banda-3 significantly contributed to the richness of the data by offering an opportunity to compare and contrast the role of an active mosque with other less active mosques in the area. Utilising this flexibility of qualitative research methods selected for this research, I included research participants from Banda-2 and Banda-3. Detail of types of data collection I carried out in the rural Khyber Pakhthunkhwa is shown in Table 4-2.

**Table 4-2: Community fieldwork in rural Khyber Pakhthunkhwa**

Location	SSI- Imams	FGDs	SSI- male	SSI- female
Banda-1	2	6 (1 female)	10	13
Banda-2	1	2	3	-
Banda-3	1	1	1	-
Rural Mansehra	2	-	1 (Bara)	-
Rural Abbottabad	1	-	-	-
Total	7	9	15	13

Source: Author

SSI: Semi-structured Interview, FGDs: Focus group discussions

The one research participant from Bara was interviewed owing to a chance meeting in Banda-1. Bara was located opposite to Banda-1 but had road access. The two imams from rural Mansehra and one from rural Abbottabad were included to enrich data and to locate and relate the emerging research themes from the three Bandas with the situation in other nearby areas.

Table 4-2 shows that Banda-1 was explored in more detail than Banda-2 and Banda-3. To draw comparisons among the mosques and communities of the three Bandas, the core questions regarding the role of the mosque in different phases of the disaster management cycle were explored in all the interactions with imams and community members. All female interviewees were from Banda-1. All the three villages were located in district Mansehra. There were similarities in many aspects such as language, customs and low literacy levels. All the three villages were hilly and had spatially isolated pockets of population. There was subsistence agriculture farming and people usually relied on remittances from the migrant workforce of the concerned village. A detailed community profile of Banda-1 and short profiles of Banda-2 and Banda-3 are provided to locate the findings in context and found in Chapters Five and Six.

### 4.3.1 Banda-1

Banda-1 was located 32km from Mansehra and there were approximately 250 families in the village. The village was 1.25km from the main road with on-foot access through narrow hilly passages and a dilapidated bridge (Figure 4-2). Horses were used to carry foodstuffs and other necessities of life from the road to the village (Figure 4-3). The village population was scattered in a radius of 1.5km. The village had four tribes, namely Swati, Syed, Gujjar and Allai. The members were physically located in separate pockets of population within the same area. There was no boundary line among the four tribes but the communities were identifiable based on their clustered houses.



**Figure 4-2: The dilapidated bridge in Banda-1, the only access to the village**



**Figure 4-3: Foodstuffs being carried on the backs of horses in Manshera district**

The population of Banda-1 reached 5,000 with the addition of about 150 families (approximately 1,000 people) who had migrated from a nearby earthquake-affected area after the earthquake. These people were tenants in their original place and decided to migrate in search of better economic opportunities.

Banda-1 had three mosques in each locality for Swati, Syed and Gujjar, and the Allai community was linked with the mosque in the Swati area. The Allai too had reserved a place for a mosque and bare stones were seen on the proposed construction site. Out of these three functional mosques in the village, none of them was a Jamia<sup>22</sup> mosque. The village people went to nearby Jamia mosques to offer Friday prayers. Friday gatherings brought all males of the communities in an area to the mosque and were therefore important events in which to share and spread information of general interest.

The average land holding size was 4-5 kanal<sup>23</sup> and Banda-1 land was arid. Water was available in abundance, with a water supply that reached every home. There was a reservoir at a high place, which stored water from a spring. Water supply pipes ran to the whole village from this reservoir.

In Banda-1, the majority of the people were dependent on agriculture. Farming was subsistence-based but the produce from the land was hardly enough for two to three months after the harvest. The staple included wheat, rice and maize. During FDGs in Banda-1, the research participants were asked about their impressions of poverty and richness. The land ownership was pointed out to be the single most important factor in determining the social profile of a family. Generally, most of the people had their own houses, no matter how poorly built. Owing to a simple lifestyle and no connection to the road, there was low motivation for owning motor transport. Therefore, in the given socio-geographical situation of the village, it was the land that was valued the most in the lives of the people. In this way, the village people suggested during FDGs that 80 percent of the people were poor because of small land holdings and lack of a reliable alternative source of livelihood. About 15 percent could be ranked among middle income while only five percent were thought rich: they owned large tracts of land and had alternative sources of income as well (Fieldwork Journal, June 2009).

The poor class was generally engaged in casual labour. Most of the poor men had migrated to big cities to find livelihoods and usually carried out low paid unskilled jobs such as dish washing in hotels. The middle class was made up of those who had land and a permanent alternative source of income.

Banda-1 was vulnerable to seasonal flooding and earthquakes. In 1992, the worst flood had washed away all vegetation on the village land. In the 2005 earthquake, houses across the

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<sup>22</sup> The mosque where Friday prayers are offered is called Jamia mosque.

<sup>23</sup> Kanal = 1/8 acre.

whole village were damaged and there were 10 deaths. The signs of landslides, which occurred during the time of the earthquake, were visible at certain locations.

The village was remotely located and weakly linked with the rest of the country. Not only was the connection to rest of the country limited but also there was only one television for every 50 households and two radios in the whole village. I initially thought the poor people of the village could not afford to have a television. However, after having spent time with the community, the research participants discussed another dimension of not having television at home. It was deemed unbecoming of a modest family to have a television. The community did not consider that the television was showing what was religiously and culturally suitable to be viewed. Therefore, it was culturally inappropriate or “bigharat”, a shameful act to have a television at home (FGD1, Banda-1, 06/2009). This way of thinking refers to the lack of openness of this community as compared to the urban areas where televisions are regular fixtures in common public places such as tea cafeterias. Table 4-3 shows different indicators that reflect lack of openness and connectivity of the village people with the rest of the country.

**Table 4-3: Weak communication links of Banda-1 with the rest of the country**

<b>Description</b>	<b>Number</b>
Total family units in Banada-1	250
Households with television	5
Households with radio	2
No. of people in government jobs	3
No. of people in private jobs	2

Source: Author

In view of the above distance between the means of communication and an isolated community and its logical implications for DRR and disaster management, it was important to explore the factors leading to formulations of these invisible societal constructs, which determined what was modest and appropriate for this community. Chapter Six discusses in detail that the community-based religious institution of the mosque, mainly through messages from the imam, had a major role in shaping communities' worldviews. Having restricted access to means of communication such as radio and television, this situation raises serious concerns since these communities are vulnerable to several hazards including earthquakes and seasonal flash flooding and they might not be able to receive a timely warning.

Another socio-economic and socio-cultural dimension of the poor class in Banda-1 was their involvement in environmentally damaging activities such as cutting forest wood illegally. Trees covered the hills around the village and were a natural barrier to hazards such as flash flooding and landslides. Cutting of these trees had direct bearing on the safety of the village population. One evening when I was coming back with the locals to the village close to sunset, I saw three donkeys loaded with wood. There were four young men, in their early twenties,

with the donkeys. The men were just holding the donkeys and roaming aimlessly on the side of the path. I was surprised to see these people lurking around and asked my hosts about them. They did not utter anything about them at the spot, signalled through a wink and spoke later only when we had passed them:

They have cut this wood from the forest, which belongs to the provincial government and now they are waiting for the forest guard to get away from the outer path of the village. Once their companion tells them that the way is clear, they will cross the road from the village, sell it in the market and earn money, which would be enough for a week. After one week, these guys will be on the hunt again (FGD1, Banda-1, 06/2009).

I asked my hosts whether these people were from the village and they replied 'yes'. They said they were uneducated, had nothing to do at home in the village and were a sort of a burden on the village resources. The guides and hosts felt sorry for them and there was a noticeable tacit consent from my hosts by not opposing them openly. Afterwards, when I had built reasonable rapport with my hosts I asked them why they could not stop these people from destroying the forest. They said the whole village had made a commitment a few years back not to cut trees from the forest. Now, some people had started flouting the common commitment again and no one was taking it very seriously. One reason was that many people were very poor and they had no means of livelihood. Many were those who depended on casual employment and were unable to find regular work. The co-villagers of these subsistence wood loggers were aware of their abject poverty and therefore their activity was deemed permissible.

#### 4.3.2 Banda-2

Banda-2 was located 65km from Mansehra, a drive of about three hours. There were 200 houses in the village and the total population was 800-900 approximately. There was a long jeep track connecting Banda-2 to the main road leading to Mansehra. During my travel to the village, several naked hills indicated the massive landslides that had occurred during the 2005 earthquake. These landslides badly hampered the response and relief teams in reaching the affected population in the aftermath of the earthquake, the driver for the local NGO informed me. The road passed in between the winding hills and a river for about two hours, thus access would have been completely blocked after landslides. Even four years after the earthquake, the road was dangerously narrow at certain points where two vehicles could not cross.

One could reach the village by jeep but had to walk to access houses of the people since there was no road inside the village. The houses were quite spread out and some were physically isolated. The people used fresh spring water for drinking and irrigation of crops. Unlike Banda-1, this village had a *Jamia* mosque which provided a natural gathering place in community settings to talk about common issues such as DRR. A 52-year old imam led the mosque. I attended Friday prayers during my fieldwork in this mosque. A part of the mosque had collapsed because of the 2005 earthquake and the community prayed on the nearby land

until repairs were carried out. Until my visit to the village, the mosque was still under construction and thick cloths were hanging in the place of doors to hinder rain and wind.

Once I was in village, I observed that the Friday speech was delivered through a loudspeaker and it was audible in all parts of the village. There were about 150 men in the mosque listening to the sermon and offering Friday prayers. Due to subsistence agriculture in the village, many of the men worked in big cities or overseas. After the prayers, men gathered in small groups and began chatting, some staying inside and some hanging outside of the mosque hall. The Friday gathering was the biggest weekly social event for the men of the community. The men who would normally be away in their fields on other days would especially join Friday prayers since it was religiously obligatory and could not be offered except with congregation. Through these interactions inside and outside the mosque, I could observe the mosque served as a communal place for men to share and update each other. These groups of men discussed and exchanged their views on different issues ranging from the personal health of each other to village, regional and national issues. They would draw up plans to carry out different economic activities for each other such as helping in farming and collecting fodder for animals.

Since there was no provision for women to pray in this mosque, this social space benefitted men directly. However, the women were indirectly connected to the mosque in that they could listen to public announcements and the sermons of the imam, made through loudspeakers, and through men carrying messages back home from the mosque.

Like Banda-1, there was no NGO working for the village before the earthquake. It was only local people helping themselves, or occasionally they sought government grants for community projects. During the 2005 earthquake, 37 people had lost their lives and several other were injured. After the earthquake, the village vulnerability and poverty was highlighted and development organisations turned towards this community with various projects. Despite different projects for community welfare, no organisation, including government institutions, funded the reconstruction of the village mosque. The community on its own raised 900,000 Pakistani Rupees (USD 10,975)<sup>24</sup> for repair and extension of the mosque.

### 4.3.3 Banda-3

Banda-3 was located about 9km from Mansehra linked by a narrow road. It had about 200 houses and the population was approximately 1,000. There was no major damage to this village during the earthquake. The village was situated at the top of a hill unlike Banda-1 and Banda-2, which were located in valleys. Similarly, the village had relatively better infrastructure and housing than that of Banda-1 and Banda-2. One obvious reason for this was the village connectivity with the city that had opened up a number of employment opportunities for the

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<sup>24</sup> One United States Dollar (USD) = 82 Pakistan Rupee (Pakistan Rupees.) as considered on March 25, 2010.

people. There were paved streets inside the village. It had two primary schools: one for boys and one for girls. The girls' school building was severely damaged during the earthquake.

The mosque included in this case study was located in the centre of the village and was led by an imam who was 45 years old. The mosque was partially damaged in the earthquake. The people continued praying inside the mosque since it was not considered unsafe. However, just like the case of the mosque of Banda-2, this mosque was also repaired and extended after the earthquake, with the community raising 2,200,000 rupees (USD 26,829). No government or private organisation funded the reconstruction of the mosque. The sources of funding included community members who now worked elsewhere in Pakistan or overseas.

#### 4.3.4 Imams and their recruitment

The main operator of the mosque in each Banda was the imam. It is important to understand who the imam was, what the process of his recruitment was and what were his major responsibilities. The imam, who had to be a man, was primarily a prayer leader who led prayers five times a day in the mosque. In villages included in the case study, a prospective imam would usually be approached by a village elder. The process would begin with the visit of a village elder to a nearby seminary. The village elder would see the head of the seminary and place a request for an imam for his area mosque. The head of the seminary would then refer him to any one of his pupils in the area. Once seen and approved by a village elder, the imam would be invited to the village for approval by the community. The community would usually accept and welcome the imam arranged on their behalf by their elder. There was no retirement age for an imam. The imam would continue to serve as long he wished or the concerned community was satisfied with his services.

The imam was not paid a monthly salary in all the three Bandas. Twice a year at the time of Islamic festivities, people would give charitable donations to the imam. However, this occasional charity was not enough to cover living costs for the imam. Usually, some well-off families in a community would help the imam in cash or kind. In the community of Banda-1, one well-off family was providing food for the imam every day (Male Villager, 35, Banda-1, 07/2009). The imam was found to be an important and respected figure having public faith.

#### 4.3.5 Accessing participants

Personal issues such as dress, personality, awareness of local norms and culture, have significant implications for successful fieldwork (Scheyvens & Nowak, 2003). In terms of this research, which sought to engage with religious institutions in a faith-based society, the issue of local sensitivities may have been more delicate than expected for a non-Muslim and a foreigner. For me as a Muslim it was a strength to come from the same country, profess the same religion, share the same culture and wear the same dress. Although questions were prepared in English, they were translated into Urdu and presented to the Ethics Committee

before leaving for the fieldwork. During the fieldwork, I asked questions in the language most understandable to respondents such as Urdu, Punjabi or Hindko. The people from Swati and Syed tribes mostly understood and communicated in Urdu during interviews. The people from Gujjar tribe more commonly spoke Hindko and Punjabi. In a few cases where respondents (from Allai tribe) could understand my questions in Urdu but could respond only in Pashto, the local guide helped in translating the same in Urdu.

For women's interviews, I expressed my desire to interview women. My guide offered his services and suggested the name of a male school teacher of the village for conducting interviews of women on my behalf. Having spent time in the community, I could observe a strong purdah<sup>25</sup> tradition in the local culture and it did not seem possible for an outsider male to ask for interviewing women directly. Therefore, I accepted my guide's offer and had to rely on women from Banda-1 to conduct interviews because it was difficult for me to access women directly. Therefore, I accepted my guide's offer and had to rely on the women's interviews from Banda-1 because it was difficult to access women in the other case study villages. I briefed my guide and the aged schoolteacher about the ethical and confidentiality issues of conducting interviews for this research. All interview responses were recorded in Urdu and later translated by me into English. To minimise chances of misunderstanding of any response and its meaning, I read over and discussed all the women's interview transcripts with my guide and the schoolteacher while I was in the village.

It was unacceptable for my guide to receive money from me for his services and his time spent with me, as I was his guest. So, as the phrase goes, like a son of the soil, I occasionally brought seasonal fruits and chicken and he accepted them hesitantly since it was inappropriate to refuse gifts offered in the name of host's children by the guest.

#### 4.4 Disaster management actors included in the fieldwork research

Table 4-4 shows a broad range of actors who were included in the field research. The fieldwork research was conducted in three villages named as Banda-1, 2 and 3, in district Mansehra of Khyber Pakhtunkhwa. In addition, other relevant research participants from civil society, government and private sector were included to explore the relationship with the mosque of other key actors in disaster management.

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<sup>25</sup> Purdah is treated as a cultural custom in this dissertation. Although it has religious instructions for Muslim women to dress modestly in the Koran (24:31) as its basis, the actual manifestation of purdah varies in different societies.

**Table 4-4: Disaster management actors included in the fieldwork research in 2009 and 2010**

Type of research participants	Interviews/FGDs
Local community including 7 imams, 1 bishop, 13 women	45
Academia/research institutes/independent experts	8
State institutions including federal, provincial, local and Pakistan Army officials	14
Multilateral institutions, donors and international NGOs	11
Local NGOs	5
Private Sector including local and international	7
Media including 1 local, 1 international	2
Total	92

Source: Author

## 4.5 Methods

This section sheds light on the rationale of the selection of sampling and interview methods. It also discusses the details of the key informants' interviews, participant observation and the *modus operandi* employed to access the research participants during the periods of fieldwork data collection.

### 4.5.1 Selection of the sampling method

For this research, purposive sampling was used rather than probability-based sampling. This is a qualitative sampling technique whereby "a purposeful sample occurs when the researcher makes a judgement on whom to include in the sample" (Overton & Diermen, 2003, p. 43). This type of sampling technique is useful and common in qualitative research when there is deliberate choice of information units based on previous knowledge (Tolich & Davidson, 1999). There is more focus on sample strategy than on sample size. Theoretical sampling (collecting data for generating a theory as it evolves) and snowball sampling (connect to similar people through one chosen group) are examples of purposive sampling in qualitative methods. During the fieldwork, theoretical and snowball sampling were used to select research participants.

I adhered to guidelines about beginning data collection with small amounts of data through any one of the qualitative techniques including interviews, participant observation and focus group discussions. Line by line coding was carried out to further sharpen emerging themes and concept indicators. Using these concept indicators, the research canvas was broadened

to dig further into emerging categories through theoretical sampling, as suggested by Strauss and Corbin (1998).

It is emphasised that the researcher should critically think, reflect and explain the factors which convince him/her to include new information or drop baggage, to properly appreciate the use of theoretical sampling at this stage (Draucker et al., 2007). In line with this, case studies of Banda-2 and -3 were added after visiting Banda-1 to find similarities and differences in the roles of these mosques in different locations. In this way, more data were gathered, comparisons were drawn, data were analysed to take it to an abstract level, and category development took place along with analytical scrutiny of key themes. Finally, refined theoretical constructs were integrated with the theoretical frameworks of the relevant body of knowledge but that did not stop the process of my analysis (Charmaz, 2000). Once data were revisited by the researcher, new dimensions were added to previously available empirical evidence through critical thinking over time.

#### 4.5.2 Selection of the interview methods

As a part of qualitative techniques, this research has used interviews. Interviews have become so common that some call today's society an interview society (Fontana & Frey, 2003, p. 63). For this research that explored complicated questions such as the interplay of faith and fate in the face of a calamity, interviews helped to unearth information for analysis of this study. The Interview is one of the important tools of the case study method since interviews are a source of gaining access to the most complicated social issues. Usually, these issues are derived from real experiences of people (Seidman, 2006, p. 7).

Interviews can be structured, semi-structured and unstructured, open-ended, or in-depth. In structured interviews, the same sets of questions are asked by the researcher and thus this may lack flexibility. The semi-structured and open-ended interviews used in this research allowed respondents to go beyond the answer and therefore had more flexibility than structured interviews. In semi-structured interviews, the researcher and the respondent can seek elaboration and clarification from each other. In this way, they engage in a dialogue which provides the researcher with more latitude to probe (May, 2001, p. 123). The third type of interview, unstructured or open-ended, "can provide greater breadth of data than the other types" (Fontana & Frey, 2003, p. 74). In this type of interview, the researcher poses a lead question and then allows the respondent to answer it in his/her own terms. The researcher poses a few core questions from the research and listens to the respondent (Gillham, 2000, pp. 59-60). In this research, questions such as 'why do earthquakes occur?' and 'are earthquakes a punishment or a test from God?' were used as open-ended questions when respondents answered these questions in their own terms and engaged in dialogues.

### 4.5.3 Key informant interviews

For this research, semi-structured and open-ended interviews through purposive sampling were conducted in six districts of Pakistan: Abbottabad, Hafizabad, Islamabad, Mardan, Muzaffarabad and Rawalpindi. These interviews were divided into two categories: community interviews and experts' interviews. Separate information sheets were prepared for each category. The community interviews comprised of men, women, imams and a bishop including key informants from communities. Key informant interviews from the experts' category included officials from the government (central, provincial and district levels), Pakistan army personnel, NGOs (local and national) and the private sector (local entrepreneurs, contractors, and national and international consultancy firms). In addition, research participants were recruited from universities, research institutes and electronic and print media.

### 4.5.4 Participant observation

This data collection technique provides a rare opportunity for the researcher to observe and note subjects in their natural settings. The researcher endeavours to fully integrate with the community under study and tries to learn their way of understanding of the world (Brockington & Sullivan, 2003). Some researchers find this method of data collection very similar to that of an ethnographic, open-ended, unstructured or in-depth interview (Fontana & Frey, 2003). In a way, the participant observation and in-depth interview go side by side.

People of the case study villages were very hospitable. This custom of hospitality was displayed in both public and private interactions. Informal gatherings such as at the local hotel where I attended a community funeral, strengthened my relationship with the community. For the purpose of my fieldwork, I spent six weeks with the communities. During this period, I had the opportunity to observe, take notes and record in my fieldwork journal the way of life in these communities. Sarantakos (2005, p. 205) argues that data collection involves analysis of "content and context of speech and communication, body language and emotional expressions". Schmuck (2000) and Homan (2003) argue that participant observation may reveal those realities of life of disaster-prone communities which are usually missed due to reliance on pure quantitative and secondary data sources.

### 4.5.5 Focus group discussions

Focus groups discussions are meant to generate data by involving research participants to talk, discuss, debate, share and comment on each other's experiences about an issue (Barbour & Kitzinger, 1999; Kitzinger, 1995). Focus group discussions were held according to the convenience of research participants at different places. Sometimes, they were held in mosques (Figure 4-4), the local market, in the open (Figure 4-5) or in the houses of village people. Village people were hospitable and would often serve cold or hot drinks during these discussions. Focus group discussions involved young and old, and literate and illiterate. Since

this research was conducted four years after the earthquake, these discussions facilitated the community men to recall and correct each other about the sequence and details of different events in the aftermath of the earthquake. The research themes such as why earthquakes occur, what were some of the challenges in the aftermath of the earthquake, what strategies worked and what did not work and what was the role of the mosque, were floated for discussion. Focus group discussions lasted for one to two hours.



**Figure 4-4: A focus group discussion in Banda-3 in the mosque**



**Figure 4-5: A focus group discussion in Banda-1 in the open**

## 4.6 Ethical considerations

Like any professional job, standard ethical procedures have been developed by research organisations, including tertiary educational institutions, for conducting social research. The aim of ethical procedures and guidelines is to protect from harm and enhance the welfare of all groups, individuals and institutions involved in the research (Sarantakos, 2005). Massey University has an elaborate procedure for scrutinising research projects before their approval for implementation. The Massey University Human Ethics Committee classifies research projects as high and low risk. If a project is found to be low risk, the project could be approved after departmental in-house review. On the other hand, if a project is classified as high risk, then it undergoes the full review of the committee. This research project was classified as high risk because it involved recruitment of illiterate research participants and a full ethics application was lodged with the committee. A meeting was held with the Massey University Ethics Committee on February 12, 2009. The meeting was attended by my supervisor, Regina Scheyvens, and co-supervisor, Muhammad Imran. The committee asked me to explain the process of recruitment of my research participants in detail and asked the supervisors to comment on my capacity to conduct this research with due care for local sensitivities. The meeting lasted for 45 minutes and I was required to submit several clarifications from other people to secure the project approval. It was explained to the committee that imams would be approached to solicit their cooperation for recruitment of potential research participants because imams had influence in communities. The committee was concerned that this might lead to coerced participation of research participants. However, it was demonstrated to the committee by explaining the contours of an imam's recruitment, communal remuneration and social stature, that his influence was of only in a religious sense and not because he had any political authority over people.

Other ethical issues arose in the field. Due to the sensitive political context and sceptical environment on the ground, I had to change the whole strategy of recruitment of research participants. I approached communities through local organisations and not directly by myself. Methodological flexibility should be used in research to show respect, value and respond to the needs of participants (Campbell, Sefl, Wasco, & Ahrens, 2004). To me, well-being and welfare of the participant was a priority and I was concerned about provoking sentiments of loss by talking of the earthquake. However, I became aware that talking about a disaster can often be a cathartic experience for participants, as shown in other studies (Feinstein, 2008; Feldbush, 2007; Kearney, 2007; Straker & Finister, 2007).

Common ethical issues identified by different researchers (Bryman, 2008; Sarantakos, 2005; Scheyvens, Nowak, & Scheyvens, 2003; Sommer & Sommer, 2002) such as avoiding giving false impressions, obtaining free and informed consent, maintaining confidentiality and presenting a clear statement of research, were also respected during the fieldwork.

It is important to clearly state the nature and scope of the research and the manner in which particular respondents have been selected. I clarified to respondents that this research was conducted for completion of an academic degree and the respondents had been selected to fulfil its objectives. For this purpose, an information sheet explaining the basic nature of the research and introducing me was presented to the respondents before getting them involved in the research. Information sheets were translated into Urdu language, which is the *lingua franca* for the country. In the case of illiterate respondents, the information was explained to them in the language understandable to them

In each case, I presented the information sheet to my research participants and also explained about the research and their rights to them verbally, in the local language.. However, It is not always possible and reasonable to obtain written consent from the respondents (Sarantakos, 2005, p. 21). In such cases, I received their oral consent. I codified the names of places and did not reveal real the names of those who wanted confidentiality. In the case of public officials, I used the titles of their portfolios. Similarly, I turned the recorder off when someone wanted to say something off the record.

## 4.7 Data analysis

During my fieldwork, data collection and data analysis went side by side. I was aware that in qualitative research, reflection and contemplation on collected data including participant observation and interviews should occur simultaneously. As suggested by Charmaz (2000, p. 510), my fieldwork research endeavoured to adhere to a six step process of data handling; “simultaneous collection and analysis of data, a two-step coding process, comparative methods, memo writing, theoretical sampling and integration of theoretical framework”. Data analysis starts when the researcher transcribes the audiotapes of interviews and informal discussions. In most of the individual interviews, I audiotaped interviews and later transcribed them. In the case of focus group discussions where audiotaping could not have resulted into clear recording, I took notes and later rewrote them. Ezzy (2002) observes that if data analysis does not start side by side of data collection, the researcher is likely to lose valuable information. I continued to review and analyse the collected data and wrote down the crosscutting themes emanating from the data.

Having some prior knowledge of the case study settings, I was aware of taking utmost care to minimise researcher bias in data analysis, as observed by Kanuha (2000) . Walsh (1996, p. 94) cautions that “putting two and two together is not as simple and reliable as it sounds”. There is a risk of including information from one’s previously stored experience unknowingly. However, it is impossible to separate observation, comparison and thinking from pre-existing human mind filters of gender, age, belief and culture. Therefore, field notes, photographs and audiotapes were used to verify the derived inferences, rather than leaving it to human memory which cannot be fully relied upon as noted by Silverman (2003). In a case study approach selected for this dissertation, Gillham (2000, p. 13) suggests that the researcher should go to

the field with an open mind and keep “deferring analysis until the array is comprehensive”. Checkel (2008) and Gillham (2000) emphasise that discrepancies may occur since people can be very logical in the interview but may act differently in actual life. This is not because they are necessarily lying but they may not be accurate during the interview.

I thus used triangulation, an approach of analysing the data from “different methodological standpoints” (Gillham, 2000, p. 13). As noted earlier data were collected from various methods including documents and archival records, interviews and observations. These methods have their strengths and weaknesses. As per Sarantakos (2005, pp. 145-147), triangulation is “the practice of employing several research tools within the same research design”. Triangulation helped me to view a proposition from more than one perspective and therefore increased the validity of results by enriching knowledge of that area, as suggested by Frankfort-Nachimas and Nachimas (1996). The information received from one source was verified from other sources. If this did not occur, I explained the reason for that while reflecting on my data.

#### 4.7.1 Reflecting on the data

Before commencing fieldwork, I planned to approach communities by myself. I was aware of my strengths: I can speak the local language, and am familiar with the culture and customs. However, during the process of obtaining ethics approval from the full ethics committee of Massey University, I was made to think of alternative ways of recruiting research participants. As a result, I wrote to several government and non-governmental organisations from New Zealand about my research plan in Pakistan and solicited their cooperation during my fieldwork.

It was strange for me to find that people were highly sceptical about my research in Pakistan. Therefore, I had to do away with my initial perception of approaching research participants on my own. At the time of my fieldwork, the Pakistan Army had launched a military operation in some of the districts of Khyber Pakhtunkhwa. There was a general sense of insecurity among the people. Since there were instances of attacks on military convoys in the province, the intelligence agencies were keeping a close eye on the area. In these circumstances, I adopted the formal strategy of accessing research participants with the help of development partners already present in the area. This change of strategy prolonged my time in the field but helped me to stay safe and to reassure participants of my identity. I also assured the research participants that this research was for an academic study only and that the exact location of their villages would not be disclosed during the reporting the results.

Despite being introduced by a native and well-known (for his interest in welfare activities) person of the village Banda-1, one of the imams of Banda-1 was hesitant to be interviewed. I explained to the imam that I was hosted by the village elder and had had lunch at his house. It was the same village elder that was providing food to the imam. I then offered prayers with the congregation under the leadership of this imam, and again asked for his consent to be

interviewed. The imam did consent. However, after a couple of days, while I was out in the village conducting other interviews, a man came to my guide and informed him that this imam sent his apologies, as he had left the area and would not be interviewed for fear of getting in trouble. I was shocked to hear this. I was told of another similar instance where some outside people interviewed an imam a few months ago and later he was taken away by a secret government agency. Similarly, another person of Banda-1 who had displayed very submissive behaviour during the interview and offered quite contrasting ideas when compared to his fellow village people, was reported to have lied to me. I was told that he revealed in gossip to other villagers that he had hidden his actual response and provided artificial and positive information. I discarded this fabricated interview, and was pleased I spent enough time in the field to build a rapport with others who were more trusting of my research.

Although this research was conducted four years after the earthquake, the research participants could remember the earthquake and the following events in fair detail. However, had this research been conducted, say after 10 years, some of the data which came from human memory, might not have been collected. On the other hand, had this study been conducted after two years of the earthquake, some of people's memories could have been reflected more clearly and thus contributed towards the results from this research.

I also had other opportunities for sharing my fieldwork findings with local stakeholders in Pakistan. The first opportunity was to present a paper at an international conference convened at Abbottabad in August 2009. The second opportunity was in April 2010 during an international conference organised by the Earthquake Reconstruction and Rehabilitation Authority (ERRA) in Islamabad. I also availed this opportunity to collect more data to fill gaps in some aspects of my existing data. For instance, I had interacted with officials of ERRA only and did not include the National Disaster Management Authority (NDMA) in my analysis. However, after coming back from the first fieldwork period, I realised that ERRA was a project-based body and it was NDMA who would remain on a permanent basis. Therefore, I included NDMA in the second period of fieldwork, from mid-April to mid-May 2010, and also observed and participated in the Community-Based Disaster Risk Management Programme of ERRA in Abbottabad, which enriched the data, as shown in Chapter Five.

## 4.8 Summary and conclusion

This chapter has demonstrated the rationale for selecting qualitative methods of research for this project and reflected on some of my fieldwork experiences. The most appropriate selection of research methods is critical for reliability of research results. The chapter illustrated that qualitative methods of interview and participant observation in a case study design were found appropriate in the disaster studies literature for exploring the role of religion and religious institutions.

The chapter explained the process of selection of case study sites. Banda-1 was selected after consultation with the representatives of local organisations of districts Abbottabad and Mansehra. During the fieldwork in Banda-1, Banda-2 and Banda-3 were selected to enrich the data for comparative analysis of an active mosque versus a less active mosque. Banda-1, -2 and -3 had mountainous locations and in general poor people were living in these villages. However, in terms of people's mind-set about the role of the mosque, as Chapter Six reports, there were substantial differences.

Being reflective during fieldwork is important for the researcher. I changed my strategy of directly recruiting research participants via imams, and instead sought assistance of local organisations to do the same especially due to political tensions and suspicion of strangers in the area. Respecting local traditions of purdah, women's interviews were conducted through a local village man and a schoolteacher. The people were very hospitable, treated me as a guest and would not accept compensation for their time and assistance with my fieldwork. I spent six weeks living with communities and thus had an opportunity to observe their culture and customs closely. Data analysis was carried out through line by line coding, comparison and category development of emerging themes.

In qualitative research, the triangulation technique is applied to crosscheck information received from one source through other sources. Being native was my strength, having prior knowledge of local culture and traditions but I had to be aware of any preconceived notions to ensure objectivity in the research. I demonstrated reflexivity during the fieldwork and became concerned when a totally submissive interview was given by a research participant. The interview was discarded since it became apparent that replies were fabricated to please me. Ethical issues were thoroughly addressed by the Massey University Human Ethics Committee since the project was classified as high risk and required a full review to gain committee approval. A broad range of stakeholders were engaged during the fieldwork with key informants from the government, NGOs, private sector, media and academia, and from the case study villages. This chapter provided the basic information about the selected case study sites required to understand the findings as reported in Chapters Five and Six.

## **Chapter Five Disaster Management in Pakistan**

### **5.1 Introduction**

This chapter aims to provide an understanding of the key issues of disaster management policies and structures in the Pakistani context. The thematic arrangement of this chapter revolves around the roles of the key disaster management actors in the country, including the government, the private sector and civil society. Disaster management initiatives are traced from the pre-independence period, and the British government's response-driven approach to the 1935 Quetta earthquake is examined to provide the background for disaster policies in the post-independence period.

Since Pakistan's disaster-management policies were focussed solely on flood control before to the 2005 earthquake, the analysis of disaster-management policy and structure in Pakistan is divided into pre- and post-2005 earthquake periods. The pre-2005 earthquake disaster-management policies are analysed through the assessment of ten 5-year developmental plans, from 1955 to 2010. Analysis of disaster management structures involves a review of the roles of 13 government ministries and departments related to flood-centric disaster preparations in the pre-2005 earthquake setting, based on primary and secondary sources.

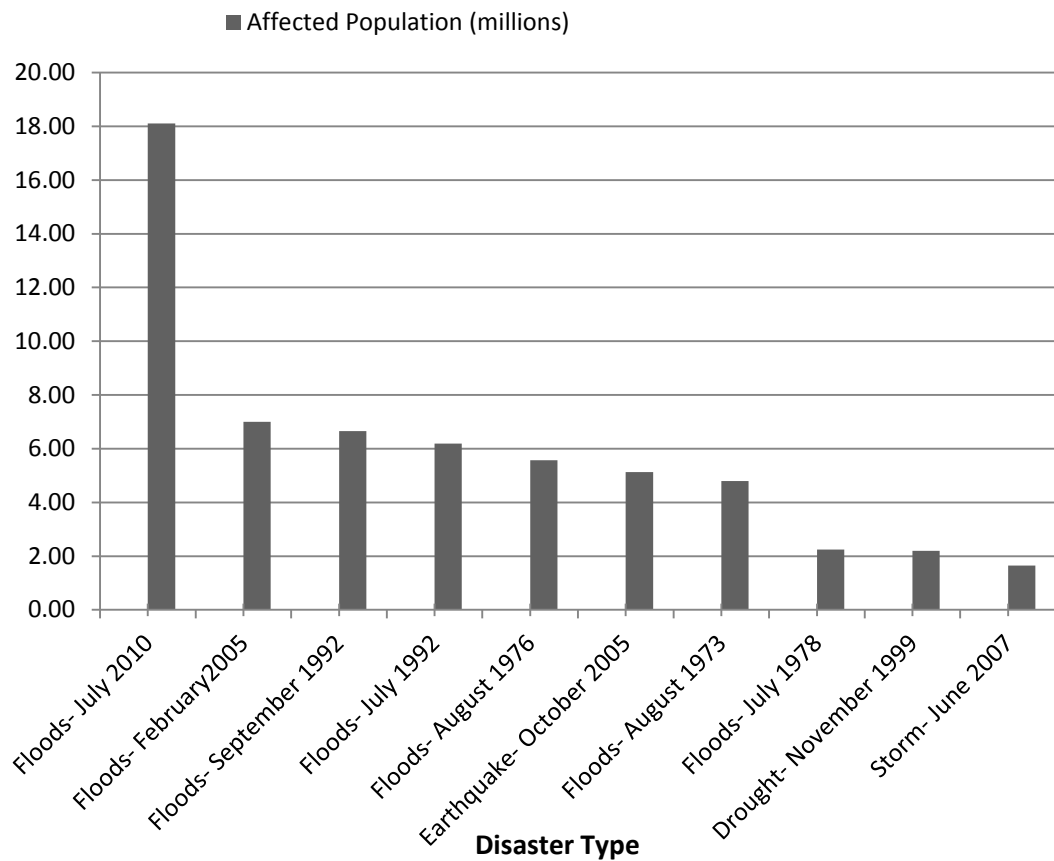
After explaining the National Disaster Risk Management Framework (NDRMF), the chapter provides an analysis of the roles of 34 government ministries by comparing the pre-and post-2005 earthquake disaster-management structure and policy, in the context of the disaster-management cycle. During this analysis, the chapter highlights the issues of institutional overlap, conflict, ad hocery and the marginal role of civil society and community-based institutions in the formal disaster management structure. The analysis is enriched by incorporating interview excerpts from the two periods of fieldwork in 2009 and 2010. The roles of the mosque as a community institution and the imam as an opinion-maker are also introduced here as important stakeholders in disaster management at the community level.

### **5.2 Approaches to disasters since the 1935 Quetta earthquake**

During colonial rule, the British government established a contingency-oriented infrastructure in the sub-continent for responding to any disaster (Patwardhan & Ajit, 2007). An example of a contingency approach (looking only at the immediate needs of response and relief) to disasters can be observed from the 1935 Quetta earthquake, which occurred during British rule in India. Before the independence of India and Pakistan in 1947, the British devised a contingency approach in the sub-continent to respond to disasters (Patwardhan & Ajit, 2007). Quetta is now the provincial capital of Balochistan, which is the largest province of Pakistan in terms of area. An earthquake struck the people of Quetta in the morning of May 31, 1935, destroying the whole city and claiming 30,000 lives (Skrine, 1936, p. 422; The Times, 1935c, p. 11). A train of doctors and nurses was sent from Karachi to Quetta (The Times, 1935a). The

government was satisfied that substantial food supplies were available in Quetta and there was no fear of starvation. As a matter of great urgency, martial law<sup>26</sup> was declared and it was mainly a military-driven response and relief setup under the command of the army to help the Indian sufferers (The Times, 1935b). About 7,000 troops from the Quetta garrison joined the response and relief operation (The Times, 1935a, p. 15).

After independence in 1947, Pakistan could not free itself from the British colonial legacy of a contingency approach to natural hazards. Pakistan’s institutional framework of disaster management has been predominantly reactionary in nature, with limited focus only on response and relief, and to deal only with one hazard – flooding, which has indeed been the most recurrent disaster to affect the largest number of people in the country since its creation, as shown in Figure 5-1.



Source: Author based on Em-Dat (2011)

**Figure 5-1: Top 10 disasters in Pakistan by number of people affected until March 2011.**

Earthquakes, though less frequent than floods, remained the most deadly events in the country’s history. Since 1935, excluding the 2005 earthquake, earthquakes have killed 68,700 people in Pakistan (Em-Dat, 2011). However, it was not until the 2005 earthquake that attention was drawn to the rehabilitation of the earthquake-affected people (National Disaster Management Authority, 2007). Thus an apparent paradigm shift occurred in the disaster

<sup>26</sup> Direct control of the country by the armed forces (Macmillan Dictionary, 2012).

management institutional policy and structure from a flood-centric to an integrated and multi-hazard approach to natural hazards in Pakistan (Khan, 2007; National Disaster Management Authority, 2007; UNDP, 2009a). The discussion of disaster planning and implementation is therefore divided into pre- and post-2005 earthquake timeframes.

### 5.3 Pre-2005 disaster-management policies

In general, Pakistan's disaster-management focus has been limited to counter-flooding policies. This was mainly due to a lack of awareness about other disasters and the high frequency of floods. As a matter of legal arrangement and legislation, 'The West Pakistan National Calamities (Prevention and Relief) Act 1958', generally called 'The Calamities Act 1958', set parameters for the conduct of the state during natural hazardous events. This act, however, concentrated on the provision of response and relief to the affected communities. No amendments were made in the Calamities Act 1958 and a crisis management style towards disasters remained dominant in the country, as shown in Table 5-1, in the 5-year development plans for decades to come.

**Table 5-1: Disaster management policies and related major events up until the 2005 earthquake**

<b>Five year plans</b>	<b>Disaster management policies, plans and major events</b>
First 5-year plan 1955–1960	The National Calamities Act 1958 passed as a result of recurrent flooding in East Pakistan. The Act is strictly limited to response and relief. The focus on counter-flooding measures did not include flash flooding; measures restricted to river floods only.
Second 5-year plan 1960–1965	Nothing new from the first 5-year plan except increase in budget allocation for flood control measures.
Third 5-year plan 1965–1970	Continued sole focus on river flooding control besides adding measures for enhancement of flood protection to increase area under cultivation.
Fourth 5-year plan 1970–1975	Contingency approach prevails. A cyclone hits East Pakistan and an Emergency Relief Cell (ERC) is established at federal level. Government has to drop an elaborate flood control programme with the technical support of the World Bank because of political crisis in the country. East Pakistan becomes Bangladesh in 1971. Floods hit Pakistan in 1973 and 1976.
No plan period 1971–1976	Due to the political crisis, government falls back on annual planning – no 5-year plan period from 1971 to 1976. Federal government nationalises several private assets and many provincial functions such as canal rehabilitation and fertilizer subsidy. The National Calamities Act 1958 is re-adopted as the West Pakistan Calamities Act. The Act remains limited to response and relief.
Fifth 5-year plan 1978–1983	Flood control policy is further centralised with the establishment of the Federal Flood Commission in 1977. Role of provincial and district governments is further reduced in local disaster risk and hazard mitigation planning.
Sixth 5-year plan 1983–1988	Technocratic tendencies hold with the extension of irrigation and drainage systems. Absence of grassroots participation of the affected communities.
Seventh 5-year plan 1988–1993	Structural measures such as building of additional storage capacity to store floodwaters, and enhancing flood forecasting and flood warning system dominate the disaster policy horizon.
Eighth 5-year plan 1993–1998	Focus on canal lining, remodelling and use of floodwater for land recharging. In addition, some non-structural measures, such as promotion of water resources research in universities.
Ninth 5-year plan 1998–2003	Flood control measures continued as in the previous plans. However, plan abandoned given extraordinary circumstances due to the 9/11 events and Pakistan’s new role in the ‘war on terror’.
Medium Term Development Framework 2005–2010	Shift from flood-centred policy to a multi-hazard approach. UNDP Pakistan provided technical support and incorporated lessons learnt from the Boxing Day tsunami on December 26, 2004.
Vision 2030	Poverty alleviation through control over natural calamities such as floods, droughts or man-made events such as wars, and through introduction of agriculture insurance against drought (Planning Commission of Pakistan, 2007, pp. 25-26).

Source: Author, based on five-year government plans (Planning Commission of Pakistan, 2010)

The Medium Term Development Framework, covering the period from 2005 to 2010, suggested a complete diversion from the flood-centred legacy of disaster to a multi-hazard disaster approach. It was launched in May 2005 (Planning Commission of Pakistan, 2010). For the first time, the subject of disaster preparedness and risk mitigation received full attention in the national planning corridors of power. What was behind this sudden change of approach to disasters in early 2005 in Pakistan? It was the December 26, 2004 Boxing Day Asian tsunami. Having seen the tsunami, world attention was drawn to the need to prepare for reduction or losses from natural hazardous events, and Pakistan was no exception. An international conference was held in January 2005 and the Hyogo Framework for disaster risk reduction was agreed by world leaders (UNISDR, 2005d). International development organisations such as the United Nations Development Programme (UNDP) quickly incorporated lessons from this destructive event. UNDP Pakistan acted as technical adviser to the government and reflected the latest learning from the tsunami during the preparation of the Medium Term Development Framework. The UN had already reviewed the status of disaster management policies and the institutional structure of Pakistan during the course of preparation of the country report for the World Congress on Disaster Reduction (UNISDR, 2005a). The Medium Term Development Framework referred to the December 2004 tsunami and suggested an all-inclusive review of the existing capacity of the public sector and civil society organisations for disaster preparedness and management. UNDP also assisted provinces to prepare proposals for establishing disaster management structures. As a result, comprehensive disaster management plans have been prepared for Punjab (Government of Punjab, 2008), Sindh (Government of Sindh, 2008), Balochistan (Government of Balochistan, 2008), Northern Areas (Government of Northern Areas, 2008), and Azad Jammu and Kashmir (Government of Azad Jammu and Kashmir, 2008).

In May 2005 the Medium Term Development Framework proposed a National Disaster Management Authority (NDMA) at the federal level to design, organise, coordinate and implement disaster relief, rehabilitation, preparedness, early warning system and risk-reduction measures for all hazards across the country, but the October 8, 2005 earthquake still took the government by surprise.

#### **5.4 Pre-2005 disaster-management structure**

Given Pakistan's sole focus on flood control, the country developed a somewhat loosely organised, though not sufficient, control and command system for dealing with floods. It is therefore pertinent to examine the role of the different institutional structures that were in place or raised over time mainly to respond to the problem of river flooding before the new institutional mechanisms were put in place after the 2005 earthquake.

### 5.4.1 Government

Before 2005, there were about 27 federal and provincial institutions related to disaster response and relief. Since there was no coherent policy or central authority for dealing comprehensively and systematically with all disasters, no government plan elaborated clear demarcation of responsibilities of different government organisations in an integrated manner at different phases of a disaster, or delineated their relationships. Table 5-2 shows disaster related federal ministries and provincial departments in the pre-2005 earthquake disaster-management structure.

**Table 5-2: Disaster related federal ministries and provincial departments in the pre-2005 earthquake disaster-management structure**

<b>Ministry</b>	<b>Department</b>	<b>Brief history, roles and responsibilities in disaster management</b>
Interior	Civil Defence Department	Established in 1951 at federal, provincial and district levels to ensure peace by preparing people in case of foreign country aggression. In 1993, emergency preparation, first aid, response and relief for all kind of manmade and natural hazards were included in its mandate.
	Emergency Relief Cell (ERC)	Established in 1971 at the federal level to deal with the emergency in the aftermath of the cyclone in East Pakistan. Its job is to stockpile goods and relief items and coordinate with provincial relief departments. It operates as emergency control room to liaise with other departments.
	National Crisis Management Cell (NCMC)	Established in July 1999 under the Anti-Terrorist Act at the federal and provincial levels to deal with any emergency resulting from human or natural hazards.
Water and Power	Water and Power Development Authority	Established in 1958, reservoir management and collection of rainfall data through its telemetric rain-gauge stations at different locations across the Indus River System (Water and Power Development Authority, 2010a). Also operates a seismic observatory at Tarbela dam since 1974 (Water and Power Development Authority, 2010b), which led to detection of a new seismic zone – Indus Kohistan – the zone involving the 2005 earthquake (Khan, 2007, p. 15).
	The Indus River Commission	Established in 1960 after signing of the Indus Waters Treaty, the Commission gathers data on river flow and rain fall in the catchment areas of Pakistan’s western rivers flowing upstream from India (Khan, 2007, p. 14).
	Federal Flood Commission	Established in 1977 to have effective control of floods and to reduce flood losses. It prepares flood protection plans for the whole country.
	Dams Safety Council	Established in 1987 to monitor dams’ safety under federal and provincial governments and to coordinate with the Federal Flood Commission on large dams; based in Paris.
Defence	Frontier Works Organisation	Established during the construction of Karakoram Highway 1966–1978 (Frontier Works Organisation, 2010). Run by the army, it has hi-tech logistic capability to unblock roads by removing landslides in hilly terrains.
	Armed Forces	Pakistan Army, Air Force and Navy play leading roles in response, relief and evacuation. Different army organisations like Army Aviation Corps, Army Medical Corps and Army Engineers Corps have dominant roles in early phases of a disaster.
	Pakistan Meteorological Department	A key institution that collects and analyses rainfall data and shares information relating to weather and geophysical phenomena with objectives of traffic safety in air, land and sea and therefore reduction in disasters and disaster losses. Shares information on flooding during the monsoon season, June 15 to September 30, with all provinces (National Disaster Management Authority, 2010, p. 26).

	Flood Forecasting Division	Meant to collect, analyse and prepare a flood forecast and warning, as necessary. It is a subsidiary organisation of the Pakistan Meteorological Department.
Cabinet Division	Planning Commission of Pakistan	Established in 1958 for strategic planning through preparation of national development plans with regular intervals (Government of Pakistan, 2011a). Its functions comprise allocation of resources including for disaster management.
	Space and Under Atmosphere Research Centre	Established in 1981 as a commission at the federal level. It conducts studies and projects on satellite remote sensing for hazard mapping, resource surveying and environmental monitoring to obtain information about impending disasters (Pakistan Space and Upper Atmosphere Research Commission, 2010)

Departments	Provincial Departments and their roles
Planning and Development	Key planning body in each provincial government. Not directly involved in disaster risk planning but indirectly related since it formulates short-term and long-term provincial development plans.
Irrigation	Undertake planning, designing and maintenance of flood protection works under the supervision of the Federal Flood Commission.
Provincial Crisis Management Cell	Monitor and respond to any emergency, particularly manmade disasters like terrorist activity; works under auspices of National Crisis Management Cell.
Police	Present at the grassroots level, maintain law and order during a disaster situation, disseminate flood warnings and help in search and rescue.
Relief	Coordinate at provincial level among several actors including federal, provincial and district governments and the affected community in a disaster. Interact with district governments to establish flood relief centres at district and tehsil levels. These departments usually worked under the Board of Revenue.
Health	Support response and relief efforts by providing treatment to the injured. Declare emergency in hospitals in disaster situations and organise medical teams at a disaster location.
Agriculture and Livestock	Reduce loss to livestock and agriculture land and help in recovery of the same after a disaster by providing subsidised agriculture inputs like seed and fertilisers.
Communication and Works	Responsible at provincial level for maintenance and protection of communication network and infrastructure such as roads and bridges before and after a disaster.
Food	Stockpile of food items and organisation of ration depots at the affected places to cater for basic food requirements of the affected people.
Punjab Emergency Service – Rescue 1122	Responsible for first call response to all emergencies. Established October 14, 2004 as a pilot project in Lahore (capital of the Punjab province) and now expanded to other districts of Punjab and provinces (Punjab Emergency Service, 2010).

Source: Author

Table 5-3 summarises the Pakistani federal, provincial and district institutions involved in disaster management during different phases of a disaster before the 2005 earthquake. The table classifies these roles in the three phases – response, relief and preparedness – since

government largely ignored long-term rehabilitation plans. Some of these organisations would have an overlapping role in more than one phase of a disaster. For example, Communication and Works Department mainly works during relief at different tasks such as restoring affected roads, but it would join Pakistan Army Engineers Corps to restore critical infrastructure during the response phase of a disaster. However, the roles of these institutions have been classified according to the focus of their interests and activities based on pre-2005 earthquake disaster management institutional policies and structures as identified from different reports, documents and interviews during the fieldwork.

The list of ministries and organisations produced in Table 5-3 includes major government organisations related to flood management and control. There were only four federal ministries (Interior, Defence, Cabinet and, Water and Power) focussed on flood control and management in the pre-2005 earthquake policy and structure for disaster loss reduction. Keeping in mind the government's restricted focus on counter-flooding measures, there were ten<sup>27</sup> government departments working for response, including six at federal level and four at provincial level. Since the relief phase was the focus of the government, there were 14 organisations, including six at federal and eight at provincial level. Investment in preparedness measures was not a priority for the federal government, and even less so at provincial and district levels. There were 13 government organisations expected to prepare plans for flood-centric disasters, 10 at federal and only three at the provincial level.

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<sup>27</sup> Excluding Punjab Emergency Service, which was operative only in some parts of the Punjab province before the 2005 earthquake.

**Table 5-3: Pre-2005 earthquake role of federal ministries and provincial departments in the disaster-management cycle**

<b>Response</b>	<b>Relief</b>	<b>Preparedness</b>
National Crisis Management Cell	-	-
Civil Defence Department	Civil Defence Department	Civil Defence Department
-	Emergency Relief Cell	Space and Upper Atmosphere Research Commission
Pakistan Army	Pakistan Army	Pakistan Meteorological Department
Army Aviation	Pakistan Air Force	Flood Forecasting Division
Federal Works Organisation	Federal Works Organisation	Federal Works Organisation
Pakistan Navy	Pakistan Navy	-
-	-	Federal Flood Commission
-	-	Water and Power Development Authority
-	-	Dams Safety Council
-	-	The Indus River Commission
-	-	Planning Commission of Pakistan
	<u>Provincial Departments</u> <sup>28</sup>	
-	-	Planning and Development
-	Relief Departments	-
Police Department	Police Department	-
Provincial Crisis Management Cells	-	-
Civil Defence Department	Civil Defence Department	Civil Defence Department
Irrigation Department	Irrigation Department	Irrigation Department
-	Health Department	-
-	Agriculture and Livestock Department	-
-	Food Department	-
-	Communication and Works Department	-
Punjab Emergency Service <sup>29</sup> – Rescue 1122	-	-

Source: Author fieldwork and secondary sources (Khan, 2007; UNISDR, 2005a)

<sup>28</sup> The nomenclature of provincial departments varies slightly across provinces, so general terms are used here.

<sup>29</sup> Only in the Punjab province before the 2005 earthquake.

Despite having such a large number of organisations dedicated to flood control, it was the Pakistan Army that has dominated the scenes of flood response and relief. With a few exceptions, such as Pakistan Meteorological Department and Flood Forecasting Division, the capacity of civil institutions was never enhanced enough for them to take charge of their responsibilities. The flood-focussed long-term disaster planning was marginal, largely limited to river flooding, centralised, and mainly involved federal organisations.

No central agency existed to take full charge of designing disaster policy and its implementation at federal and provincial levels. Moreover, different responsibilities related to disaster management were fragmented across several institutions. For example, ERC was only responsible for dealing with the post-disaster situation and National Crisis Management Cell (NCMC) was there to ring the danger bells at the time of a disaster.

Table 5-3 also shows the overlapping of disaster management functions among different departments. The Civil Defence Department has a district level set up and has been made responsible for disaster response since 1993. High- and low-ranking government officials believed that in contrast to its responsibility, it is poorly resourced and woefully ignored by provincial and federal governments alike (Senior Officer, NDMA, Islamabad, 04/10; Instructor, Provincial Civil Defence Department, 05/10). Instead of building its capacity by injecting financial resources and training its staff, another institution, the NCMC, was established in 1999. In the case of the Punjab province, the largest province population-wise, yet another institution, Punjab Emergency Service 1122, was added to the number of disaster-response institutions in 2004. In the absence of an integrated and coherent policy on disasters, the disaster management structure was made more complex by adding new structures without clear boundaries of mandate over a period. Lately, other provinces have also begun to emulate the model of Punjab Emergency Service 1122. Peshawar, the capital city of the case-study province of this study, launched its rescue service on August 30, 2009 (The Dawn, 2009).

#### 5.4.2 Private sector

Having no key institution to engage with a range of stakeholders and relying solely on the Pakistan Army for flood response and relief before 2005, the government did not explore the opportunity of connecting with the private sector for provision of goods and services in disaster situations. Similar to a top-down, decision-making process, the disaster management structure was also heavily centralised, hardly leaving any room for other entities beyond the government. In fact, the government, the Armed Forces in this case, began to compete with the private sector by directly entering into private sector through publicly owned rent seeking enterprises such as Federal Works Organisation (Siddiqa, 2007). The Frontier Works Organisation is a subsidiary of the Pakistan Army under the Ministry of Defence and an infrastructure building company. It bids in the open market to win construction contracts. Its Chief Executive Officer is

always a serving military Lieutenant General (Frontier Works Organisation, 2010). Most often, it was the Frontier Works Organisation that was called on by the Pakistan Army in a disaster situation, and other private sector actors were not encouraged to participate as a matter of government policy. However, on their own accord, private sector actors such as business persons, traders and industrialists would regularly provide food, tents, medicines and construction materials to disaster-affected people.

### 5.4.3 Civil Society

Owing to the absence of a bottom-up development approach and inadequate disaster management policy in Pakistan, there was no formal consideration in the government policy to recognise or include civil society in flood control decision-making. Nevertheless, non-governmental organisations and community groups have been working on a self-help basis for counter-flooding measures, such as strengthening the unstable banks of a canal flowing alongside a community.

It would be worthwhile to mention here about the scope of the Civil Defence Department. Although ignored and not playing an active role in disaster responses in the current form, it had played an important role in advising ordinary people of safety measures during the 1965 and 1971 wars with India. The Civil Defence Department policies have an elaborate arrangement for the involvement of civil society. This example shows that there is provision for the inclusion of civil society in disaster management policy at the grassroots level but it has been neglected throughout the country's history.

The actual and potential role of the Civil Defence Department was explored during my fieldwork visit to a district in the Punjab province where I met with a member of the department with more than a decade of service (Instructor, Provincial Civil Defence Department, 05/10). The Civil Defence Department is headed by a District Coordination Officer<sup>30</sup> (DCO) at the district level. The head of district administration, DCO, is the ex officio District Controller Civil Defence. The Civil Defence Department is supposed to register volunteers and train them in different life-saving techniques such as search and rescue, fire fighting and first aid. In theory, involvement of civilians occurs when members, preferably apolitical but notable, are taken on as Chief Warden, Additional Chief Warden, Deputy Chief Warden, Divisional Warden, Group Plan, and Post Warden in the management of the Civil Defence Department. A 'Warden' is referred to as W-willing, A-active, R-resourceful, D-dutiful, E-effective and N-noble, as a way of popularising the idea. These warden positions are honorary and nominated by the DCO. This hierarchy of wardens is to maintain a working liaison with other community members who are volunteers for the Civil Defence Department.

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<sup>30</sup> District Coordination Officer was Called Deputy Commissioner before the introduction of the Local Government Ordinance 2001.

However, it was revealed during the fieldwork that the district Civil Defence office I visited was heavily under-staffed. This office was supposed to look after the one million people of the district in case of any eventuality with a staff of 12 people (Instructor, Provincial Civil Defence Department, 05/10). This included one DCO/ex officio head of the department, one district officer Civil Defence, one bomb disposal technician, and one bomb disposal expert (both of whom were non-permanent staff and on deputation from the army), three instructors, and five secretarial support individuals. There were neither resources to register, train and keep track of community volunteers, nor capacity to engage with civil society members. The three instructors of the department could not even follow up with those who were already registered. The office was not only lacking in human and financial resources but also lacked space and office equipment, like computers, desks and chairs, for the existing staff. The staff members were generally demoralised and demotivated when asked about the future of their department (Field Journal, May 2010). In consequence, the department was training only school-teachers (since they were made to attend trainings by the district government order) and school administration was required to provide school buildings as venues for the training.

The same sorry state of affairs was prevalent in other provinces, such as Karachi, the provincial capital of Sindh province, even three years after the 2005 earthquake. The department was heavily under-resourced, emergency drills were non-existent, the staff were disoriented, and 80 of them posted in four districts of Karachi were not performing any duty due to ignorance of the provincial government to run the department properly (Ali, 2008).

## 5.5 Pre-2005 emergency response system

With respect to flooding, the government had designed a working mechanism for flood control, response, evacuation, relief, and preparedness. However, there was no formal and standardised procedure or plan explaining the roles and responsibilities of different stakeholders involved in disaster response, relief and preparedness at any one place. Although a broad understanding existed among different institutions about each other's role, there was also a large grey area. This area would be filled, depending on the mutual rapport and networking of key persons serving in different institutions, since boundaries of organisations could be stretched either way, given the absence of any defined procedure.

During the monsoon season, different organisations including Pakistan Meteorological Department, the Federal Flood Commission, the Flood Forecasting Division, the Pakistan Army and Provincial Relief Department, would yearly exchange information and monitor the situation. However, this coordination would rarely result in a timely response. At the time of actual flooding, different organisations such as the Pakistan Army, on the request of the civil administration, Civil Defence Department and Police, along with the affected people's kith and kin, would help in evacuation on ad hoc basis, lacking unity of command under a single institution. If the Pakistan Army had been called during flooding, it would lead the response operation as it had trained personnel and resources. Civil departments such as Civil Defence

and Police would assist the army. After the response phase, the civil departments would follow up with the affected population providing relief goods with the help of the army. The relief would be dealt with chiefly by Provincial Relief Departments. The Pakistan Navy and Air Force would also operate under the command of the army if requisitioned by civil administration. After a few days, once the flood had subsided, people would be left to themselves to settle and recover on a self-help basis, with many government promises that were rarely fulfilled (Senior Officer, NDMA, Islamabad, 04/10). The 2005 UNISDR country assessment report noted that there were “no long-term, inclusive and coherent institutional arrangements to address disaster issues with a long-term vision” (UNISDR, 2005a, p. 7). It was not until the 2005 earthquake that the government set out a clear rehabilitation programme for the affected population and established an authority to implement it.

## 5.6 Influence of Local Government Ordinance 2001

Local Government Ordinance 2001 was important legislation, though not directly related to disaster management, providing a noteworthy diversion from the previous legacy of top-down and centralised decision-making to a broad-based and grassroots type of governance structure. It influenced future disaster-management structure and policy. The Ordinance was introduced in all the four provinces and the first local government elections were held in August 2001. Under this local government system, the district administration was put under the elected public representative. Three tiers of administration having financial and administrative powers were introduced: district, tehsil, and union council. The provinces were comprised of districts. Among the districts, there were urban districts and rural districts. Urban districts were divided into municipalities and towns; rural districts were divided in tehsils for administrative purpose. Tehsils were further sub-divided in Union Councils, the lowest tiers of the state structure (National Disaster Management Authority, 2007).

Different safety functions, such as flood control protection, storm water drainage and civil defence planning including rapid response contingency plans, were to be designed and implemented with the active participation of the concerned communities and their representatives at district-, tehsil- and union council-levels. It was proposed that several governance structures that involved substantial participation from civil society, such as the Public Safety Commission and the Community Citizen Boards, were to monitor the working of the district bureaucracy. During the time of the 2005 earthquake and later, during the conception and initiation of the new NDRMF in 2007, the country was under a military ruler (General Pervez Musharraf) and the local government system had the full support of the government. Therefore, the layout, design and suggested institutional structure of the NDRMF were connected fully to the local government system.

However, the phenomenon of a representative government disowning local government reforms introduced by a non-representative government is centuries old in pre- (the first municipal Madras corporation in 1688, the Karachi municipality in 1852, and the 1912

Punchayat Act) and post-independence (the Basic Democracies Ordinance 1952 and Local Government Ordinances 1972) Pakistan (Cheema, Khwaja, & Qadir, 2005). Unfortunately, there have been no elections since 2005 and the Local Government Ordinance 2001 has been rendered practically redundant by provincial governments (The News, 2008; Waqas, 2008). The Sindh province, where the ruling party, the Pakistan Peoples' Party, has had an absolute majority in the provincial assembly since the 2008 elections, abolished the 2001 local government system, and recentralised most powers from local governments by restoring the local government system of 1979 (Tunio, 2011).

## 5.7 Key challenges regarding the pre-2005 arrangements

The Quetta earthquake had occurred only 12 years before the creation of Pakistan but seemed to have provided no lessons for approaches to disasters in the country. It is clear from more than five decades of development planning in Pakistan, shown through the analysis of 10 5-year plans (1955–2010), that flooding has been the most recurring hazard with which the government has dealt. The pre-2005 earthquake disaster policy and the ensuing management structures targeted the reduction of river-flood losses and invested in structural measures such as the construction of dams, barrages, embankments, and a few non-structural measures such as collection of real-time flood data, a flood early-warning system, and coordination for evacuation of affected communities. The issue of reduction of losses from torrential rains and flash flooding, however, was not addressed.

Adhering to a contingency and reactionary approach towards disasters, the government kept on adding new structures to address the emerging needs of the time, hoping to attain efficiency and improvement in the process. For example, the Federal Flood Commission was established in 1977 when the provincial flood management organisations could not deal with severe floods in 1973 and 1976. However, the addition of new actors in the flood management chain only marginally improved the flood control system and protection of life and property. It certainly resulted in further distribution of responsibilities, which meant that no single institution could be held responsible for a failure. Similarly, no serious endeavour was made to enhance the capacity of the related provincial line departments such as Civil Defence Department.

Since its creation in 1947, Pakistan has remained under the rule of military<sup>31</sup> generals for half its life. The capacity of civil institutions could not be enhanced owing to frequent disruption of the political process (Cheema, Khwaja, & Qadir, 2006). To fill the gap, the Pakistan Army was invited to capture the centre-stage of flood response and relief. The army has a trained work force, resources, and organisational skills to respond to a disaster situation. However, the army has not undertaken long-term DRR strategies and disaster-management policies. A few civil institutions such as the Pakistan Meteorological Department, the Space and Under Atmosphere Research Centre, and the Flood Forecasting Division were upgraded, and their

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<sup>31</sup> Periods of military rule include 1958–1971, 1977–1988 and 1999–2007.

technical capacity was developed in terms of human and technical resources after the 1992 floods. This improvement in technical capacity (with the assistance of Asian Development Bank) has contributed to an improvement in flood forecasting mechanisms (Planning Commission of Pakistan, 2010).

In general, national armies play a role in disaster response, domestically and internationally, in many countries, including developed countries such as the USA (Gaydos & Luz, 1994; Harrison, 1992; Thompson, 2010). Nevertheless, this does not absolve civil authorities of their responsibilities for disaster preparedness, as has been the case in Pakistan. The role of civil institutions was largely crowded out by the dominant position of the army in the overall development process of the country (Siddiqa, 2007). This over-reliance on the army in the disaster response, coupled with neglect of long-term disaster preparedness strategies in the country, had severe implications (Khan, 2007; UNISDR, 2005a). The consequences of this lack of preparation became more apparent at the time of the 2005 earthquake, and the nation paid a heavy price in terms of human and economic losses.

It is surprising to note that the government included the multi-hazard approach to disasters in the Medium Term Development Framework just 4 months before the 2005 October earthquake. Similarly, another report by the ISDR, released in January 2005, identified that Pakistan's disaster management structure was out-of-date, narrowly focussed on floods, and lacked long-term cohesive institutional arrangements to address disaster issues (UNISDR, 2005a, pp. 6-7). However, the 2005 earthquake did not give the government the opportunity to prepare, and it caught people by surprise.

From the analysis of developmental plans of the country over the last 55 years, it appears that there was inertia<sup>32</sup> (resistance to change) in the disaster management structure of the country. There could be three key reasons for this inertia. First, Pakistan had not faced a high-scale calamity like that of the 2005 earthquake that could have become a strong reference point to sensitise the pattern of future disaster policy-making. Second, the country struggled to meet the pressing needs of its growing population such as poverty, health and education, thus it was difficult to free up resources for future disaster planning. Third, the existing disaster management institutions of the country did not have the capacity to suggest or implement the required changes in disaster infrastructure and policy. When the change in disaster management policy and infrastructure was introduced under the influence of a donor (UNDP in this case), it was not followed by actions until the 2005 earthquake occurred.

Similar to the centralised decision-making of pre-2005 policy, the disaster management structure became heavy at the top, allowing only a marginal role, if any, for the private sector and civil society. Instead of encouraging broader participation of other private sector players as a matter of policy and practice, the government relied on a single army-owned government

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<sup>32</sup> This inertia in an institutional structure has been of interest to academic scholarship and is referred to as path dependence (Imran, 2010; Jacob, 2001).

agency, the Frontier Works Organisation. Likewise, the disaster policy decision-making was thought to be too serious a business to be taken to civil society; a technocratic mind-set and approach prevailed, as explained in Chapter Two. The affected communities were coordinated to the extent of dissemination of advanced flood warning and mosques were engaged for announcements only. However, the involvement of communities in disaster management such as local disaster preparedness plans was non-existent.

Overall, the flood-centric policy framework and fragmented responsibilities of different disaster management institutions show the lack of an effective institutional disaster management structure for reduction of disaster losses in Pakistan, particularly at the local level. The disaster policy relied only on attaining the short-term objectives of immediate response and relief while ignoring the long-term goal of risk reduction through paying attention to improvement of disaster management in the country. The Local Government Ordinance, introduced in 2001, was an attempt to devolve power to the grassroots level and to involve the poor and the marginalised in the process of making decisions that affect their lives, such as the formulation of disaster management contingency plans. This piece of legislation has had a major effect on the new NDRMF but it is losing significance with the reversal of the colonial district administration system in some of the provinces.

## 5.8 Interim disaster-management policy and structure

It was immediately realised by the federal government that the magnitude of loss from the 2005 earthquake was enormous, and the existing institutional structure had neither the capacity nor the resources to handle it (National Disaster Management Authority, 2007). Therefore, a new institution, namely, the Federal Relief Commission (FRC) was established to deal with this extraordinary situation in the aftermath of the destruction caused by the earthquake.

### 5.8.1 Federal Relief Commission

It has been noted in the NDRMF that the inability of Pakistan's emergency response system was exposed after the 2005 earthquake (National Disaster Management Authority, 2007). FRC was established on October 11, 2005, 2 days after the earthquake, to coordinate the huge response and relief operation needed in the earthquake affected areas. A senior army officer of the rank of Lieutenant General was appointed as the first relief commissioner. There was an immense response from within the country as volunteers loaded with relief items sought to reach the earthquake-affected people.

The gigantic task of the commission was to organise and structure the response and relief operation in partnership with federal and provincial departments, civil society organisations and the international community bringing relief aid and human resources, such as response workers and paramedics. The relief was formally ended by the government on March 31, 2006,

and FRC was dissolved (ERRA, 2010c). The establishment of the FRC was a stop-gap arrangement and the government felt the need for another organisation that could take the job beyond relief. The unprecedented task of reconstruction and rehabilitation in Pakistan's history was therefore handed to another authority already created by the government on October 24, 2005.

### 5.8.2 Earthquake Reconstruction and Rehabilitation Authority

The Earthquake Reconstruction and Rehabilitation Authority (ERRA) was established as a statutory body through a presidential ordinance on October 24, 2005 mainly to take up the enormous task of rebuilding an earthquake-affected region spread over 30,000 square kilometres (ERRA, 2005). ERRA took over from FRC. Initially, the core group of ERRA was comprised of civil bureaucrats, armed forces personnel, and international consultants. With the exception of the chairman, who is a civilian and more of an advisory role, the operational position of deputy chairman, second in command after the chairman, and many other key positions in the organisation have, since its establishment, been occupied by army officers, although on paper it is a civilian institution.

ERRA was a project-based organisation meant only for the reconstruction and rehabilitation of the nine earthquake affected districts of Khyber Pakhtunkhwa and Azad Jammu and Kashmir. Its aim was to streamline all activities related to post-disaster damage assessment, reconstruction, and rehabilitation under one roof to promote the pace of development in the earthquake-affected areas. Two other authorities, the Provincial Reconstruction and Rehabilitation Authority and the State Reconstruction and Rehabilitation Authority, were established in the North West Frontier Province (now renamed as Khyber Pakhtunkhwa) and Azad Jammu and Kashmir respectively. These authorities were to undertake reconstruction and rehabilitation activities in their areas while ERRA was to provide funds and set guidelines. At that time, these authorities were established to complete the project of reconstruction and rehabilitation in the nine earthquake-affected districts in 3 years. They might have been later merged into the new permanent federal organisation, NDMA (Khan, 2007) but it did not happen. The evaluation of ERRA's performance is beyond the scope of this research. However, its policies are referred to where they are linked to the role of the mosque in disaster management.

## 5.9 Post-2005 disaster-management policy

A new institutional policy framework for disaster management was proposed in the aftermath of the 2005 earthquake. Former President Pervez Musharraf promulgated a presidential ordinance, the National Disaster Management Ordinance, on December 23, 2006. This ordinance provided for necessary institutional arrangements, policy guidance and a reference point for the future disaster-management structure in Pakistan.

The NDRMF was prepared by NDMA with the technical assistance of the UNDP Pakistan in March 2007. NDMA is the apex federal disaster management body of the country (National Disaster Management Authority, 2007). This organisation is required to prepare a National Disaster Response Plan under section 10 of the National Disaster Management Ordinance (Government of Pakistan, 2007a) and then seek its approval from the National Disaster Management Commission (NDMC). Provincial, district, municipal and town level disaster management authorities have been named and their responsibilities have been identified in the NDRMF.

The NDRMF outlines the roles and responsibilities of a wide range of organisations directly or indirectly related to the cause of reduction in disaster losses. The framework carries a vision statement for achieving “sustainable social, economic and environmental development in Pakistan through reducing risks and vulnerabilities” (National Disaster Management Authority, 2007, p. xii). Nine priority areas, including the setting up of institutions and an enabling legal arrangement devolving disaster management to community and local level planning, have been designated in the framework to attain this vision.

The framework highlights and elaborates upon the roles and responsibilities of all the stakeholders involved in disaster management. It emphasises that all stakeholders have to help in initiating the three basic activities in case of a disaster. These activities are to carry out damage and loss assessments after a disaster, to coordinate emergency response, and to participate and organise recovery and rehabilitation initiatives in line with duties of a department.

## 5.10 Post-2005 disaster-management structure

Under the NDRMF, elaborate decision-making and implementation bodies have been suggested for three distinct levels of administration: federal, provincial, and district. The framework has followed the layout of the Local Government Ordinance 2001 mentioned in the preceding sections of this chapter in terms of devolution of disaster-management responsibilities. Pakistan has a federal structure of government with a bicameral legislature. It has four<sup>33</sup> federating units called provinces – Punjab, Sindh, Khyber Pakhtunkhwa, and Balochistan.

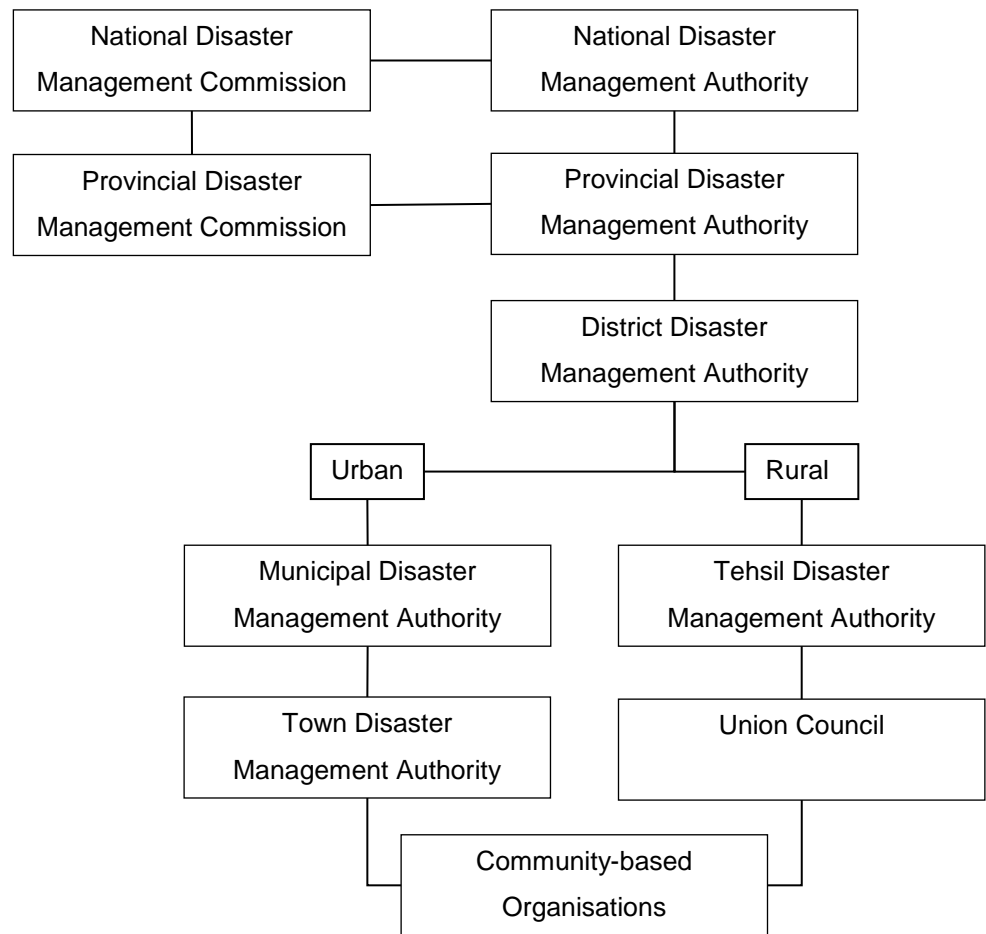
### 5.10.1 Government: federal level

A country-level disaster management commission, NDMC, has been set up at the federal level in the NDRMF. The ordinance provides for the establishment of a federal disaster-

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<sup>33</sup> The president signed the Gilgit-Baltistan Empowerment and Self-Governance order in 2009 and appointed a Chief Minister and a governor for the Gilgit-Baltistan region but it still does not constitute a province, which requires an amendment of Article 1 of the 1973 constitution of Pakistan (Khan, 2010).

management authority, NDMA, to function as the operational arm of this commission. Figure 5-2 shows the new disaster management institutional structure.



Source: Author based on the NDRMF (2007)

**Figure 5-2: Post-2005 earthquake disaster-management institutional structure of Pakistan**

### 5.10.2 Government: provincial level

In the new disaster-management institutional structure, each province has a Provincial Disaster Management Commission (PDMC) and a Provincial Disaster Management Authority (PDMA) to function as an operational arm of the PDMC. The federal government has notified PDMCs and PDMA for the four provinces of Pakistan.

### 5.10.3 Government: district, tehsil and union council levels

Under PDMA, District and Municipal Disaster Management Authorities have been proposed. Municipal/Tehsil and Town disaster management Authorities would function under District Disaster Management Authorities (DDMA) in urban and rural areas, as shown in Figure 5-2. However, disaster management is a nascent idea in the country and faces a number of

challenges. During my fieldwork, the project office of the country's only DDMA in district Mansehra was included in the field study because the Khyber Pakhtunkhwa province had the largest number of earthquake casualties. Within the province, the district Mansehra was the first to have a working DDMA office for two reasons. It was one of the eight most affected districts, and NDMA had identified it as among the 50 most vulnerable districts in the country. In addition, a donor agency provided technical help to make the DDMA office operational.

Spending a day at the first DDMA office, in two makeshift shipping containers, the Project Coordinator revealed a number of underlying issues emanating from the federal level that had implications for the success of disaster management at the local level. This also highlighted largely why great pieces of legislation and well thought out policies fail to deliver when ground support is not provided at the time of their implementation. The Project Coordinator was hired by GTZ, an international German development organisation, to provide technical services for making the DDMA operational by the provincial government of Khyber Pakhtunkhwa. It was a surprise to the Project Coordinator to find, after joining in July 2008, that he was the only person supposed to run the whole DDMA office and administration, and that he also had to plan and design disaster-preparedness strategies for a district with a population of a million. The provincial government had issued the notification for the establishment of the DDMA without sanctioning any financial or human resources. "Disaster management is a new thing in the country and nobody understands why they need to pay attention to it", commented the Project Coordinator (Project Coordinator, DDMA, Mansehra, 05/10). Over a period, he has campaigned and canvassed for the establishment of the DDMA office and had four people attached from line departments. The issue of acknowledgement, acceptance, and importance of disaster management in Mansehra can be understood from the fact that even in the federal capital, Islamabad, emergency management bylaws (that also related only to fire) have just begun to be enforced since February 2011 (Capital Development Authority, 2011; Teepu & Khattak, 2010).

In addition to the lack of understanding and support from the top, one of the major hurdles in the way of establishing disaster management policies and practices at the district level was the frequent change of the head of the district administrator: "This is the seventh DCO I am working with", the Project Coordinator stated. Every time a new DCO joins, the Project Coordinator has a challenge to win his support to run DDMA programmes such as trainings and workshops for employees of different departments. Sometimes DCOs have been supportive and the cause of the DDMA flourished; but it has suffered when it was not the case.

The Project Coordinator further explained that no officer had been appointed as head of the district Civil Defence Department in the 2 years since he had joined as the Project Coordinator for the DDMA in July 2008 (Project Coordinator, DDMA, Mansehra, 05/10). The job contract of the incumbent donor-paid Project Coordinator was to expire soon but he had no idea how the provincial government would run this infant set-up of disaster management for this vulnerable district that he had endeavoured to establish with great zeal. The situation of this newly

established first DDMA was similar to the pre-2005 Civil Defence Department, as mentioned earlier in this chapter. In fact, the district disaster-management set-up in any government is the key line of defence for responding to a local- or national-level disaster. However, the Civil Defence Department was established and then neglected by authorities, whereas the DDMA is ignored even before it is fully established.

Further to District and Municipal Disaster Management authorities, there would be Tehsil and Town Disaster Management Authorities. The framework envisages that a number of government departments at grassroots level, such as agriculture through its extension workers, police, education, health and revenue, will come into direct contact with communities at this level of administration to carry out their different roles in the disaster management cycle. However, the framework does not suggest any organisational set up at this level of disaster management and merely concludes by saying “appropriate local structures would be established for risk and preparedness” (National Disaster Management Authority, 2007, p. 54).

Tehsil comprise union councils, the lowest tier of administration. The framework envisions a proactive role for these councils. They are expected to represent their people fully through their elected representatives and therefore to advocate for their needs to higher disaster management authorities to seek resources. They must also seek allocation of resources from higher authorities for vulnerability reduction activities including spurs for flood control and rainwater harvesting structures for drought mitigation. The framework is optimistic to a point where “capable union councils may develop local policies and guidelines for vulnerability reduction” (National Disaster Management Authority, 2007, p. 55). Just as there is no structure or mechanism suggested for tehsil and town authorities, no formation has been hinted at for the working of union councils in relation to DRM programmes. Further to union councils, disaster-related, community-based organisations have also been proposed to link with local public sector service provider such as agriculture extension services.

## 5.11 Post-2005 emergency response system

Learning from the 2005 earthquake experience when FRC had to be established to deal with the catastrophic situation, a new emergency response system has been devised in the NDRMF. Under this system, there would be Emergency Operation Centres at national, provincial and district level to be named as National Emergency Operation Centre, Provincial Emergency Operation Centre and District Emergency Operation Centre respectively. The National Emergency Operation Centre, Provincial Emergency Operation Centres and District Emergency Operation Centres would be under the supervision of NDMA, PDMAs and DDMA respectively. As with the NDRMF, Emergency Operation Centres have been established at national, provincial and district levels in 50 districts (National Disaster Management Authority, 2007, p. 44). The *modus operandi* of the working of Emergency Operation Centres has been explained in the National Disaster Response Plan released in March 2010 (National Disaster Management Authority, 2010).

According to the latest available National Disaster Response Plan 2010 until September 21, 2011, the District Emergency Operation Centre will operate in the case of a local-level emergency and the concerned DDMA will mobilise its resources to deal with the situation. The District Emergency Operation Centre will coordinate with all relevant government agencies and civil society organisations for response, relief, and rehabilitation of the affected population. In the case of a disaster exceeding local capacity, the DDMA will request assistance from the concerned PDMA. The Provincial Emergency Operation Centre will be activated and will help organise resources for response, relief and rehabilitation of the affected population. In the case of a disaster exceeding the provincial capacity, the PDMA will request NDMA for assistance and the National District Emergency Operation Centre will be activated. The National District Emergency Operation Centre will then help organise response, relief and rehabilitation of the affected population. In case of a national emergency, the Prime Minister would announce a national emergency.

## 5.12 Role of other government institutions in the post-2005 disaster-management policy and structure

In the new framework, a multi-hazard approach has been adopted and the number of government institutions, organisations, and statutory bodies involved in disaster-response, relief, recovery and preparedness has been increased substantially compared with the pre-2005 earthquake situation. Tables 5-4 and 5-5 show the roles of 26 federal ministries and eight provincial departments in the disaster management cycle. These 34 ministries and departments do not include the new governing and regulatory structures which are on top, such as NDMC, NDMA, PDMA, DDMA, Municipal Disaster Management Authorities, Tehsil and Town Disaster Management Authorities (established under the NDRMF), or the KANA Division meant for Northern Areas and Azad Jammu and Kashmir.

At the federal level, the NDRMF lists seven ministries responsible for response, almost double the number of federal ministries (four) in the pre-2005 earthquake disaster-management structure. To manage the relief phase of a disaster, 17 federal departments have been included in the new framework, which is almost three times the number of federal organisations (six) in the pre-2005 earthquake scenario. Having realised the importance of lacking disaster preparedness and recovery planning in the pre-2005 earthquake phase, the number of related federal government departments more than tripled in the NDRMF, 33 compared with 10. For the first time in the history of the country, the federal ministries and provincial departments have been tasked with preparing their ministerial DRM plans according to their specific area of operation. The organisations shown in italics in Tables 5-4 and 5-5 are those not listed in the NDRMF but remain engaged in the disaster management cycle in the pre-2005 disaster management structure mentioned in Table 5-3.

**Table 5-4: Role of federal ministries and departments in the disaster-management cycle as per the NDRMF**

<b>Response</b>	<b>Relief</b>	<b>Recovery, Mitigation and Preparedness</b>
<u>Under the Ministry of Interior</u>		
Civil Defence Department	Civil Defence Department	Civil Defence Department
Coast Guards	Coast Guards	-
Fire Service	-	Fire Service
National Crisis Management Cell	-	-
<u>Under the Cabinet Division (a ministry)</u>		
-	Emergency Relief Cell	Pakistan Space and Upper Atmosphere Research Commission
<u>Under the Ministry of Defence</u>		
Pakistan Army	Pakistan Army	Pakistan Meteorological Department
Army Aviation	Pakistan Air Force	Flood Forecasting Division
Pakistan Navy	Pakistan Navy	-
<i>Federal Works Organisation</i>	<i>Federal Works Organisation</i>	<i>Federal Works Organisation</i>
-	National Logistics Cell	National Logistics Cell
<u>Under the Ministry of Water and Power</u>		
-	-	Federal Flood Commission
-	-	Water and Power Development Authority
-	-	Dams Safety Council
-	-	The Indus River Commission
<u>Other Federal Ministries</u>		
Foreign Affairs	Foreign Affairs	Foreign Affairs
Health	Health	Health
Youth Affairs	Youth Affairs	Youth Affairs
-	Education	Education
-	Food and Agriculture	Food and Agriculture
-	Housing and Works	Housing and Works
-	Law, Justice and Human Rights	Law, Justice and Human Rights
-	Planning and Development	Planning and Development
-	Railways	Railways
-	Social Welfare and Special Education	Social Welfare and Special Education

-	-	Population Welfare
-	-	Environment
-	-	Finance and Revenue
-	-	Information and Broadcasting
-	-	Information Technology
-	-	Science and Technology
-	-	Industries, Production and Special Initiatives
-	-	Ministry of Petroleum and Natural Resources
-	-	Women Development
-	-	Ports and Shipping
-	-	Local Government and Rural Development
-	-	Tourism

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Source: Author, based on the analysis of the NDRMF (National Disaster Management Authority, 2007, pp. 59-76), fieldwork and secondary sources (Khan, 2007; UNISDR, 2005a)

While numerous federal-level organisations are now expected to be involved in disaster response, relief and recovery, the NDRMF has only marginally mentioned provincial organisations, referring to only three provincial departments – the Revenue Department<sup>34</sup>, the Home Department<sup>35</sup> and the Irrigation Department – to deal with the different phases of the disaster-management cycle. Unlike the intention of the plan to strengthen the capacity of front-line actors, due attention was not given to creating an elaborate and integrated networking of provincial departments. The six provincial departments shown in italics in Table 5-5 have not been included in the NDRMF but continue to play their role as in the pre-2005 earthquake scenario. The three provincial institutions mentioned in the NDRMF, namely the civil defence, relief and irrigation departments, along with the six mentioned in italics in Table 5-5, are to work under PDMA.

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<sup>34</sup> Relief Department works under Revenue Department.

<sup>35</sup> Civil Defence and Police departments work under Home Department.

**Table 5-5: Role of provincial departments in the disaster management cycle as per the NDRMF**

<b>Response</b>	<b>Relief</b>	<b>Recovery, Mitigation and Preparedness</b>
Irrigation Department	Irrigation Department Relief Department	Irrigation Department
Civil Defence Department	Civil Defence Department	Civil Defence Department
Police Department	Police Department	-
<i>Provincial Crisis Management Cells</i>	-	-
-	-	<i>Planning and Development</i>
-	<i>Health Department</i>	-
-	<i>Agriculture and Livestock</i>	-
-	<i>Food Department</i>	-
-	<i>Communication and Works</i>	-

Source: Author, based on the analysis of the NDRMF (National Disaster Management Authority, 2007), fieldwork and secondary sources (Khan, 2007; UNISDR, 2005a)

The classification of the roles of different ministries and departments in Tables 5-4 and 5-5 has been carried out keeping in mind their major roles as indicated in the framework. The framework has mentioned the indicative roles of different organisations and has not claimed it to be an exhaustive exercise. Even now, there may be institutions that perform their role in one phase of the disaster that feeds into the next phase of the disaster in such a way that the exact line of demarcation may be difficult to draw.

### 5.13 Key challenges regarding the post-2005 arrangements

The NDRMF has mentioned that a number of new government organisations with new roles in the disaster-management cycle have been included in the national disaster-management structure. However, analysis in this section shows that the addition of new actors increased the complexity of the disaster-management structure and created new institutional challenges without solving the previous ones. Ad hocery and short-termism coupled with adherence to the old pattern of erecting new structures without evaluating, upgrading or dismantling the former, have again emerged. The study shows that this may result in friction, conflict of interest, power and resource struggle among government institutions. Table 5-6 shows examples of parallel and horizontal overlaps among the responsibilities of several government disaster-related organisations.

The framework shows the NCMC has the same responsibilities of response as those assigned to the newly established NDMA, such as managing a round-the-clock operational control room and the collection of information on all sorts of emergencies in the country to coordinate with

other agencies. The framework does not suggest which organisation would take the lead in a crisis and with which other stakeholders it would coordinate and cooperate, since both the structures exist parallel to each other. Together with the NCMC, the ERC under the Cabinet Division retains the charge of procuring relief items, and arranging for receipt of international assistance and response teams. The same matching role has been made part of the portfolio of NDMA in the post-2005 disaster management structure. Therefore, the ERC and NDMA exist parallel to each other. Likewise, at the provincial level, provincial relief departments are working parallel to PDMA. The first head of NDMA realised the functional overlapping of responsibilities among a multitude of government organisations. During the policy dialogue on disaster management arranged under the auspices of UNDP (2009b), he implored the support of parliamentarians for implementation of National Disaster Management Ordinance 2006 in letter and spirit and to remove such anomalies.

However, nothing changed and this environment of friction, conflict, power struggle, lack of trust, and lack of coordination has resulted in institutional complexities in which old institutions are not ready to forego their authority and control over resources in favour of new institutions. To its credit, NDMA officially moved the NDMC to order the merger of the ERC and sixth Disaster Aviation Squadron with NDMA and Provincial Civil Defence Departments with respective PDMA to streamline the functions of NDMA and PDMA. Above all, these steps were to help in establishing NDMA and PDMA as central authorities for streamlining disaster management in the country. Despite the approval of the NDMC, headed by the Prime Minister, NDMA's 2009 and 2010 annual reports noted that none of the above-mentioned decisions were implemented by respective authorities, federal or provincial (National Disaster Management Authority, 2009, 2011). Not only this, these reports showed that the federal government did not transfer the Prime Minister's Relief Fund to NDMA despite the approval of these decisions by the NDMC (headed by the Prime Minister). Displaying a crisis management approach, the National Disaster Management Fund was ultimately established in December 2010 after the country had faced the worst floods of its history in July of that year and NDMA faced an acute shortage of financial resources to run its operations. Likewise, the acknowledgement of the NDRMF is even worse at provincial levels. Provincial governments did not actively respond to instructions for establishment of PDMA and DDMA and allocation of funds for these bodies although these decisions had been approved by the NDMC in 2009.

Parallel government set ups are competing for resources, creating an environment of conflict to justify their existence. This power struggle and conflict of interest is counterproductive for the cause of disaster management in the country. A living example of these counterproductive effects occurred during fieldwork in April–June 2010. The NDRMF expected NDMA to work closely with ERRA to benefit from its experience (National Disaster Management Authority, 2007, p. 45). However, the two organisations, both established by an army ruler, could not agree and there was rivalry between the two, more at the highest level than at the functional

level. A Senior Technical Adviser of an international multilateral organisation, working with both the organisations, remarked (ERRA Conference Islamabad, April 19-21, 2010):

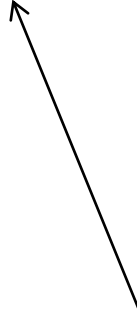
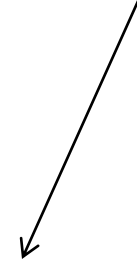
It is a bane to deal with them, though working for the same cause of disaster preparedness and risk mitigation, they do not tolerate each other and do not want to work together, so we work with them separately.

ERRA was primarily a project-based organisation, an interim structure, meant for the reconstruction and rehabilitation of the eight affected districts in the aftermath of the 2005 earthquake. ERRA was to finish its job by 2011, as agreed. NDMA, on the other hand, had been established to function as a permanent body and lead organisation for dealing with all types of hazards and disasters in the future. ERRA was charged with an obvious and more pressing agenda than NDMA. Therefore, ERRA was resourceful, having allocated funds from the government and several donor organisations for the reconstruction and rehabilitation in the aftermath of the 2005 earthquake.

Conversely, NDMA had not received due attention either from the government or from donors until the July 2010 super-flooding. There were only scanty references about the existence and role of NDMA during the whole conference proceedings, which I attended in April 2010 during my fieldwork. During the conference, when I asked about the role of NDMA after ERRA has finished its job, a very senior officer of ERRA shrugged his shoulders, reiterated the contribution of ERRA, and remarked “NDMA just does not know anything so what they are going to do!” (ERRA Conference, Islamabad, April 19-21, 2010). There was a clear conflict of interest and rivalry between the officials of the two organisations and more among the ERRA officials fearing extinction after one year. Both organisations were determined that one should not supersede the other while competing for federal government support and funding.

Unfortunately, as time passed, it became clear that the rivalry between the ERRA and the NDMA officials was not without basis. While ERRA was lobbying for its survival and continuation beyond its mandate in July 2011, NDMA was lobbying to absorb ERRA. Instead of winding up or merging ERRA with NDMA, the federal government approved the ERRA Bill 2011, making ERRA a permanent body (The Dawn, 2011). The Deputy Chairman ERRA, an army lieutenant general, asserted that the decision to make ERRA permanent exhibited the acumen of legislators and it now enables the organisation to approach the other parts of the country for disaster preparedness in the light of its reconstruction and rehabilitation experience. NDMA strongly resented this move in its 2010 annual report, released in April 2011, saying “continuation of ERRA beyond its original mandate does not make sense” (National Disaster Management Authority, 2011, p. 78).

**Table 5-6: Parallel and horizontal overlapping roles of government organisations in the NDRMF at federal, provincial and district levels**

Responsible government organisations	Roles in disaster management	Nature of overlap
1. National Disaster Management Commission, 2. National Oversight Disaster Management Council	Both are high-powered bodies at the federal level to oversee the overall state of relief and rehabilitation issues after the July 2010 flooding.	 <p>Parallel structures, may lead to tension, conflict of interest, resource and power struggles, lack of accountability and understanding of their role</p>
1. National Disaster Management Authority, 2. Earthquake Reconstruction and Rehabilitation Authority	Two federal-level organisations engaged in DRM measures including preparedness, relief, recovery, rehabilitation and reconstruction for the whole country.	
1. National Crisis Management Cell in collaboration with Provincial Crisis Management Cells, 2. NDMA in collaboration with PDMAs	Both are to manage a 24-hour control room for collection of information and coordination with provincial authorities at federal and provincial levels.	
1. Foreign Affairs in collaboration with National Disaster Management Authority and National Disaster Management Commission, 2. Emergency Relief Cell	Coordination with foreign countries and organisations for receipt and dispatch of aid and international assistance in case of major disaster at federal level.	
1. National Disaster Management Authority, 2. Emergency Relief Cell	Procurement and stockpiling of relief items in collaboration with national and provincial Emergency Operation Centres, Civil Defence and Red Crescent.	
1. Provincial Relief Departments, 2. Provincial Disaster Management Authorities	Provision of adequate support to local administration through coordination with provincial departments and agencies.	
Ministries of: 1. Interior, 2. Social Welfare and Special Education, 3. Law, justice and Human Rights, 4. Women Development, 5. National Disaster Management Authority	Protection and safety of vulnerable women, children and elderly during disaster situations and ensuring their access to basic services at federal level.	 <p>Horizontal structures and vague boundaries, may lead to evasion of responsibility and therefore lead to further deterioration of the situation</p>
Ministries of: 1. Information Technology, 2. Information and Broadcasting, 3. Science and Technology	Protection and maintenance of communication infrastructure and preparation of strategies for dealing with emergency situations at federal level.	
1. District Civil Defence, 2. District, Municipal, 3. Town Disaster Management Authorities	District level organisations to coordinate with each other and at the same time report and work with different supervisory provincial bodies including Relief Departments and Disaster bodies.	

Source: Author, extracted from the analysis of the NDRMF (National Disaster Management Authority, 2007)

Moreover, several institutions functioning horizontally may lead to inefficient outcomes resulting in further deterioration of a given disaster scenario (see Table 5-6). For example, the framework has nominated four federal ministries in addition to NDMA to look after the physical safety and human rights protection of vulnerable groups such as women, children, and the elderly. Similarly, three federal ministries are responsible for the protection and maintenance of communication infrastructure during a disaster situation. This type of horizontal overlap would not only result in wastage of human and financial resources, as several ministries would be managing the same area, it could also lead to a conflict of interest and evasion of responsibility. Since numerous institutions would be handling their area horizontally, no institution could be identified in an adverse situation, which might further exacerbate the plight of the affected people. On the other hand, there would be several institutions to receive appreciation in case of a good outcome. A separate budget in each ministry to achieve the same goal would lead to inefficiency, wastage of resources, and extra burdens on the scarce resources of a developing economy, as indicated by NDMA's comment about the loss of resources as a result of making ERRA permanent (National Disaster Management Authority, 2011).

Recent handling by the Pakistani government of Internally Displaced Persons from district Swat in Khyber Pakhtunkhwa in the 2009 and 2010 super-flooding, has shown the government's fire-fighting approach to disaster management. While responding to the crisis of the Internally Displaced Persons, the provincial government established another authority, the Provincial Reconstruction, Rehabilitation and Settlement Authority, within the PDMA, an already established body, for the explicit purpose of dealing with natural and man-made disasters under the NDRMF (Provincial Reconstruction Rehabilitation & Settlement Authority, 2009). Although it would have been an opportunity to let the PDMA learn and mature during this process for dealing with future disasters, the provincial government established another structure. The policy document maintained the purported rationale for the establishment of this new authority was to foster the process of reconstruction of infrastructure and early rehabilitation of the Internally Displaced Persons by bypassing the usual chain of command in those government departments recognised as having entrenched corruption and red-tape-ism (Government of Khyber Pakhtunkhwa, 2009, p. 32):

One key lesson learned from the massive relief and reconstruction efforts after the earthquake is the importance of creating a dedicated organisation with appropriate authority and staffing to lead such efforts in the form of ERRA. Provincial Reconstruction, Rehabilitation and Settlement Authority has been created on the same model and is being staffed appropriately.

The strategy document mentions that it drew inspiration from the establishment and role of ERRA in achieving fast reconstruction of infrastructure and rehabilitation of those affected by the earthquake as well as improved coordination with donors. However, it completely ignores the context of the establishment of ERRA when there was no federal authority to coordinate

the massive post-2005 earthquake response, relief and rehabilitation, whereas a number of new organisations were established afterwards and there was no need to create yet another body to deal with the Internally Displaced Persons as such.

Similarly, during the July 2010 super-flooding, provinces bypassed these provincial and district bodies in counter-flooding planning and post-flood reconstruction and rehabilitation (National Disaster Management Authority, 2011). The government established yet another body, National Oversight Disaster Management Council, mainly to ensure transparent spending of the flood rehabilitation funds (Yasin, 2010). The NDMC established under the National Disaster Management Ordinance 2006 is already responsible for overseeing the operations of NDMA, including disbursement of rehabilitation funds in the aftermath of a disaster. This Commission is headed by no less a person than the country's Prime Minister, and the Leader of the Opposition in the National Assembly is among its high-powered members, which also include chief ministers of the four provinces. However, this new Council is to report to another constitutional body, the Council of Common Interest (The Dawn, 2010), thus completely bypassing the NDMC formed under the NDRMF.

In a nutshell, nothing substantial seems to have changed in the aftermath of the 2005 earthquake in terms of a new approach to institutional strengthening for disaster management. The government's non-adherence to the NDRMF causes a conflict of interests and friction among disaster institutions at the federal level, and among provincial and district disaster bodies such as PDMA's and DDMA's. The establishment of the National Oversight Disaster Management Council in 2010 and the permanence of ERRA in 2011 are recent examples of short-termism in the country's overall working about disaster management, and may not disappear soon. As observed in the pre-2005 earthquake disaster-management structures, newly established structures initially gain prominence but lose their significance once the emergent issue has subsided. Old disaster management institutions continue to exist without being overhauled in terms of financial, human and technical capacities. Ad hocery appears to be reoccurring, even after the full overhaul of the disaster-management policy and structure in the aftermath of the 2005 earthquake and, as such, hinders the growth and development of competent disaster-management organisations.

### 5.13.1 Private sector

The framework expects the private sector to be aware of risks and carry out hazard and risk analysis during the design and planning phases of infrastructure and industry (National Disaster Management Authority, 2007). It should explore alternative options for risk and vulnerability reduction such as change of location. In addition, the private sector is supposed to develop preparedness and response plans for industrial units and zones.

However, the analysis of the NDRMF shows that the government's objective of full engagement with the private sector may not be achieved because of the *modus operandi* it

has adopted to fulfil this objective. For example, an army commercial organisation, the National Logistic Cell, has been made fully responsible for the complete transportation of goods and supplies in case of a disaster. Established in 1978 during the military rule and now headed by a serving senior army officer with the rank of major general, it has grown into a major freight handler in the country (National Logistical Cell, 2010). This organisation is to coordinate and liaise with all transport companies in case of a calamity. It is to act on behalf of NDMA and therefore to prepare contingency plans and manage road, air and sea transport of relief supplies in a disaster situation. Therefore, due to this government exclusion, since the whole disaster-response portfolio has been handed over to a government-owned, rent-seeking enterprise, other private sector entities may be side lined and not engaged fully as envisaged in the NDRMF.

In some cases, the government engaged with the private sector during the recovery, reconstruction and rehabilitation phase in the aftermath the 2005 earthquake. For example, ERRA hired the services of National Engineering Services Pakistan, a well-reputed private engineering consulting company. To ensure compliance with seismic-safe building codes, this company provided ERRA with technical services for its reconstruction projects such as bridges, hospitals and government offices.

However, at the local level, there is no engagement with the private sector to address the local issues of reducing losses from disasters. In the aftermath of the 2005 earthquake, the government monitored public-funded housing to ensure the implementation of seismic-safe building codes. However, ERRA reconstruction guidelines are generic in nature and no micro-seismic zoning has been carried out that could guide private construction in the earthquake-affected areas at the local level (Project Coordinator, DDMA, Mansehra, 05/10). Since no proper seismic zoning is available for Mansehra, private reconstruction is not bound to follow any seismic-safe reconstruction guidelines. In addition, there is no government body to take charge and ensure implementation of even generic seismic-risk reduction codes on private, small-scale commercial reconstruction such as shopping plazas. Consequently, as observed during fieldwork, community buildings such as mosques have been constructed again without care for seismic reconstruction guidelines in many localities. In one instance, a team of the UN-Habitat intervened to convince a community to build their mosque as per ERRA reconstruction codes, the people disapproved of the suggestion saying “it was not the ERRA’s mosque, it was their (the community) mosque” (Social Mobiliser, UN-Habitat, Islamabad, 04/10).

### 5.13.2 Civil society

On paper, the framework emphasises the importance of community-based disaster management (National Disaster Management Authority, 2007). It highlights the role of local organisations and social activist groups in this regard. It maintains that district and tehsil disaster-management authorities would promote and strengthen the existing community-

based organisations. In case there are no community-based organisations, new social community groups would be formed to promote disaster-management activities. Coupled with the formation of new community-based organisations, is training in first aid, early warning systems, search and rescue, evacuation, and fire fighting. The framework envisages that such community-based organisations would be linked with local public service providers such as veterinarian facilities, banks, post offices and agriculture services. Nevertheless, the framework is silent about any formal structure to link community-based organisations with tehsil or district authorities.

Since there was a huge response from civil society in the aftermath of the earthquake when people offered material and personal support, a new organisation named National Volunteer Movement (NVM) was formed on November 1, 2005 (Government of Pakistan, 2011b). This came under the Ministry of Youth Affairs with its office in Islamabad. The NVM aimed to channel and mainstream the large number of volunteers from within and outside the country, national and international associations converged on the earthquake-affected areas by linking them with civil society organisations during relief and rehabilitation activities. The NVM mainly remained active during the military government of General Pervez Musharraf, and the NDRMF has called for its strengthening, along with other weaker organisations such as Civil Defence Department (National Disaster Management Authority, 2007, p. 43).

According to the Hyogo framework, the ultimate promise of safer communities lies at the local level (UNISDR, 2005d, 2011). However, due to the lack of attention and allocation of resources to disaster management at national and provincial levels by federal and provincial governments respectively, local-level disaster-management bodies such as DDMA, Municipal Disaster Management Authorities and Tehsil Disaster Management Authorities remain too handicapped to be able to perform their functions. For example, I visited the first office of the DDMA Mansehra during my second fieldwork period. The salary of the project officer was being paid by GTZ. He had only three people working for him and they too were borrowed from other departments. The DDMA office comprised two temporary containers. The project officer stated there was lack of ownership of the DDMA by district and provincial government. He was facing a dearth of human and financial resources to run everyday office correspondence because the policy decision of having DDMA was not followed by resource transfer. Despite a few successes, like the establishment of search and rescue teams, there were serious concerns about the sustainability of disaster management projects at community level. The functioning of the first DDMA office relied on contingency plans run on a day-to-day basis. It may be true on paper that DDMA was to take care of the Community-based Disaster Risk Management (CBDRM) programme after ERRA but it did not seem to happen in the actual circumstances faced by DDMA.

The CBDRM programme was implemented at Union Council level, the lowest tier of administration, and it was claimed that it had raised the capacity of communities who would stand on their own in a future disaster (ERRA, 2010b, 2011). Despite the project's

implementation at the Union Council level, the communities under study considered it insufficient to meet the target of proposed capacity enhancement for disaster safety. During my fieldwork in 2010, I joined an on-going CBDRM programme in one Union Council. This Union Council had a population of 30,000, with 10 major villages located in an isolated, rugged and mountainous landscape in Khyber Pakhthunkhwa. In the programme, there were 20 men and 12 women. These 32 participants included six representatives of different government departments, such as health, revenue and education. Therefore, less than one percent of the people participated at one time in training under the CBDRM programme. The villagers raised strong concern about the insufficient coverage of this training, and suggested the programme should be extended to the village level to be significant. Even during the training, certain areas of training, such as climbing down from a hill using a seat harness could not be undertaken because of the low quality of ropes available to the master trainers. The community was also wary about the supply of equipment after the training. Similarly, the master trainers commented on the leakages in funds, which affected their mobility while accessing remote sites. Overall, DDMAAs were constrained by lack of human and financial resources; it did not seem likely that CBDRM would be sustained even in its limited capacity.

The two master trainers interviewed for this study, who I joined in the actual first aid training sessions, explained that it was important to win the support of the imam. The imam was an opinion maker and his views and religious interpretations influenced a community's worldviews. The master trainers explained how they would proceed (ERRA Master Trainers, CBDRM Project, 4/10):

In the first meeting with a community including the imam of the village mosque, we would begin with the story of Prophet Noah's Ark mentioned in the Holy Koran. We would explain that Noah was the Prophet of Allah and Allah could have saved His Prophet without asking him to prepare for the flood. But the purpose of asking Noah for preparation and mentioning this story in the Koran is to make us aware that we ought to prepare for disasters.

The engagement with the imam was important for ensuring that the CBDRM initiative was inclusive, particularly of women. The CBDRM programme guidelines also suggested the inclusion of the religious leader in the Union Council Disaster Management Committee. A regional manager and a social mobiliser of the UN-Habitat working to promote safe house building techniques among village people had a similar experience. They explained they had a special orientation programme for imams and then invited them to deliver a speech before house building training workshops (Regional Manager and Social Mobiliser, UN-Habitat, Islamabad, 04/10). Imams would usually begin their speech with these thoughts:

I have lead [so many] funerals after the earthquake and these people did not die because the earthquake killed them. It was because of their houses that fell on them

and killed them. Allah entrusts us with our lives and we need to protect it by building our houses safely.

Although, the mosque was enlisted as a critical facility<sup>36</sup> for communities in the ERRA CBDRM Programme booklet but it did not receive any kind of support from the government as discussed in detail in Chapter Six. Likewise, NDMA's National Disaster Response Plan (National Disaster Management Authority, 2010) mentions the role of the mosque only to the extent of dissemination of disaster early warning, since mosques have loudspeakers.

## 5.14 Summary and conclusion

Analysis of five decades of the development planning history of Pakistan has shown that before the 2005 earthquake the country's disaster management remained narrowly focussed on counter-flooding (excluding flash flooding) measures. This focus on counter-flooding was mainly on structural aspects such as the strengthening of embankments and bunds, the digging of new canals, the construction of new dams, and the generation of electricity. However, non-structural measures to reduce flood losses, which included the capacity building of communities, related government departments and organisations for flood preparedness, were not emphasised in institutional policy or the structures of disaster-management organisation.

Disaster management was highly centralised and skewed towards the response and relief phases of the disaster-management cycle, whereas the preparedness, recovery and rehabilitation of the affected people were largely ignored in the pre-2005 earthquake situation. Although there were seven government agencies for response, and six for relief, it was mainly the Pakistan army that would handle a disaster emergency, with subordinate support from civil departments. The legacy of reliance on the army was further strengthened because of the three-decade military rule. This dependence on the army excluded the development of credible civil disaster-management institutions.

Before the introduction of the NDRMF, different government organisations, federal and provincial and often with overlapping roles, lacked preparedness, coordination, coherence, and a sense of direction on the eve of a disaster. Before the 2005 earthquake, Pakistan did not have a single federal organisation for disaster management with a multi-hazard approach that included earthquakes.

There was minimal allowance for the roles of the private sector, civil society organisations and local community institutions in disaster management before the 2005 earthquake. The fieldwork findings have shown that mosques were only used passively for flood warnings by government organisations. Grassroots government organisations responsible for community

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<sup>36</sup> The concept of critical facilities is to identify those buildings, facilities and services that are essential for people, such as transport, electricity, fire service, hospital and health clinic in the time of extreme emergency (UNISDR, 2004).

level disaster response, such as Civil Defence Departments, were ignored and gravely under-resourced. However, international and national NGOs, local community institutions and the private sector have been playing a strong role on their own, largely to compensate for the dysfunctional public sector in disaster situations.

Local government reforms were introduced in 2001 during military rule. These reforms affected the pattern of disaster management policy in the aftermath of the 2005 earthquake. As this earthquake was an unusual event in the history of the country, an interim disaster management policy and structure was set up to deal with it. The NDRMF released in March 2007 was prepared with the technical advice of the UNDP Pakistan.

The 2005 earthquake was a lesson-producing event for the whole nation and the government in terms of renewed awareness of disaster preparedness and the mitigation of other hazards beyond flooding. With the promulgation of the Disaster Management Ordinance in December 2006, the country witnessed an apparent paradigm shift from a flood-based and highly centralised contingency disaster risk approach to a multi-hazard and integrated disaster policy incorporating a broad range of stakeholders in disaster management. The NDRMF espoused the aim of engaging with a broad range of stakeholders with the establishment of the central federal organisation. The federal organisation thus established, NDMA was charged with the whole spectrum of disaster management functions of preparedness, response, relief, recovery, reconstruction and rehabilitation. However, patterns of horizontal and vertical functional overlap among government disaster-related organisations at federal, provincial and district levels persist, which forces disaster management to operate far below the optimum level. Despite the federal government's paper commitment to the cause of reduction in disaster losses and tall claims of mainstreaming DRR in development planning, the real resource transfer to NDMA remains marginal in comparison with the task assigned to the organisation and the actual commitment of the government. With the permanence of ERRA, the two main federal disaster management organisations, NDMA and ERRA, have come in direct institutional conflict, dimming the hopes of sustainability of community safety initiatives.

On the same lines, provincial governments are found to be recentralising the powers that were given to districts under the Local Government Ordinance 2001. This recentralisation has direct repercussions on the district government potential of service delivery, including local emergency and disaster management as a whole and particularly the viability of proposed DDMAAs.

The disaster management structure is marred by deep myopic tendencies, which override objectivity and hinder the stable progression towards a reduction in vulnerability in disaster-prone Pakistan. To add further complexity, friction and power conflict, the National Oversight Disaster Management Council established in the aftermath of the 2010 flooding supersedes the NDMC created in 2006 for the same purpose of overseeing disaster preparedness, relief and rehabilitation operations of NDMA. Lack of political will and ad hocery on the part of the

government are key factors that cast a shadow on the future of disaster management in Pakistan. Overall, fieldwork findings support the view that the paradigm shift in disaster management, though profound in theory, remains elusive in practice.

Given the state of the disaster management institutional policy and structure of the country, the journey to a life safe from disasters seems very long. Meaningful attention and engagement to build capacity at the local level, coupled with resource transfer, appear unlikely to materialise soon. There is a visible disconnect between the central and local levels. Meanwhile, the poor remain at the forefront of disasters. They continue to live in isolated, mountainous, vulnerable and rural places. However, the beliefs, values, customs and community institutions of the people such as the mosque, become a source of bringing the poor together to stand against day-to-day hazards and vulnerabilities.

Chapter Six examines the role and potential of the mosque in disaster management in the aftermath of the 2005 earthquake through a case study in the Khyber Pakhtunkhwa province. This highlights the role of the mosque in generating and promoting linkages among different stakeholders, but is also an opportunity to address some of the deeper endemic issues, such as lack of trust and information gaps, that have emerged between the state and the civil society.

## **Chapter Six The role of the mosque in the aftermath of the 2005 earthquake and its future potential**

### **6.1 Introduction**

Chapter Five elaborated on disaster-management structure and policy in Pakistan and provided a critical insight of the role of key actors in disaster management. Case studies presented in this chapter relate to rural settings in the Khyber Pakhtunkhwa province in the aftermath of the 2005 earthquake. This chapter discusses the two research questions (see Chapter One) about functional roles of the mosque in response, relief, recovery, reconstruction and rehabilitation phases of the disaster management cycle in the aftermath of the 2005 earthquake in Pakistan, and the mosque's potential role in future in similar situations.

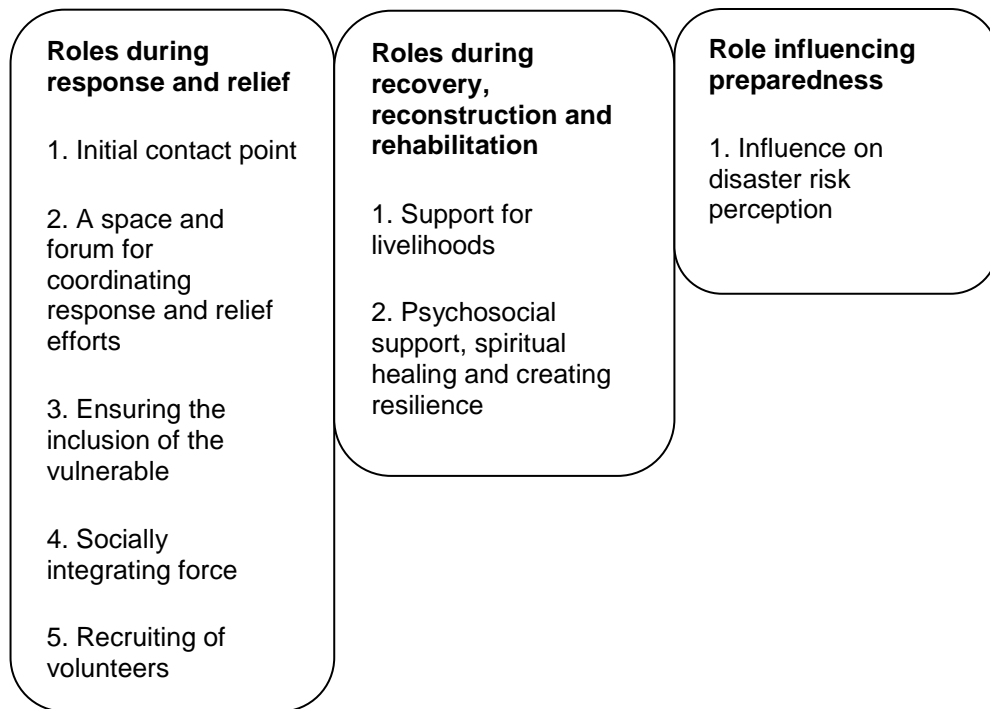
The chapter findings are demonstrated in two ways: the different roles of mosques in Banda-1, -2 and -3 in terms of their cultural, psychosocial, economic, social and political dimensions; the roles of mosques are categorised in response, relief, recovery, reconstruction and rehabilitation in the aftermath of the earthquake.

The findings highlight the influence of the mosque in shaping disaster-risk perception that affects communities' attitude towards disaster preparedness. The findings show both the opportunities and limitations of the role of the mosque. Interaction between mosques and other key actors in the state, civil society and private sector in different phases of the disaster management cycle is illustrated through examples of these interactions from the fieldwork. The mosques' dealing with women are discussed in a separate section. The role of the mosque as a community-based religious institution is highlighted, and its potential roles are presented as described by the research participants.

The next section elaborates on the roles of the mosques and imams in different disaster-management phases such as response, relief, recovery, reconstruction and rehabilitation in the aftermath of the earthquake.

### **6.2 The roles of mosques in the disaster-management cycle**

The mosque as a local civil society and community institution contributed to disaster management in the aftermath of the 2005 earthquake. Figure 6-1 shows the roles of mosques in three disaster phases. The sizes of the three boxes in the figure show that the roles of the mosques included in the case studies played were more active in the immediate aftermath of the earthquake than in the later phases when communities began to settle and needed less support. These roles are explained in three phases as grouped in the three boxes in Figure 6-1.



Source: Author

**Figure 6-1: Actual roles of mosques in different phases of the disaster management cycle**

### 6.2.1 Mosques' roles during response and relief

All mosques in the case studies became initial contact points for initiating response and relief operations in the aftermath of the 2005 earthquake. Many emergency service providers approached mosques to announce their presence and establish initial contact with communities. One senior officer of the UNDP, who was resident at Mansehra, the case-study district, and who experienced and survived the earthquake, stated:

Most parts of the rural Khyber Pakhtunkhwa, a Pashtun society, used mosques for organising their people after the earthquake. People used loudspeakers for announcing their priorities like removal of debris, motivating the young, telling women to cook for the people busy in debris removal. Within 24 hours, the people of the village knew who had died and who was missing. The whole chain of command was run by using the mosque (Provincial Coordinator, UNDP, Islamabad, 04/2009).

Eight focus group discussions with men showed that in all the five mosques in the three Bandas (three in Banda-1, one in Banda-2 and one in Banda-3), at a time of frustration and despair in the aftermath of the earthquake, most people turned to the mosques. Mosques proved a spiritually supportive and socially integrating force for the affected communities.

Mosques served as an entry point for response and relief operations in the initial few weeks (Country Project Head, FAO, Abbottabad, 05/2009). Later, when the Pakistan Army took over the response and relief drive in collaboration with the UN, meeting points of development organisations and the earthquake-affected community began to shift outside the mosque. However, because of the position of the mosque in the centre of the case-study villages, it served as a coordination place for linking communities with relief. People explained during the focus group discussions that they not only went to the mosque to pray but also to collect food:

In the start people gathered in the mosque. For the first three days there was no food. Then helicopters started dropping food. Then there were recurrent earthquakes, and we used to pray outside. Then the food camp was established outside the mosque, opposite the mosque. We used to go to the mosque and collect food as well (FGD4, Banda-1, 07/2009).

In most areas mosques were physically located in the centre of communities. They were a common and neutral point of contact for communities and, because they had loudspeakers, were able to communicate with the whole community present at the grassroots level. In this way, mosques provided the requisite physical and social space for coordinating and organising relief efforts between the affected communities and relief organisations. Local Muslim relief organisations tapped the potential of mosques in the aftermath of the earthquake as explained by an area head of a Muslim country level humanitarian organisation:

From December 2005 to December 2008, 572 mosques were built by our organisation. After the earthquake, the first priority was to establish tents for the people. We established mosques in tents in the start and planned to have a one-room house and we tried to have people not indulge in begging by putting food tables outside the mosque. In regular development schemes, mosques have been major supply routes for accessing locals. The basic consultative process was undertaken in the mosque (District Head Muslim NGO, Mansehra, 04/2009).

He added that they purposefully visited communities at the time of congregation for prayer. After entering the village, their staff would pray with local people first and then engage with them in relief activities. He called this a “natural way” to engage with communities. They would usually have meetings in the mosque and form a disaster management committee:

In the beginning, when we used to come, we made announcements to gather in the mosque. When our vehicle arrived people would start gathering around us. Also, we planned to arrive about prayer time. There were people who were outside mosque but we utilised the natural gathering for prayer for our meetings with communities. To form committees, we used to join congregational prayers and ask locals to join in (District Head Muslim NGO, Mansehra, 04/2009).

Due to strong family customs of mutual help, which were reinforced by calls from the mosques to look after and help each other in order to please God, the vulnerable were looked after. Mosques contributed to ensure that the poor, needy, destitute and vulnerable (children, elderly men and women) were included during the response and relief phase. A male villager, 55, from Banda-1 described his effort to take care of his old mother-in-law:

I was in Mansehra, buying fruit and vegetables for my shop when felt the earthquake. I reached Bara in an hour. I got down at the bus stop and came to know that three people had died under one house. I asked about my father, met my son and enquired about the in-laws in a nearby village. There was no one in the Mohalla. When I found that all of my family members were safe, I went to the village of my in-laws. I took my mother-in-law out from the debris. She survived but her leg was broken. I tied up her leg and put her on a cart and then took her to Abbottabad. There was a great rush in the hospital and nobody listened to me. Then I took her to a nearby town to a man traditionally trained in binding broken joints.

Such type of community sentiments for the vulnerable were confirmed one evening when I was in Banda-1. There was a meeting at the mosque after the afternoon prayer about leaking pipes and taps in the village (Fieldwork Journal, Mansehra, July 2009). During this meeting, one villager pointed out that a widow's house at the end of the pipeline was hardly receiving any water because of leakage of water at certain points. A village elder tasked a young man to repair leaking pipes and he was told he should start his work from the widow's home.

Eight of the nine focus group discussions showed that mosques acted as community collection centres for men to share their grief and pain, and then to get organised to carry out different tasks in the aftermath of the earthquake. "The mosque is our village capital", remarked one participant (FGD3, Banda-1, 07/2009). Announcements and sermons from mosques inspired men and women alike to help each other, stay together, and be patient. Women also sought guidance and support from the wife of an imam. A male villager (56, Banda-1, 07/2009) explained the situation after the earthquake in relation to the social role of the mosque in his village:

Prayer gatherings grew stronger during the days of the earthquake. The imam advised us to turn towards Allah. Before and after the prayer, there were discussions and exchange of information including where to find tents. We kept coming and praying in the mosque even though tremors were coming every now and then (male villager, 56, Banda-1, 07/2009).

Mosques in the case-study area and outside also proved fertile grounds for getting dedicated volunteers, through religious motivations to please God, to help in response and relief phases of the earthquake. As noted by a team leader of Food and Agriculture Organisation (FAO) working in the earthquake-affected areas of Khyber Pakhtunkhwa and Kashmir, "mosques can be a good recruiting ground for committed people" (Country Project Head, FAO, Abbottabad,

05/2009). Muslim NGOs, in particular, called for volunteer community participation with the help of imams by motivating and inspiring people to join in response and relief tasks. This volunteer recruitment was carried out throughout the country where Muslim NGOs collected public donations in mosques and appealed to people to help their organisation by giving them a hand in relief camps in the earthquake-affected areas. Among many such volunteers who replied to such calls for help, I interviewed one based in Rawalpindi, 177 km from Mansehra. He stated that he took leave from his office for 1 month, joined the relief camp of a Muslim organisation at Mansehra, and helped the management of the organisation to carry out different tasks (Volunteer worker, Muslim NGO, Rawalpindi, 10/2009). In particular, he worked as a volunteer translator with a foreign team of medical doctors who could only speak English and therefore required a person who could translate the local language into English to help doctors treat patients.

There was also an opportunity to observe the role of the mosque in a humanitarian crisis during my fieldwork due to the Swat military operation. This allowed me to relate this situation to the one in the aftermath of the 2005 earthquake and understand the role of the mosque. Swat is a beautiful valley, located 160 km from the federal capital (Shahzad, 2009). It is an administrative district of Khyber Pakhtunkhwa. The Pakistan Army launched Swat operation in May 2009 against armed militant elements supporting the Taliban in Afghanistan. According to the United Nations Office for the Coordination of Humanitarian Affairs, 2.3 million people were internally displaced because of this operation (Times of India, 2009). In consequence, the internally displaced persons' camps were established in different districts of Khyber Pakhtunkhwa. I visited three such camps, namely Shah Mansoor camp in district Swabi, Sheikh Yasin camp in district Mardan, and the camp established inside the city church of district Mardan. Public and private sector organisations came forward to deal with this humanitarian crisis.

Donation campaigns were also launched throughout the country by government and non-government organisations to raise funds for the Swat internally displaced persons. I had a chance to witness the attachment of women and men with the mosque, how it worked as a community mobilising institution and the key role of the imam in this regard. One Muslim NGO, Al-Khidmat Foundation, which had engaged in the aftermath of the 2005 earthquake as well, came to Banda-1 for fund raising for the internally displaced persons. The *modus operandi* of this team was similar in all the case-study villages. A team of this NGO, comprised only of male members, approached the three mosques in Banda-1. They had their meetings with the imams and community members within the mosques. After explaining their aim and mission, they made announcements from the mosques calling for donations. Men and women responded alike to the calls of action from the mosque. For example, the imams persuaded communities to donate generously to help their Swat brethren. One woman, a teacher by profession, revealed that she donated her personal jewellery on hearing the call for donations from the mosque for those displaced by the Swat military operation (Female Informant, 36,

Banda-1, 07/2009). She stated that she felt her connection with God by giving away her jewellery for this noble cause of helping Swati brethren. All the 13 women interviewed for this study were found to have as profound an affiliation with mosques as did the men, despite the fact that women of Banda-1 were not physically visiting their village mosques.

The Al-khidmat Foundation had worked extensively in the earthquake-affected areas. Women were also involved through women-only groups. Working via the mosque helped the organisation to gain legitimacy, acceptance and a favourable reception in communities. Communities then trusted the organisation and provided them with community support. There was a clear distinction between the response to donation calls made through other forums and the response from the mosque. The voice that came through the channel of the mosque carried a unique legitimacy, authenticity and pragmatism. The imam's promise of divine rewards gave it a special appeal. People trusted that donations through the mosque would not be misused. A Muslim NGO calling for donations with the help of the imam's engagement by using the institution of the mosque in rural settings of Mansehra made it a pragmatic and suitable method of collection.

### 6.2.2 Mosques' roles during recovery, reconstruction and rehabilitation

Although mosques' roles differed from each other during recovery, reconstruction and rehabilitation phases of the earthquake, and some were more active than others, all of those included in my case studies were a source of strengthening livelihoods at the local level. As a community institution and a meeting point for men, they were carrying out this role even before the earthquake. However, these mosques provided a continued opportunity for men for chance meetings leading to more organised consultations regarding crops, casual labour, and seasonal work opportunities in other places. This was a critical support to communities in the aftermath of the earthquake once other channels of information (such as the market) were severely disrupted due to physical destruction of their infrastructure. Once people gathered at the mosque to offer prayers, they socialised, shared information, and made livelihood decisions to support each other at the local level:

Once we gathered in the mosque, we decided whose crop will be watered, cleaned of undergrowth or harvested tomorrow and all the men would go there (Male Key Informant, 35, Banda-1, 07/2009).

Much of the role of mosques in the earthquake recovery, reconstruction and rehabilitation phase depended on the personality of the imam and his community's perception of his role beyond that of a prayer leader. All the seven imams included in the case studies acted as facilitators for efficient use of their mosques. These imams arranged, joined and coordinated meetings between aid organisations and village communities. However, often, the community's perceptions of the role of an imam curtailed his desire for a pro-active role in

relief and rehabilitation. Members of a focus group discussion from the Banda-2 community said:

At the time of the earthquake, some organisations and particularly religious organisations' members would join a prayer and call for the help of the imam and other notable community members for distributing relief items. However, we do not like our imam engaging in distribution of relief goods and rehabilitation activities (FGD1, Banda-2, 06/2009).

When I asked why they did not like it, there was no obvious reason except that historically most of their imams had not engaged in economic activities because their livelihood was provided by the community. Thus, over a period, it was a kind of an unwritten norm for the imam to keep himself limited to matters of worship. The interview with the imam of Banda-2 also reflected the same idea that the community's influence restricted him from engaging directly in relief activities in the aftermath of the earthquake. Rather than distributing relief aid with his own hands to the needy and the marginalised, he preferred to give his input to concerned organisations in the process of identification of the needy and poor in the village. He chose not to lead from the front in this hour of need, respecting the public view of his job (imam, 52, Banda-2, 06/2009):

I actively engaged with an international Christian organisation's (World Vision) relief and rehabilitation activities. I had meetings with their staff in the mosque where they asked for my help. I helped the organisation's people to reach the poor and the needy in the village. Why I hesitated to join in relief activities directly was because people of the village do not like the imam to engage in such activities, which were worldly in their view. Although, I know there is no such restriction on such activities from an Islamic point of view.

This finding was consistently verified during visits to other communities and interviews with all the seven imams included in the case study. Even the imam who had spent more than three decades in his community did not opt to be at the forefront in the relief and rehabilitation efforts (imam, 55, Rural Mansehra, 07/2009). He stated that owing to his reputation, some of his friends from around the country and overseas directly approached him to deliver relief goods and money among the affected people of his area but he refused. When asked why he did so, he replied:

There were some people from Gujranwala (a district in the Punjab province) who sent relief goods but those were snatched before organised distribution. So later I separated myself from this process. I declined any such offer. I thought some people might object and think that I have taken a lot of relief items for myself (Imam, 55, Rural Mansehra, 07/2009).

There was a strong sense of accountability among imams. They needed to retain their image as public figures above reproach if they wanted to stay in their job with dignity. Imams knew that they had to live in the communities they served. However, I found a contrasting example at a mosque in Banda-3 during the fieldwork, and included it in the case study as a comparison with Banda-1 and -2.

The imam of Banda-3 community not only vigorously and visibly contributed to response and relief phases but still continuously engaged in local rehabilitation projects 4 years after the earthquake. Unlike the other case study villages of Banda-1 and Banda-2, the mosque had a provision for women, who would come for Friday prayers. As the men, women and children of Banda-3 were all linked and affiliated with the mosque, when the earthquake occurred, all the community gathered in the mosque. The imam stated that:

At the time of the earthquake, I was alone in the mosque and busy praying. When I finished my prayer and looked back, there were a whole lot of people including men, women and children who rushed to the mosque to take shelter in the mosque during the earthquake (Imam, 45, Banda-3, 06/2009).

During the focus group discussion and individual interviews, all research participants reiterated the aim and vision of this dynamic imam as including both strictly religious and seemingly non-religious activities. Relief goods were collected at the mosque and volunteers were mobilised for search and response tasks within the village and nearby places after the imam had delivered motivational calls based on promising huge divine rewards for people's charity.

The Banda-3 imam also headed the Parent Teacher Council looking after the reconstruction project of the village girls' primary school. Parent Teacher Councils were formed to restore educational facilities after the earthquake as part of the rehabilitation projects of the USA Aid Agency (USAID). The USAID project-monitoring officer confirmed that they were particularly focusing on imams of mosques to be part of Parent Teacher Councils during this education project as a matter of policy, although he could not source any document that had such policy in black and white, despite my request (Project Monitoring Officer, USAID, Islamabad, 06/2009). No woman was a member of the Parent Teacher Council in Banda-3.

During the earthquake in Banda-3 and following days of tremors, the old building of the girls' primary school collapsed so the girls of the village had no place to continue their education. The boy's school building survived the earthquake. The mosque committee headed by the imam made a remarkable decision. They decided to shift the girls into the boys' school and to shift the boys' school into the mosque until such time as the girls' school building was reconstructed. When I visited Banda-3 almost 4 years after the earthquake, the boys were still attending classes in the mosque. Instead of sitting at desks, which were stacked aside in one corner of the mosque, they were sitting on the floor and continuing with their classes, with the teachers coming to the mosque to discharge their official duties. The boys' school in the mosque observed usual working hours, as it would have done in its own building. The mosque

committee and the Parent Teacher Council had arranged for the school and prayer timings after consultation with each other so that there was no conflict between the working of mosque as a dedicated religious institution and the school disseminating knowledge of everyday life.

Later, during individual interviews, community members and the imam of Banda-3 were unanimous in their view about the mosque being as a community centre as well as a place for worship. Once, when I was in the mosque during fieldwork, there was a meeting between the Parent Teacher Council and ERRA to review progress on the reconstruction of the girls' school. I was allowed to join the meeting, which was convened inside the mosque and attended by the imam, members of the Parent Teacher Council, and a representative of an implementing partner NGO. The meeting lasted for an hour and it was surprising to observe the institution of the mosque providing the social space for coordination and collaboration among disaster management actors at the local level. There were 12 people in the meeting and all participants spoke freely about the slow pace of the contractor and other related issues. Everybody, including a regional officer of ERRA and regional head of the NGO, were sitting on the prayer mats of the mosque. The meeting was presided over by an ERRA officer. The mosque was no less than a coordinating office for the local reconstruction and rehabilitation projects in the aftermath of the earthquake since it combined government, private, and civil society sectors under one roof. Not only this, it was an encouraging environment for the poor, illiterate and marginalised men of the community who raised issues and asked questions from the government officer and NGO representatives during the meeting. Ordinary villagers also questioned the government officer about his responsibility to ensure timely completion of the school. The government officer made the contractor explain the causes of the delays to the Parent Teacher Council and other ordinary villagers present in the meeting. He also asked the contractor to commit to a completion deadline. The mosque facilitated the flow of information in favour of the poor, usually left out, which is essential for improving transparency and accountability of actions of organisations such as government and local and international NGOs. This Banda-3 mosque provided practical engagement with key disaster management actors during the recovery, reconstruction and rehabilitation phase in the aftermath of the earthquake.

Why was this mosque and community different from the other mosques and communities in terms of their engagement in recovery, reconstruction and rehabilitation phase of disaster management? One of the two main reasons was the personality of the imam. The imam of Banda-3 explained the background to his engagement in the Parent Teacher Council:

Before the earthquake, I had continuous interaction with local schoolteachers. Sometimes, I would visit the school during daytime and have a gossip with them. Also, if any teacher was away on leave, I would voluntarily take over a class (Imam, 45, Banda-3, 06/2009).

In addition to his engagement with the local community and education sector, the imam of Banda-3 would also not hesitate to see the local councillor, the Nazim (locally elected leader, equivalent of a Mayor) and discuss with him the developments in the mosque. It is the personality of an imam that, to some extent, determines the social role of the mosque and its capacity to perform as a community institution in any non-worship activity such as disaster management.

The second main reason was a community's view of the social role of the mosque that would determine the limits of the mosque's engagement in disaster management. As observed during the fieldwork, it was the perception of communities that determined the extent of engagement of imams and mosques in all phases of the disaster-management cycle. If a particular community desired its mosque and imam to engage in disaster management, it did so. Although an imam had influence, the community and the imam collectively determined the overall nature of engagement and the extent of involvement of the mosque in different phases of the disaster management cycle. In a conflict, it was the opinion of the community that would ultimately prevail, since the imam stays in his job with the consent of the community. In this way, the mosque's operations appeared to be democratic, reflective of the opinion of its custodian community.

The earthquake was a harsh reality that shattered many people's lives, and imams, as popular community leaders, had to have their say in it. Imams, utilising the platform of the mosque, delivered a strong message that the earthquake was the result of one of two reasons: a test from Allah or a punishment for sins. This gave meaning and objectivity to the scenes of unparalleled death and destruction.

Imams preached that communities should weep, repent, ask forgiveness, and reconnect and repair their relationship with Allah. The imams were faith healers who led the way to spiritual healing for the affected communities. As a result, the earthquake-affected communities, men in mosques and women at home, tried to reconcile their personal relationship with God through meditation, prayers and supplications, seeking strength to face the calamity. Largely, people did not despair, despite feeling cursed by God, and chose to retreat to God as advised by imams. This is how some of the research participants explained their spiritual reconnection with God in the light of the imams' interpretations of the earthquake:

Earthquakes occur because of the order of Allah. Our sins are too much. The Prophet Muhammad (PBUH) had informed us fourteen hundred years ago that there would be more earthquakes close to the day of the judgement. As our sins would grow, greater would be calamities. Allah is never unjust. Earthquakes are also a test from Allah. Human beings are a creature of Allah. Allah tests His people who remain steadfast and patient (FGD2, Banda-1, 07/2009).

After the earthquake, the message from the mosque was that Allah was angry with us because of our deeds. Therefore, this punishment has been given to us. Also, it was a

test and we have to get through this test successfully (Male Villager, 22, Bara, 07/2009).

Imams were also quoted as saying that all the wealth such as houses, children and their lives belonged to Allah and He could take these back whenever He willed. During focus group discussions, men and women relayed this message from the mosque that afflictions and calamities in this life would be a source of relieving pain and suffering on the day of judgement. This interpretation of the earthquake as a test from Allah and a source of warding off sins for those who would bear it patiently greatly helped the earthquake victims to relieve themselves from psychological and mental sufferings. This psychosocial healing was provided through the creation of a shared meaning of life, helped by psycho-religious interpretations by imams through the platform of mosques. The imams referred to the word of God, the Koran, and the sayings of Prophet Muhammad (PBUH), as explained in the next section, to back up their speeches. As a result, there was an increase in the number of people attending mosques.

The physical presence of the mosque was also perceived as a fountain of divine blessings that provided spiritual healing at a time of great stress in the aftermath of the earthquake. Men received this healing through increased attendance of congregational prayers in mosques, and women through increased affiliation to and reverence of mosques in their own selves. This is how Banda-1 women, who never had the chance to physically attend the mosque, felt about the presence of the mosque in their village:

Mosque is the house of Allah and it is our duty to frequent it. It has a great obligation on us. By making the mosque live, we will live. If we would leave the mosque unattended, we will be uprooted and ruined. The mosque has innumerable benefits. Because of the blessings of the mosque, we had great mercy of Allah and were saved from the severe destruction of the earthquake (Female Villager, 72, 07/2009/Banda-1).

We are all alive because of the mosque. When there is Azan (call for prayer), then all creations pay thanks to Allah. Only because the mosque is frequented, we would be all alive (Female villager, 69, 07/2009/Banda-1).

Imams reached out to people to say how they could get back on their feet. The counselling was provided both in public and private spaces. General counselling was provided through sermons, lectures, and open talks in mosques and other communal places like markets where Imams encountered communities. Private counselling was given when imams led funeral prayers and visited the houses of families who lost their near and dear ones during the earthquake. During focus group discussions, community members acknowledged that it greatly helped them to share their grief over the loss of their near ones and belongings and it helped to console each other by ascribing the earthquake to the will of Allah as interpreted by imams. The other benefit of this morally contextual spiritual healing was that no instance of theft or stealing occurred in the villages included in the case study even though several houses remained unattended for many days in the aftermath of the earthquake.

The next section discusses some basic implications of the flip side of this psychosocial and spiritual healing contribution of mosques in terms of the disaster preparedness attitude of communities through disaster risk perception.

### 6.2.3 Mosques' roles in influencing disaster preparedness through affecting disaster-risk perception

Almost 94 percent of the research participants (89 out of 94), both literate and illiterate, experts and ordinary persons, urban and rural men and women in this study, responded that earthquakes occur because of the order of Allah. The same percentage of the people stated that whichever mosques they attended ascribed the earthquake to one of two causes: profusion of sins and a test from Allah. It was found in the fieldwork that imams as opinion makers played a major role in shaping the communities' perception of disaster risk. Most of the people residing in rural settings of Khyber Pakhtunkhwa included in the case study were found to be deeply influenced by the perception of their imams. Here are a few excerpts from interviews showing how people explained the occurrence of the earthquake:

Regarding earthquakes, these are [because of] our sins; we should ask forgiveness from Allah. This is His sole discretion to do whatever He wants. What can we do by using a strategy? You can imagine that our area is in the red zone, how long can these buildings stand in the face of an earthquake? (Village Leader, 56, Banda-1, 07/2009).

There were talks about the earthquake in mosques. Mosques told us all about it in religious colouring like immorality: the interest-based banking<sup>37</sup> system and likewise are responsible for this destruction (Provincial Coordinator, UNDP, Islamabad, 04/2009).

Imams also influenced the perception of local-level private sector business people on disaster risk. For instance, a manager of a concrete block factory stated that his factory mainly dealt with government and private organisations, which ordered blocks for construction (Block Factory Manager, Rural Mansehra, 05/10). There was a rapid growth of the business, as concrete block making became popular after the earthquake in view of sudden huge demand for reconstruction of damaged and destroyed infrastructure. One such block factory manager interviewed for this study was connected with the local mosque of his area. In reply to the question why the earthquake occurred, he stated that people's sins were the main cause of earthquakes as told by the imam of the local mosque in his speeches and sermons.

Due to these impressions, the earthquake-affected people tended to dodge some of the disaster-preparedness guidelines. During a focus group discussion with the Allai community in Banda-1, the research participants stated that they had no respect for the building by-laws

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<sup>37</sup> The Koran prohibits Muslims from charging or receiving interest on money.

during the construction of their new houses. Since these people had migrated from another place, they were somehow able to escape the monitoring system of ERRA. It was suggested by the key informant that they received official assistance from their original place but constructed their houses here. Why did these people not follow seismic-safety building codes, even though they had suffered the worst earthquake of their life, and lost lives and property? The imam of the Allai community residing in the city, whose visit to Banda-1 coincided with my fieldwork time, participated in a focus group discussion and stated that:

One can follow the different suggestions by various organisations regarding the construction of our houses. However, you can see for yourself that these big mountains were moved because of the earthquake so what do you think of these small houses. Did you not see the plaza in the middle of the rubble of Balakot, which did not fall down during the earthquake? It was only because the owner of the plaza was pious and paying the Zakat<sup>38</sup> (Imam, 55, Rural Mansehra, 07/2009).

Communities included in this study challenged the rationale of disaster preparedness. In particular, the illiterate contrasted the idea of disaster preparedness with the apparently absolute link of earthquakes with divine punishment for an excess of sins. When I asked religious scholars about it, they confirmed the religious interpretation that correlates the occurrences of natural calamities including earthquakes with the deeds of Muslims and trials from Allah. A prominent local religious scholar who was the imam of the central mosque of his village and head of an educational institution remarked:

Being Muslims we will look into The Koran and Hadith<sup>39</sup>. Earthquakes occur because we commit sins and rights of the people are not fulfilled. These are punishments from the heavens which may be earthquakes, or rains will stop, or more. The other factors scientists tell us that may also be the reason, I do not reject them but the real cause is our sins. If we eliminate the cause, then earthquakes will not come. Islam has permitted us to follow precautionary measures so we can do that. I believe in the wisdom of carrying an umbrella if rain is expected but we need to keep in view the capacity of an umbrella, which may be exceeded by the power of the wind or a storm. Look at the example of hurricane Katrina in the USA that had far better preparedness measures in place than ours but the superpower could not cope with the devastation and suffered huge human and financial losses (Imam, 45, Rural Abbottabad, 04/2009).

It is important here to look at the source of knowledge that feeds the mosque and imam regarding their particular orientation towards natural hazards such as earthquakes. When consulting the Koran and Hadith, the two authentic sources of Islamic law for Muslims, there

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<sup>38</sup> This refers to a compulsory annual deduction of 2 ½ percent from the wealth of rich Muslims for redistribution among the poor and the needy.

<sup>39</sup> It refers to the teachings of Prophet Muhammad (PBUH) taught by him to his companions and considered as a source of legislation along with the Koran in Islam.

are several references to the occurrences of natural calamities including earthquakes. There is a full chapter in the Koran (Chapter 99; 1–8) titled as the earthquake:

When the earth is shaken with its (final) earthquake. And when the earth throws out its burdens. And man will say, what is the matter with it? That day it will declare its information (about all that happened over it of good or evil). Because your Lord will inspire it. That day mankind will proceed in scattered groups that they may be shown their deeds. So whoever does good equal to the weight of an atom (or a small ant) shall see it. And whoever does evil equal to the weight of an atom (or a small ant) shall see it.

In addition to this mention of the earthquake in this chapter on the day of judgement, there are several other references in the Koran, for example, narrations about Prophets Moses (PBUH) and Noah (PBUH), which relate to the blessings of Allah for obedient people and punishment for renegades. In these stories, the renegades were punished through different types of heavenly disasters, apparently natural. This theme of punishments through natural hazards, including the 2005 earthquake, emerged in several discussions with research participants, and particularly with imams. A clear linkage between the bad deeds of people and natural hazards is provided in this narration attributed to the Prophet Muhammad (PBUH) (Al-Tirmidhi Hadith 5450, Narrated by Abu Hurayrah):

When booty is taken in turns, property given in trust is treated as spoils, Zakat is looked on as a fine, learning is acquired for other than a religious purpose, a man obeys his wife and is un-filial towards his mother, he brings his friend near and drives his father far off, voices are raised in mosques, the most wicked member of a tribe becomes its ruler, the most worthless member of a people becomes its leader, a man is honoured through fear of the evil he may do, singing-girls and stringed instruments make their appearance, wines are drunk, and the last members of this people curse the first ones, look at that time for a violent wind, an earthquake, being swallowed up by the earth, metamorphosis, pelting rain, and signs following one another like bits of a necklace falling one after the other when its string is cut.

Common village people were often found to relate any of the causes mentioned in this saying of the Prophet Muhammad (PBUH) as the prime reason for the earthquake. A disabled male villager who was also illiterate remarked that non-payment of Zakat by the rich was the main reason for the occurrence of the earthquake (Male Disabled Villager, 60, Banda-2, 06/2009). The question arises that in a country where half the population illiterate, how are these messages from the Koran and Hadith that affect the perception of disaster risk of the general masses, transferred to most people.

In the case study religious leaders, including imams, were the principal source of transfer and the mosque was the most important primary medium of transfer of religious knowledge to communities. Research participants in focus group discussions referred to a public talk by a

famous scholar (FGD1, Banda-1, 06/2009). I was persuaded to buy a compact disc and listened to the speech. This was a speech by Tariq Jamil, a national-level scholar, popular across the country owing to his persuasive eloquence. This scholar visited the earthquake-affected areas and delivered public talks to gatherings of thousands, making particular reference to this traditional narration of the Prophet Muhammad (PBUH) to explain the background causes of the earthquake. Later, his speech was aired on FM radio. One point in his speech, which concerned how he connected earthquakes with religious interpretation and distanced them from scientific evidence, reflects his stance. He stressed that science might explain the reasons of the earthquake, for instance, that tectonic plates moved but could not answer questions such as why plates moved. The scholar emphasised that it was the sole discretion of Allah to order the moving of tectonic plates. The visualisation of these impressions was seen in the fieldwork. A village elder of Banda-1 was fully aware of the location of his village in the red zone, which was highly vulnerable to earthquakes, yet he challenged the wisdom of using any risk-mitigation strategy: "How long can our buildings stand during an earthquake if Allah wants them to fall down"? (Village Leader, 56, Banda-1, 07/2009).

Only one imam (out of seven) interpreted the Koranic warnings of natural hazards, including earthquakes, differently. A university lecturer and an ex officio imam stated that the 2005 earthquake was related to the movement of tectonic plates and thus was not a punishment of deeds. He proposed that the hereafter was meant for settlement of good and bad actions (University Lecturer, Muzzafarabad, 05/2009). However, the other six imams found clear religious linkages between actions of people and natural hazards. A higher ranking government officer and an ex officio imam of a government-controlled prominent mosque in Islamabad had a critical view of the role of the mosque. He said natural hazards could be interpreted in two ways: religious and scientific. He suggested looking at them from a cause and effect point of view. He remarked that floods and earthquakes are "lesson-producing events" and we should recognise our responsibilities and try to do our best to minimise their effects beyond mere repentance from sins. Underscoring the role of every relevant institution during a calamity, he stressed that the mosque should play its role, which it was not then playing:

There are more than 300,000 mosques in Pakistan and a huge amount of money is donated to them but less than five percent have a welfare orientation (Director General, Dawah Academy, Islamabad, 06/2009).

Most of the people from the affected communities had an overriding belief that the earthquake was due to the will of Allah. Overall, risk perception was not a function of chances of an impending disaster alone but was also shaped by a set of socio-religious factors. Piety was considered a parallel survival strategy and even in some cases precluded adherence to seismic safety building codes. Thus, the people in case-study areas did not show a willing compliance with earthquake resistant reconstruction codes introduced by ERRA. Only those

owners who received assistance from ERRA built their houses as per the building by-laws since it was a pre-condition for assistance and there was a vigilant monitoring mechanism as well. Those who had a chance not to abide by the by-laws constructed their houses in legally prohibited and earthquake-vulnerable styles. Mosques through imams were largely the primary source of setting parameters of risk perception in communities.

There was a parallel interpretation of disasters in terms of a punishment or a test from God and geological reasons, thus providing room for disaster preparedness. However, the former part of this interpretation of coping with disasters through the power of virtues was far more inculcated in the minds of communities than the physical explanation. It was this physical explanation that could prepare people to take practical steps for disaster preparedness. The overwhelming inclination of communities towards their morally contextualised spiritual reformation as a parallel disaster coping strategy had direct implications since the level of perceived risk was fundamental to preparedness. These fatalistic tendencies lead to a compromise on safety standard advised by the government, which might result in an increase in preventable loss of lives in case of a future earthquake.

Imams were the mouthpiece and main channel of transformation of religious interpretation of natural hazards to ordinary people. They drew references from the Koran and Hadith to back up and propagate the religious interpretation of the 2005 earthquake. This interpretation had a strong moral context. In addition, it negatively influenced people's orientation towards disaster risk perception and precluded some practical measures towards disaster preparedness. Although, this interpretation promoted fatalistic tendencies in people, it did not turn them completely fatalistic as they participated in disaster preparedness initiatives such as the Community-based Disaster Risk Management (CBDRM) project discussed in Chapter Five.

The next section looks at the interaction of mosques and women before and in the aftermath of the 2005 earthquake.

### 6.3 Mosques and women in the post-2005 earthquake period

Before the 2005 earthquake, the mosque was instrumental in promoting selected development activities, such as stitching, sewing and handicrafts, among women (FDG2, Banda-1, 07/2009). Although these activities would be coordinated through the mosque (loudspeaker announcements and approval/support of imam), they would actually be located in someone's house, not in the mosque. Also, 46 percent of the female research participants (6 out of 13) were literate because they received religious education inside mosques and their attached seminaries. The religious education was accessible, free of cost and supported by parents, whereas it was difficult and costly to send girls to far-off schools. Until the restoration of the mosque infrastructure damaged due to the earthquake, 150 girls were studying (up to primary school level) in a nearby (Banda-1) Islamic seminary with boarding facilities (Imam, 75, Rural Mansehra, 07/2009).

After the 2005 earthquake, women were connected to the mosque through loudspeaker announcements. In some cases, they were also involved with the mosque through the wife of the imam who would teach them the Koran and disseminate information. Women were not physically seen in mosques and this was confirmed when I attended prayers in Banda-1, Banda-2 and Banda-3 mosques and spent time with communities but could find no women. An old woman explained her attachment to the mosque and the importance of the mosque, even though she could not attend prayers there (Female Villager, 72, Banda-1, 07/2009):

We do not go to the mosque because it does not have a facility for women. We hear Azaan and prepare for prayer, our children go to the mosque and learn the Koran and our men go there and offer prayers. The mosque is a great blessing for our village.

Keeping in view this separation of women from mosques in many places, a research participant cautioned “the mosque as a forum is okay to be used in disaster management but who will care for women, there is a fear of cutting off half of the population” (Country Project Head, FAO, Abbottabad, 05/2009). The study found two main reasons for this separation of women from the mosque: the community did not like it and mosques did not have an elaborate facility for women. Although it was not a priority for the village men to build a provision for women, they also could not free up enough resources from other more pressing needs to build a facility for women to pray in the mosque. In addition, the local purdah custom did not encourage women’s broad participation in public life. There was strong gender separation in Banda-1. It was not usual for women to visit the market except for an explicit purpose such as to see a doctor. So, often men would be seen in markets in Banda-1 and nearby towns. Most of the women, when seen in the market, were observing purdah. This veil would hide their body and face in loose clothing, called a chador. I observed many times on my way to the village that women would give way to men by moving toward the edge of the path. They would not exchange greetings with men. In the same way, they would not go outside unless accompanied by a close male family member or an old woman.

Furthermore, women had two other religious limitations restricting their regular attendance in the mosque. First, it was religiously optional for women to pray with the congregation in the mosque so they could not insist on visiting the mosque five times. Second, the mosque was a religious restriction, physical in nature, and they were not to visit the mosque during the time of their menstrual cycle and even not pray at home.

It was observed that religious interpretations were held by the majority of men and women alike and deemed culturally appropriate and valid in all forums of community decision-making. For example, there was a strong spiritual and symbolic connection between women and the mosque: “had there been no mosque in the village, we would have been ruined”, was a recurring thought in women’s interviews (Female FGD, Banda-1, 07/2009). As with the imam who attributed the survival of a left-over plaza in Balakot after the devastating earthquake to the piety of its owner (Imam, 55, Rural Mansehra, 07/2009), a woman attributed the

destruction of a nearby village, which was razed to the ground, to the absence of any mosque there (Female Villager, 44, Banda-1, 07/2009).

In addition to this symbolic connection, female participants effectively perceived the physical structure of the mosque as an institution and tool of survival against the earthquake. Revealed more in women's dialogues than in men's was the use of the mosque as a shelter during the earthquake and the following tremors. The majority of the female research participants, 11 out of 13, considered the distinctive importance of the mosque as a critical place for shelter during calamities, including earthquakes. This choice was quite different from ERRA's vision, which considered schools as critical emergency shelter centres. However, this choice might be partly due to the general perception that government buildings including schools were poorly built, given the widespread corruption in the public sector. The women stated that they rushed to the mosque for shelter during the aftershocks. The concept of the soundness of the mosque building did not play any role in their decision to seek shelter there. The women thought that the mosque was the house of Allah, built by communities, and therefore had divine protection against forces of nature such as the earthquake. Not only would this provide protection against the earthquake aftershocks, but also death in the mosque, in the worst scenario, would help in negotiating their pardon in the court of Allah on the Day of Judgement. This clearly showed the degree of sacredness attached to the mosque, considered safer than the government-built community school, by the female research participants of Banda-1: they said they would like to embrace death, if they had to, in the mosque. This type of death was deemed equivalent to martyrdom, a highly cherished ending of life in Muslim faith.

The women of Banda-1 were asked about the most relevant and important things in addition to the mosque to them regarding their village, they came up with almost the same list of items as men: bridge, roads and hospitals. However, this mental alignment of men and women did not mean the same level of participation in public life. Owing to purdah, the women would meet in women-only groups and not join the men in the disaster-management decision-making process. All meetings and gatherings in mosques involved men alone. As per the existing norms of the area of Banda-1, Banda-2 and Banda-3, women were neither invited nor supposed to join meetings between development organisations and community men in the mosque. However, they would stay updated of all the developments in their village through their men, their children, the Imam's wife and the loudspeaker announcements.

In the aftermath of the earthquake, during the recovery, reconstruction and rehabilitation phase, a protocol was in place through which local development organisations accessed women even although they did not physically come to mosques. The Field Coordinator (Field Coordinator, SUNGI, Mansehra, 06/09), stated that his organisation would send a women-only team to Banda-1. Respecting the local culture, the team would be dressed in a culturally appropriate way and it would approach only village women. Usually, the women would gather in a designated house, mostly the house of the village chief, after hearing an announcement

from the mosque. The mosque, through the imam and other community members, was to act as a gatekeeper, so the women could feel comfortable about the proposed activity of the NGO in the village. During this meeting in the mosque, any cultural gap would also be bridged by discussing the *modus operandi* of the NGO. This kind of protocol to engage women was also confirmed by the district head of the Muslim NGO, Al-Khidmat Foundation. He explained that women had their separate establishment and system of participation in development activities (District Head Muslim NGO, Mansehra, 04/09): the women's section of their organisation that would contact local women to form women committees. Some of these committees in urban areas were set up to address women needs during the earthquake recovery and rehabilitation. Men would not form part of women's committees but would provide logistics such as the setting up of offices and transportation of goods.

In the CBDRM programme explained in Chapter Five the imam's engagement was critical for the involvement of women in the training programme. I noted during the programme that in a classroom the women were sitting behind men with a gap of two rows of chairs between. The master trainers informed me that they arranged separate training sessions for women in some cases where village people did not like their women seated side by side with men. Since this team had worked in Mansehra before moving to Abbottabad, they mentioned one such case in Banda-2. The women of Banda-2 requested additional women-only training sessions beyond those normally provided. The female master trainer stated that more women became interested in learning new life-saving techniques once the first batch was about to graduate in Banda-2 (Fieldwork Journal, May 2010). In a group discussion with female participants at the end of the training, all the participants seemed to be enthusiastic and passionate having received this six-day training. One young female participant, asked about the utility of the training for women, explicitly stated that:

First aid training was more important for women than men since it's women who stayed at home all day along with small children while men were outside to earn livelihoods and, therefore, they were to handle any contingency on their own related to household injury, fire, earthquake or anything else (Fieldwork Journal, Rural Abbottabad, May 2010).

Outside the humanitarian situation, some local development organisations worked well with women. These organisations utilised female staff and connected with women. A male villager revealed in a focus group discussion that the female staff of a Christian hospital operating in a nearby town had imparted midwifery training to the village women (FGD2, Banda-1, 07/2009). He stated that his wife received this training and had assisted in 20 births since then; obviously, this was a great help to an isolated village community who had to carry every seriously sick person needing a doctor on their shoulders 1.5 km through a narrow, hilly passage before getting to the main road. Likewise, a local NGO had given 25 days stitching training to the women, and another organisation had loaned money to female households.

Overall, these examples of women's involvement in training and development work show that women, like men, have understanding, potential and enthusiasm to contribute to DRR and community development, when provided the opportunity in a culturally and religiously appropriate way. They also had strong affiliation with the mosque. The mosque was a shelter place for them and their children in case of any future earthquake. On spiritual grounds, the mosque had a divinely iconic value for women and was seen as a blessed place critical for the existence of the village during disasters.

This section has shown that women, although rarely seen in public, were involved in the earthquake recovery, reconstruction and rehabilitation phase. However, these activities took place outside the physical space of the mosque because of local purdah customs but also because of religious limitations on the physical presence of women in the mosque. Therefore, women were not invited to any disaster management meeting inside a mosque; they would be informed through exchange of information from men, children and loudspeaker announcements from mosques. The findings show that the mosque itself as a physical space for women's engagement in disaster management was not available but its support as a forum was critical for their engagement outside the mosque. Mosques were used by imams and men to promote and facilitate religiously and culturally appropriate development and disaster management activities among women.

The next section discusses the interaction of other key actors with the mosque.

## 6.4 Interaction of the mosque with other key actors

This section examines the interaction of the mosque with the government and the private sector during the recovery, reconstruction and rehabilitation phase of the earthquake.

### 6.4.1 Government

As discussed in Chapter Three, religious institutions have generally been ignored as a stakeholder in disaster management and ERRA did not choose to engage with mosques in the capacity of a community institution as a matter of policy. However, the mosque made a notable contribution to realizing the goals of ERRA in many ways. It served as a media centre for advertising the messages of ERRA to those affected by earthquakes. When I asked the senior-most officer of the organisation, the chairman, about the role of the mosque in ERRA's operations, he said:

We used mosques for public announcements since the mosque is a collection point. For example, to distribute different kinds of undertaking forms, we used local institutions according to local priorities. Sometimes it happened to be a dispensary and on another time a shop (Chairman, ERRA, Islamabad, 05/2009).

The ERRA Chairman also said, “we have used mosques but very informally” (Chairman, ERRA, Islamabad, 05/2009). He explained that committees were formed for verification of damage claims. Besides government officials, local notables including teachers, village elders and imams served as members in these committees. ERRA neither formally engaged nor prioritised mosques as community-based local partners in any of the disaster management cycle phase. This was in contrast to some international donors such as USAID and UN-Habitat (explained in Chapter Five). The USAID explicitly chose to engage with mosques and imams during the rehabilitation of educational facilities (Project Monitoring Officer, USAID, Islamabad, 06/2009).

The mosque was too important a community institution to be bypassed. Though not formally written as a guideline, and perceived as informal by the chairman, ERRA was connecting with the mosque on the ground to carry out disaster-management tasks just like other development partner organisations. ERRA field officials adopted and respected local customs and were seen conducting government business in the mosque with the community in Banda-3. Most of the research participants from Banda-1, -2 and -3 confirmed that several ERRA operations, particularly in the beginning, were conducted and routed through the mosque, especially announcements and community meetings.

The official ERRA CBDRM booklet explaining the aim and design of the formulation of Union Council Disaster Management Committees explicitly stated that the religious leader should be part of any typical Union Council Disaster Management Committee. Similarly, Union Council Disaster Management Committee guidelines enlisted the mosque after the school and hospital in the list of critical community facilities. The basic information dossier of Union Council requires the entry of details about the mosque, including the number of worshippers coming to the mosque regularly, the maximum number of people the mosque could accommodate, and the structure of the mosque building – whether mud/straw, concrete or reinforced concrete (ERRA, 2010a, p. 39). A schoolteacher cum ex officio imam of the village, along with other representatives from different local government departments, including education and health, were participating in the training. All these people, including women, received training about fire fighting and first aid with other community members in a school building belonging to an isolated and mountainous Union Council of the district of Abbottabad. Besides, the two master trainers were found to be ensuring the inclusion of the imam in training programmes. This was not only to conform to the instructions given in the ERRA booklet but also to be received well in the community. As stated by the master trainers, imams’ views usually have strong bearing on the response of communities to outside development organisations.

It was important to win the trust and confidence of the imam for the success of the programme in terms of community participation in particular and support in general. As mentioned in Chapter Five, the master trainers had learnt the art of integrating religious knowledge with technical knowledge for promoting development, relating the Noah’s Ark story in The Koran to disaster preparedness, to perform their job by winning the trust of communities in their social

space (Fieldwork Journal, rural Abbottabad, 05/2010). I asked the imam about the participation of women in trainings and he said, “women should be included in training as they would accompany Muslims in battles for nursing the wounded at the time of Prophet Muhammad (PBUH)” (Fieldwork Journal, rural Abbottabad, 05/2010). According to master trainers, it was essential to win the support of the local imam, in particular, for the inclusion of women in the programme.

Although the men and women considered the mosque as a repository of their faith, culture and civilization, the mandated government agency for reconstruction, ERRA, did not build or repair the damaged mosques. The people responded in the same way as they had to a team of UN-Habitat who tried to convince a community to build their mosque as per seismic codes at another place: “it was not ERRA’s mosque, it was their (the community’s) mosque” (Fieldwork Journal, rural Abbottabad, 05/ 2010). Mosques were rebuilt by communities relying on traditional masonry after the earthquake without any regard for earthquake seismic-safety construction codes. Since the government stayed away from mosque affairs and did not support their reconstruction, it did not have any control over the way mosques were rebuilt. However, the government facilitated some donors interested in rebuilding mosques mainly in urban areas such as reconstruction of the District Headquarter Complex mosque in Muzaffarabad city by the Turkish Government (State Earthquake Reconstruction and Rehabilitation Authority, 2011).

The women’s perception of the mosque and the public policy to stay away from mosque matters have a direct bearing on the success of any disaster management policy at the local level. The consequences of this could be deadly for those seeking shelter in the mosque in case of a future earthquake, most likely to be women accompanied by children. Their homes may actually have far better survival probability than the mosques since their houses were built with the assistance of the government, following ERRRA seismic building codes.

Thus, the question arose as to why the government was consciously and meaningfully hesitant to appreciate their contribution and engage with mosques. Research participants had different apprehensions including disaster perception, an unknown fear of not having done this before, conservatism, and sectarianism. Hardly anyone in the government denied the tangible contribution of the mosque, yet they had abstract presumptions, not always based on evidence, about engagement with the mosque.

The biggest obstacle for the government to the inclusion of mosques in disaster management was seemingly the mosque’s traditional and non-scientific approach to understanding disasters. The chairman of ERRA thought it was very difficult to ask a person to be involved in disaster preparedness when they had a belief that everything was going to happen on the order of Allah. The ERRA Chairman was referring to the typical character of an imam who would usually ascribe earthquakes to divine afflictions or tests. In this context, it might not have been an efficient choice to engage with mosques. Given the paucity of time and

resources with ERRA, “we went for the least resistant and most cost effective way of intervention”, the chairman remarked (Chairman ERRA, Islamabad, 05/2009). According to the chairman, the mosque did not appear to be an institution to provide a quick-fix solution after the earthquake in the view of the government<sup>40</sup>.

Another reason for avoiding mosques in the disaster-management process was their perceived conservative interface towards development. The head of a provincial chapter of ERRA perceived imams as traditionalists who would not welcome progress in society (Director General Provincial Reconstruction and Rehabilitation Authority, Abbottabad, 05/2009). He acknowledged the importance of mosques but emphasised that:

A mosque is the epicentre of our society. Generally, very poor people go to the mosque and people of this area [Khyber Pakhtunkhwa] are very religious and they listen to Moulvi<sup>41</sup>. Definitely, Moulvis [plural of Moulvi] are our stakeholders but we do not involve them formally. They only tell people that earthquakes occur because people are sinners and immoral. Mosques are an important community mobilising institution but they are not playing their due role.

Among other apprehensions, people were concerned that engagement with religious institutions like mosques could result in discrimination based on sectarian affiliations. Imams were questioned about their views on sectarian differentiation during the rescue, relief and rehabilitation processes in the aftermath of the 2005 earthquake. All the imams were against any kind of discrimination, including on sectarian basis, while helping people during disasters. No such instance occurred during the course of this research to suggest otherwise. This could be due to sectarian harmony and also because the majority of the population of areas under study belonged to one sect (Sunnis) and therefore the issue of sectarian friction was not relevant<sup>42</sup>.

Similarly, a senior officer of ERRA, dealing with social sector programmes for the earthquake-affected areas, stated that they were told to stay away from mosques in disaster management (Deputy Director General ERRA, Islamabad, 04/2009). This officer, who had more than 10 years' experience of public service in district management across the country, commented on the relationship between the state and the mosque: “We (the state) never felt the need to establish links with the mosque as an institution and we never dared to do so”. There was a tacit hesitation and fear of the unknown about formally acknowledging and engaging with the mosque, though it was happening to some extent informally. Besides other socio-political factors, this situation indicated the lack of research and awareness regarding the role of religious institutions in disaster management in particular and development in general.

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<sup>40</sup> Although the government had limited experience in dealing with seminaries, which are usually attached to mosques, there was hesitation to engage with mosques as such, as a matter of policy in the aftermath of the earthquake. The government had engaged with seminaries in General Zia's regime (1977–1988) and again tried to engage under General Musharraf (1999–2007).

<sup>41</sup> It is a local informal title for imam, sometimes considered offensive.

<sup>42</sup> Sectarian clashes usually occur between Sunnis and Shia.

Overall, there seemed to be a large gap in the understanding and perception of the role of the mosque and the imam between those stationed in headquarters like ERRA and those on the ground (like the CBDRM master trainers and Un-Habitat social mobilisers). The field staff used mosques to win community support and network with other actors. Specifically, mosques were useful institutions with which the government engaged, although not initially intended, because they were there on the ground. The government used mosques for advertising its policies and plans. However, mosques were used far less than their potential value due to largely unresearched concerns (for example, conservatism and sectarianism). This highlights the lack of research about finding a new approach through building synergy about the role of the mosque in particular and religious institutions in general in disaster management.

#### 6.4.2 Private sector

At the local level, the mosque was a meeting and communal place for private sector people of Banda-1 local market. Since this mosque was fulfilling the religious needs of the local business people, the local market people maintained and looked after it. The earthquake damaged this mosque and a local saw machine owner offered his business place for prayers. The mosque was shifted to this business courtyard until the mosque could be repaired. Unlike schools and hospitals, mosques did not stop functioning, even for a single prayer, because of the destruction of their bricks and mortar in the earthquake.

Some of the local-level, private sector entities used the centrality of the mosque and the cooperation of the imam as a strategy for carrying out their business with community support before and after the earthquake. For example, underground electric water pumps were a major source of drinking water for the rural communities of the twin districts of Abbottabad and Mansehra. One water pump government contractor based in Abbottabad but also working in Manshera, reflected on his experience of engagement with the mosque before and after the earthquake. He stated that his company would get a work order to repair an underground water pump from the local government works department (Government Contractor, Abbottabad/Mansehra, 05/10). This work permit might relate to the repair of a pump in a remote rural community where they had never been before. The contractor stated that his team would ask people in the street about the location of the underground water pump after entering the village. The contractor identified that the other main strategy would be to approach the mosque in the village since the minarets of the mosque are usually visible from a distance so it is easy to locate; also, most of the time, water pumps were located close to the mosque in the centre of a village. Another reason to approach the mosque and the imam was to request volunteers. If the contractor needed volunteers to help his team, the imam would make an announcement in the village through the mosque and people would come forward to help them. He further added that even the imam would offer his labour for help in some cases. The contractor worked on the same lines in the aftermath of the earthquake, using the

centrality of the mosque for finding the water pump and the imam's support for seeking community volunteers.

When food supplies were directly distributed among affected communities at the time of the response after the earthquake, mosques were involved. However, during the relief phase, the mosque facilitation role was phased out once those affected had shifted to makeshift camps and humanitarian organisations had arrived and started providing different services to the affected people in a formal way. The managing director of a Mansehra-based transport company stated that his company would then directly deliver the supplies to warehouses established by humanitarian organisations in earthquake-affected areas (Managing Director, General Supplies and Transportation Firm, Mansehra, 05/10).

Private sector community members provided direct support to some imams after the earthquake. For example, there was a small mosque in the locality of five or seven houses, and the parents of the imam died and his house was destroyed in the earthquake. A rich local bulk trader and other locals helped the imam financially and supported him (Bulk trader, rural Mansehra, 05/09).

The mosque was found to be a silent but important local partner of the international private sector organisations. For example, the project officer of an international multi-disciplinary consulting firm, carrying out third-party validation for Islamic Development Bank, stated that the firm's field supervisors immensely benefited from mosques during the verification process of housing reconstruction in Khyber Pakhtunkhwa (Project Officer MM Pakistan, subsidiary of Mott MacDonald International UK, Islamabad, 04/10). During this process, the field supervisors frequently sought the assistance of imams to introduce them to the community, and to be allowed to use the mosque as an office and for overnight stays while in far-flung areas like the district of Kohistan. Although the firm also collaborated with local NGOs, the assistance of the imams was unique. In the context where there was a strict compliance of purdah customs in some areas in Khyber Pakhtunkhwa, it was very difficult for outside people to talk to women when men were not found at home during the time of verification. As the men would usually be away in big cities like Karachi earning a livelihood, it would be imams who would request help from some community members or would accompany the supervisors themselves. Therefore, in the engagement of this international private sector organisation with the mosque, the mosque facilitated access, bridged the cultural gap, and contributed to their work by helping establish their initial contact with remote communities.

Similar to the help of mosques and imams given to the supervisors of Mott MacDonald, some other private sector consultants also engaged with the mosque and the imam during the reconstruction and rehabilitation in the aftermath of the earthquake. Socio-engineering consultants were acting as consultants under the Earthquake Emergency Assistance Programme for the reconstruction of schools in the earthquake-affected areas in an Asian Development Bank-funded project. The Earthquake Emergency Assistance Programme had a

soft component for the establishment and capacity building of the School Management Committees along with the reconstruction of the physical infrastructure of schools. The role of the local religious leader was particularly mentioned and suggested as a member of any typical School Management Committee in the School Management Committee handbook (Socio-engineering Consultants, 2006, p. 54). This coincided with inclusion of the religious leaders among key members of the Union Council Disaster Management Committee established under the CBDRM programme concurrently run by ERRA (2010a, p. 7) and funded by the World Bank.

In general, private sector entities coming from outside the affected communities connected with the mosque to negotiate their initial contact with affected communities. Depending upon the nature of the required business and its timing after the earthquake, characteristics of this interaction with the mosque varied among different private sector entities.

The next section summarises the overall role of mosques and imams in different locations based on the fieldwork research.

## 6.5 Overall role of the mosque in disaster management

The role of the mosque in disaster management differed from place to place depending on the particular characteristics of a community. The roles of mosques and imams in Banda-1 and -2 were similar but different from the role of the mosque and imam in Banda-3. Table 6-2 offers summary findings of this comparison of the roles of mosques and imams in disaster management in their communities. Based on fieldwork, this comparison presents similarities and differences in the roles of these mosques and imams in five dimensions, namely cultural, psychosocial, economic, social and political.

**Table 6-1: Comparison of the roles of mosques and imams in disaster response, relief, recovery, reconstruction and rehabilitation in their communities**

<b>Role Dynamics</b>	<b>Banda-1, -2 mosques</b>	<b>Banda-3 mosque</b>
<p><b>Cultural</b> Bridging cultural gap between different disaster management actors and the local community</p>	<p>All mosques served as an entry door for civil society, private sector and government organisations coming to help and work with the earthquake affected communities. Mosques and imams acted as facilitators and bridges to introduce and build rapport between development partners and host communities. This was essential to win support of communities and to avoid friction and conflict between outside organisation and local communities.</p>	
<p><b>Psychosocial</b> Influence on disaster risk perception and attitude towards disaster preparedness</p>	<p>All imams had a critical role in shaping disaster risk perceptions through the institution of the mosque. The mechanism for influence included sharing views in public, delivering open talks (Banda-1, -2 and -3) and Friday speeches (Banda-3). The earthquake was strongly interpreted as an ‘act of God’ through references from religious narratives. This interpretation, although useful for creating resilience, hindered practical steps to adherence to safety measure such seismic safe building codes.</p>	
<p>Spiritual well-being, healing and resilience</p>	<p>Mosques provided religious services such as imams leading prayers and teaching the Koran to children. All communities noted that they were advised by mosques to stay calm and resilient, help each other, and refrain from creating disorder and stealing, since it was a testing time for them. All communities greatly acknowledged the psychosocial and spiritual support provided by their imams through private and public counselling. This healing directly contributed to the resilience among communities.</p>	
<p><b>Economic</b> Sharing of market information</p>	<p>All mosques provided a social space to make collective economic decisions such as harvesting of crops and sharing information about availability of employment opportunities and seasonal labour in local markets in the aftermath of the earthquake.</p>	
<p><b>Social</b> Women – exclusion and inclusion</p>	<p>In all locations in the case study, women were not seen to be using mosques as physical places. Mosques did not have a provision for women to be able to pray with the congregation, although women desired this. Women said they would use mosques as emergency shelters in case of a future earthquake. The mosque as an institution supported women’s involvement in culturally appropriate development activities such as stitching and midwifery training.</p>	
<p>Bridging information gaps</p>	<p>All mosques helped bridge information gaps among different actors, including civil society, private sector and the government. All mosques were frequently utilised by all actors to make public announcements through loudspeakers and through word of mouth. Women received information through direct announcements from the mosque and through men and children.</p>	
<p>Community welfare</p>	<p>Imams did not engage in activities outside mosques as it was deemed inappropriate by the communities they served.</p>	<p>In addition to religious services, the imam of the mosque engaged in acts of general welfare such as voluntary teaching in the local school and motivating the community to help each other after the earthquake.</p>

Networking with other actors such as civil society, private sector and government organisations and identification of the poor	Imams responded to civil society, private-sector and government organisations during the disaster-management cycle when contacted but did not pro-actively engage by themselves. Imams provided some advice to development organisations looking for the marginalised (such as widows and elderly) and the poor to support them in cash and kind.	The imam actively engaged with all actors during the disaster management cycle. In one case, he took the leadership role by opting to be the head of the Parent-Teacher Council of the school. The mosque space was used for boys' school and community meetings. The imam was proactive in identifying the marginalised and the poor after the earthquake and connecting them with development organisations providing support in cash and kind.
Influence of a community's perception of the role of the mosque and the imam	Communities did not like the use of mosques for non-spiritual purposes such as public meetings, nor imams performing general welfare functions.	The community was supportive of the role of the mosque and the imam in apparently non-religious activities such as conducting community meetings in the mosque and the imam's involvement with development organisations.
<b>Political</b> Interaction with public representatives	Mosques and imams had no interaction with political figures.	The mosque, through its imam, had constructive collaboration with local political figures during the recovery, reconstruction, and rehabilitation phases.

Source: Author

Taken as a whole, the institution of the mosque played a distinctive role in disaster management by affecting the social, cultural, psychosocial, spiritual, political and economic dimensions of the lives of the earthquake-affected communities in rural areas. Socially and culturally, the mosque served as an entry door, a bridge across cultural gaps, and facilitated access to communities for private, government, local, national and international organisations during the earthquake response and relief. Unlike schools, hospitals and government organisations, which stopped functioning due to the destruction of their infrastructure, the institution of the mosque proved to be indestructible. The mosque functioned well beyond the limits of men and material, brick and mortar. The mosque building was destroyed but the institution of the mosque remained. It continued to function, surviving community men gathered to play on the rubble or in the open, and the mosque served as the collection point of the community even in the hardest of times. Psychosocially and spiritually, through the imams, it provided psychosocial and spiritual healing to members of Muslim faith and influenced their attitude to disaster preparedness. Religious interpretations of the earthquake caused communities to turn to God and to increase meditation and prayer. On the one hand, the psychosocial and spiritual healing by mosques fostered the resilience of the earthquake-affected people. On the other hand, religious interpretations of the earthquake promoted fatalistic tendencies, which negatively affected communities' attentiveness to DRR measures suggested by the government. Politically, the government and private sector accessed

communities to convey their policies and strategies in order to build connections and win support for recovery and reconstruction projects. Economically, the affected communities exchanged livelihood-related information and coordinated their income generating activities using the institution of the mosque.

## 6.6 Potential roles of the mosque

All, sectors of society, both public and private, that were approached during the fieldwork, agreed on the huge, untapped potential of the mosque for much-needed social transformations, ranging from individual reforms to changes in collective behaviour. The Director General of Provincial Reconstruction and Rehabilitation Authority referred to the mosque as “the epicentre of society” (Director General, Provincial Reconstruction and Rehabilitation Authority, Abbottabad, 05/2009). Below are some of the potential roles of the mosque and other community-based religious institutions identified by research participants and observed during the fieldwork.

### 6.6.1 Potential social and economic roles of the mosque

One key informant, a teacher, described her idea of the potential role of the mosque as a functional community institution (Female Key Informant, 36, Banda-1, 07/2009). She suggested community engagement during any future earthquake. She proposed that an announcement be made using the mosque loudspeaker for the people to leave their homes for open and safe places during an earthquake. Once gathered at a safe place, they should be advised to stay calm and patient until a plan is drawn up to tackle the situation. Consultations and deliberations should be held to find out ways and means to mitigate risks, save human lives and reduce losses. Meanwhile, the mosque should deliver the messages of endurance, patience and peace to reduce panic.

Mosques acted as information centres for communities, providing updates on vital information including arrival of relief items, development and private sector organisations, and any reconstruction policies of the government. This potential use of the mosque becomes even more critical in contexts where there were only five televisions and two radios scattered through a community of 5,000 people (Banda-1). Therefore, the formal linking of the mosque in the disaster-management cycle can provide further advantages in the smooth flow of information. Besides, rich and poor men in communities were seen talking unreservedly and social barriers diminished within the boundary of the mosque. Mosques would offer a suitable social space to allow community decision-making in a socially comfortable ambience.

Imams helped identify the poor and the needy in the aftermath of the 2005 earthquake, facilitating the process of linking the marginalised with development organisations. In addition, communities used the prayer gatherings to communicate and decide among themselves about economic activities like the collective harvesting of crops.

The chairman of ERRA stated that the mosque had such a huge potential that it could “revolutionise” society (Chairman, ERRA, Islamabad, 05/2009). He proposed that by raising the capacity of the imam and making him a resource person in the community, many development objectives could be achieved. He suggested that the imam should be included in disaster management and then:

- undergo first aid training
- be a teacher of the school in the mosque after *Fajr*<sup>43</sup> until *Zuhaar*<sup>44</sup> and inculcate disaster preparedness values of safety in children
- be trained in other locally relevant crafts to make him free from entire reliance on charity and utilise his local leadership capability for the common good. For example, imams in Swat area could be taught bee keeping.

He further explained that ERRA trained 250,000 people as masons/ artisans in makeshift tents and shops, so mosques could be a place to impart such capacity-building skills to communities (Chairman, ERRA, Islamabad, 05/2009). He referred to this scenario as “a win-win situation” for communities, public and private development organisations and the state. Along these lines, the mosque could promote other livelihood-strengthening activities such as providing a training centre for capacity-developing trades. However, the use of the physical space of the mosque for non-religious roles might face resistance from communities, as was found during this research (Banda-1 and -2).

Coincidentally, I saw the chairman’s suggestion in action in Banda-1 in July the same year. A community toilet was being constructed along with the mosque as a part of masonry training for the village people. When I spoke to the NGO official, he said that they were training the local people to raise their capacity in different skills. In this connection, they thought to build a toilet for the community along with the mosque as a demonstration of masonry for the village people who did not have toilets in general (Male villager, 22, Bara, 07/2009). He believed this would have dual benefits: it would raise the capacity of the village people and also earn goodwill for their organisation, since it was the first community toilet for a population of 5,000 people (Banda-1).

### 6.6.2 Potential for educational, health support, political empowerment and advocacy roles

A number of potential roles for the mosque were also suggested by the Council of Islamic Ideology in its report to the government about social reforms in Pakistan (Council of Islamic Ideology, 1993, pp. 42-49). Established in 1962, the Council of Islamic Ideology is a constitutional body whose mission, functions and rules of procedure were provided in Articles 228–231 of the 1973 constitution (Council of Islamic Ideology, 2005). The Council’s main

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<sup>43</sup> The morning prayer offered before sunrise.

<sup>44</sup> The mid-day prayer, which is prayed once the sun has crossed the meridian.

responsibility is to recommend to parliament and provincial assemblies ways and means to enable Muslims of the country to order their individual and collective lives in accordance with the rules articulated in the Koran and Hadith. The Director General, during his interview, stated that the Council's recommendations are sent to the government, although the government is not bound to follow its recommendations (Director General, Council of Islamic Ideology, Islamabad, 07/2009). The Director General provided me with a 1993 report of the council.

The council reiterated in its report that the government had a great under-utilised resource in the form of a local social institution – the mosque. It cited the instances of multi-dimensional historical roles of the mosque benefitting communities. Most importantly, the report notes that the mosque was the best place to join, network and integrate the marginalised and the poorest of the poor into the main stratum of society with the welfare provisions of the state.

This study illustrates that these roles are inherently linked with disaster management as shown in Table 6-2. The mosque could be used for educational, health and empowerment purposes, all of which would directly contribute to effective disaster management. However, it may be noted that establishing such roles for the mosque may require a profound change in societal cultural norms, including acceptance of a more active role of women in the mosque.

### 6.6.3 Potential role of religious institutions helping their followers and followers of other religions

Another potential benefit of engagement with religious institutions is the help the followers of one religion could offer to the followers of another religion. One such example was of a Christian church that I had a chance to observe during my fieldwork. This church was accommodating some Muslim families along with Christian families who were displaced because of the military operation in Swat, providing them with food, shelter, security and other necessities of life. When I asked the bishop of the church about accommodating Muslim families, he responded “these are Christian teachings – Christians, Hindus and Muslims all pray, we are doing it just on a humanitarian basis without any hidden agenda” (Bishop of Mardan Church, 06/2009).

A range of potential roles for community-based religious institutions as identified by research participants shows huge under-utilised opportunities in all phases of the disaster-management cycle. Distinctively supported by communities and located at a local level, these institutions could be used to save lives in disaster response and relief, coordinate and organise communities in disaster recovery, reconstruction and rehabilitation, and to prepare disaster-resilient communities by spreading awareness.

**Table 6-2: Potential roles of the mosque as explored during the fieldwork and suggested by the Council of Islamic Ideology**

<b>Roles</b>	<b>Explanation</b>	<b>Expected impact on disaster management and development</b>
Educational	Arrangement for using mosques as primary schools after a disaster.	Disasters often destroy educational facilities; yet getting children back into regular routines such as schooling, helps them recover after a disaster. Holding classes in the mosque makes them accessible to the poorest of the poor – this would raise the capability of vulnerable communities and contribute to effective disaster management. Providing classes in the mosque also presents an opportunity to impart disaster awareness and preparedness training to the children of the poor who otherwise might miss out. Such training could engage imams.
Basic Health Units, distribution of Zakat and welfare funds	Arrangement of Basic Health Unit along with mosques so that hassle-free health services and provision of Zakat and charity to the marginalised section of the society.	Considering the case of remote village areas, people desperately need a health service close by. The mosque could improve effective disaster management by serving as a first aid centre during response and relief phases of any future earthquake or other natural hazards. Imams, members of the mosque committee, and some local women require first aid training. In addition, the mosque committee can identify the needy and the poor at the local level for the distribution of Zakat and charity.
Communication and advocacy	Requiring local and higher government officials to liaise with imams and have women-inclusive public hearings in or outside the mosque.	This would directly contribute to advocacy, campaigning and empowerment of vulnerable communities including women by having increased chances of communication and information directly from public officials via a trusted channel such as the mosque. This would be equally useful for pro-poor development and effective disaster management.
Information and coordination centre	Recognising the mosque as a key local institution to coordinate and organise disaster relief and DRR activities at the local level.	Outside organisations can use the mosque to organise their response and relief activities such as identifying vulnerable households and distributing goods. Connecting the mosque with the early warning system and other support networks would further strengthen capacities and boost recovery processes.
Psychosocial healing and spiritual well-being	Role of mosques and imams in promoting psychosocial healing and spiritual wellbeing at the local level.	By training imams, mosques may be used more effectively for providing psychosocial healing and spiritual well-being during disaster recovery and rehabilitation by increasing resilience among communities through religious interpretation of disasters. In addition, this approach may also result in

Other development functions	Establishment of mosque committees comprising local men and women who can engage in development and post-disaster activities.	<p>maintenance peace by reduction of instances of stealing and theft in the aftermath of disasters.</p> <p>The mosque committee could devise culturally appropriate interventions through the following measures:</p> <ul style="list-style-type: none"> <li>• Advocacy for provision, repair and maintenance of civic facilities.</li> <li>• Helping needy, widows and orphans.</li> <li>• Establishment of communal library and literacy centre for illiterate in mosques.</li> <li>• Educated individuals to devote some of their time to educate illiterate people of community.</li> <li>• Promotion of sectarian harmony.</li> </ul>
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Source: Fieldwork findings and Council of Islamic Ideology (1993)

## 6.7 Summary and conclusion

This chapter addressed the two research questions: first, it explored the role of the mosque in the disaster-management cycle in relation to other key players in the aftermath of the 2005 earthquake; second, it identified the potential future of the mosque. The findings have shown that the role of mosques varied from place to place. The mosque, community and the imam of Banda-3 actively engaged in the whole spectrum of the disaster-management cycle in the aftermath of the earthquake. However, imams and mosques of Banda-1 and -2, although contributing to the response, relief, recovery, reconstruction and rehabilitation phases, were not as active as the mosque and the imam of Banda-3.

The findings have indicated that the community's view of the role of the mosque and its imam determined the limits of their engagement. The mosque's function was democratic in nature. It was mainly because of respect for the communities' choice in Banda-1 and -2 that their imams should not engage with development organisations directly but instead provide them with information to identify and assist the neediest and the poor in their villages. These village people did not like their imams to engage in secular acts (as they perceived them) besides worship.

Although there were differences in the role of the mosque in different locations, all mosques served distinctly from other key actors in disaster management. They served as facilitators and enablers for outside disaster-management actors, as a physical space and forum for coordinating response and relief, as a socially integrating force for the earthquake-affected, as a recruiting ground for volunteers, and as an initial contact point during the response and relief phase in the aftermath of the earthquake. During the recovery, reconstruction and rehabilitation phase of the earthquake, mosques strengthened livelihoods and offered psychosocial support and spiritual healing to the local people.

The private sector appeared as both patron (where the concerned business people were affiliated with the mosque as members of Muslim faith) and beneficiary of the institution of the mosque. At the local level, business individuals provided the mosque with an alternate space in the immediate aftermath of the earthquake as members of the Muslim faith (in Banda-1). In addition to this, the mosque served as a place through which to establish initial contact and connect the private sector with rural communities. The mosque bridged the cultural gap, was an expediter and facilitated contact with communities. The mosque, through the imam, negotiated the religious and cultural boundaries of purdah in remote communities.

The research has shown that the mosque as a physical place is not promising for women's engagement in disaster management in its current form. However, the support of the mosque is critical for women's engagement in disaster management activities outside the mosque. Women had strong affiliations with the mosque, although they did not physically visit mosques often. Due to cultural norms in the case-study area, women observed purdah and were not seen regularly in markets. Notwithstanding this, the reasons given by the village men for the absence of women from the mosque were also related to economic factors, since they were generally poor and could not free up enough resources to build separate provision for women in the mosque. In addition, there were some religious restrictions on women's visits to mosques, including staying off site during menstrual periods.

However, women were connected with the mosque through the wife of the imam, their children learning the Koran, their men offering prayers, and their listening to the weekly Friday sermon. They had strong spiritual connections with the mosque. They considered the mosque as their survival strategy, and maintained they would take shelter there along with children during a future earthquake. Since communities rebuilt their mosques without any respect for seismic safety codes, this poses a great risk to the lives of these women and children.

All mosques included in the fieldwork influenced the perception of disaster risk to communities. Imams had parallel interpretations of the earthquake – one scientific and the other religious. The religious interpretation considered the earthquake more as a sign of a punishment or a test from God than a movement of tectonic plates. All communities ascribed this perception to messages from mosques through imams. On the one hand, the religious interpretation proved to be a source of psychosocial support in several ways, such as inspiring people to help each other and promoting resilience. On the other hand, due to the religious interpretation, communities did not take important practical steps to save themselves from future building hazards, for example, they avoided government-prescribed seismic-safe housing codes. However, communities were not entirely fatalistic as they actively participated in the CBDRM programme and had a strong desire for more such disaster-preparedness initiatives by the government.

This research has exposed a gap in understanding between the standpoints of policy makers and those of 'on the ground' communities. The former insist on adopting a unified approach

without due respect for communities' views of hazard and vulnerability. Such standpoints (of ERRA) ignore the fact that there is a strong religious discourse on the causes of disasters in Muslim's scriptures, the Koran and Hadith. This religious discourse, considering earthquakes either a punishment or a test from God, is systematically reinforced in the minds of men and women of communities through regular messages from mosques through imams.

Therefore, in a faith-based society where people's religious beliefs shape their worldviews of disasters, a standardised top-down disaster management policy and institutional structure oblivious of the inclusion of the community's primary institution may not deliver its envisaged outcomes of a safer life. In addition, the study has revealed that although there is acknowledgement of the huge potential for the role of the mosque at top policy level, unexamined concerns remain (such as the mosques' conservative approach and sectarianism) that impede a meaningful engagement of the government with the institution of the mosque in all phases of the disaster-management cycle.

At the grassroots level, this research has discovered that the frontline functionaries of the government (ERRA CBDRM master trainers) and international organisations (such as UNHabitat, USAID and Mott MacDonald) appreciate the presence of the mosque as a useful institution to get their job done. They involve mosques and imams, understanding the importance of their role and influence on public opinion. They endeavour to reduce the gap between the standardised one-size-fits-all disaster management policy and local socio-cultural context by negotiating with mosques and imams and finding a new approach. By incorporating religious texts about the occurrences of earthquakes (and other natural hazards), communities were more prepared to participate in earthquake recovery and reconstruction. Imams were involved since they were the credible mouthpieces of religious teachings and were popular opinion makers in communities. Imams' involvement brought a community's trust and ownership into these organisations' recovery and reconstruction programmes.

The research has exhibited that all key actors in disaster management acknowledge the huge untapped potential of this religious-cum-social institution. This is despite the mosque's sub-optimal role in the aftermath of the 2005 earthquake in its current form. Overall, the mosque played a distinctive role contributing to different phases of the disaster management cycle in the social, cultural, psychological, spiritual, political and economic dimensions of communities in the aftermath of the 2005 earthquake. This study has documented this prominent role of the mosque in its capacity as a community institution. Whether an imam performed an active or a passive role in the response, relief, recovery, reconstruction and rehabilitation phases, he was an important stakeholder whose inclusion or exclusion could have considerable implications for the success of disaster-management strategies.

The research has indicated the need to search for an approach to disaster management that could accept religious interpretation as a valid social explanation along with the mainstream scientific understanding of natural hazards. There is a need to understand the reality of the

earthquake through the eyes of the affected population (Bankoff, 2004b; Homan, 2003; Wisner, 2010). There may be a possibility of benefitting from a morally contextualised religious interpretation, which inspires people to help each other, provides psychosocial support through creation of shared meaning of a disaster, and promotes resilience. This approach could provide a synergy by combining religious and scientific explanations of disaster while curtailing the negative aspects of fatalistic inclinations.

Chapter Seven will further elaborate on this aspect and on other conclusions from this chapter by comparing them with the literature. It will also show how this research informs academic scholarship, and the concept and practice of disaster management in relation to post-development theory, for its further application in similar situations.

## **Chapter Seven Opportunities and challenges of engagement with the mosque as a community-based religious institution**

### **7.1 Introduction**

The aim of this dissertation was to examine the role of the mosque as a community-based religious institution in disaster situations. To achieve this aim, two research questions were addressed. The first examined the role of the mosque in relation to the key actors from the state, civil society and the private sector during response, relief, recovery, reconstruction and rehabilitation in the aftermath of the 2005 earthquake in Pakistan. The second explored the potential roles of the mosque in similar situations in the future. A case study of the district of Mansehra in the Khyber Pakhtoonkhwa province of Pakistan was presented. Using qualitative research methods, a broad range of actors in disaster management such as earthquake-affected communities, imams, representatives of civil society organisations, people from the private sector and government organisations, shed light on the above questions.

This chapter discusses the findings of this dissertation in relation to the literature on disaster management about the role of community-based religious institutions in the context of post-development theory. The chapter draws conclusions and illustrates the distinct contribution of this dissertation to the body of knowledge. Before this research, the role of the mosque had mostly been hidden, undocumented, underestimated and unacknowledged.

The chapter also suggests new dimensions for exploration to further improve our understanding about the role of community-based religious institutions in disaster management both at conceptual and practical levels.

### **7.2 Contribution to knowledge about the role of religious institutions**

Overall, this dissertation corroborates the finding that community-based religious institutions play a key role in developing cohesion and building social safety which is critical for people's recovery and rehabilitation in the wake of disasters (Twigg, 2004). Some of the particular roles identified during this research are discussed in the following sub-sections.

#### **7.2.1 The centrality of religious institutions to communities**

The mosque, as a vital community hub and gathering place for men to offer prayers five times a day from dawn until night, served as a logical point for interaction, negotiation and communication for the government, civil society and the private sector. One of the extraordinary attributes of the institution of the mosque in the wake of the 2005 earthquake was its uninterrupted functioning despite deaths of its patrons and destruction of its brick and mortar building. The uniting force of religion saw its expression in communities' affiliation with the

mosque, attracting congregations of men for prayers, in the open or an alternate place, even when the mosque infrastructure was partially or fully destroyed. These congregations created a social space, which promoted a spirit of mutual help and sacrifice in communities during times of extreme misery and destruction in the aftermath of the earthquake. This is similar to the role of religious institutions found elsewhere and the roles they play in disasters (Cain & Barthelemy, 2008; Candland, 2000; Chester et al., 2008).

The mosque reflected the two core characteristics – community ownership and trust – essential to make any development project a success (Chambers, 1997; Chambers, 2005; Sen, 1999). The communities studied made the land available and built their mosque by themselves. They appointed their imams themselves. They used the mosque and sustained its expenses including payment to the imam. The mosque was far more than a religious place of worship for them; it was a spiritual defence and part of their survival strategy to safeguard them from natural hazards. These findings are similar to McGregor (2010) who found that Muslims in Aceh wanted to build their ‘meunasah’ (local village mosque) before their own houses during the post-tsunami reconstruction. This was because of the critical significance of the ‘meunasah’ as a centre for psychosocial support and spiritual healing of communities, essential for their recovery. It was not only a prayer place but also a forum for sharing happiness (for example, conducting marriages) and sadness (for example, interpreting tsunami destruction) in their day-to-day lives. Therefore, this dissertation contributes to the scarce literature in development and disaster studies by highlighting the importance of community-based religious institutions.

This exploration of the role of the mosque has elucidated that religion (through its community institutions) provided a cohesive force for communities, which greatly helped them to interpret meanings of death and destruction after the 2005 earthquake, and promoted resilience. Religion as a socially integrating force and faith as a form of social capital can play a role in community development. This particularly occurs at difficult times such as in the aftermath of natural hazards, when people refer to their divine belief more than usual to find support, and reduce the sense of loss. The prayer gatherings created social-cum-faith capital (Candland, 2000) which promoted a spirit of mutual help and sacrifice in communities during times of extreme misery and destruction in the aftermath of the earthquake. Religion was not only a defining feature of communities’ worldviews; it deeply contributed to the social, cultural, economic and political patterns of their approach to life.

### **7.2.2 The need for partnership between outside organisations and community-based religious institutions in the face of disasters**

Mosques were engaged to varying levels during the recovery, reconstruction and rehabilitation phase of the earthquake, but their contribution was often hidden. This varying level of engagement did not occur due to a conscious choice (such as the result of a policy towards engagement with religious institutions, except in case of USAID) but because of their position

as a key local community institution. The frontline staff of the state, civil society, private and public sector organisations engaged with mosques for practical reasons of reaching communities and gaining legitimacy for their work. This decision was in view of the reality on the ground – the appropriate way to approach communities. The action of the front line staff appeared consistent with Chambers' advice (1984; 2002): to recognise who mattered the most in reality. Focus group discussions with communities confirmed that the field staff of different national and international organisations (e.g. ERRA and UN-Habitat) visited mosques to relate to and interact with communities. These staff involved imams to explain to communities the importance of seismic safety codes and of learning about rescue techniques by narrating to them the Prophet Noah's story from the Koran. The findings show that the social conduct of the mosque is strongly influenced by the organisation of the people (the mosque committee and communities) and influential individuals (the imam). It supports the case for emphasising the role of people's organisations and core individuals in order to achieve development outcomes that are significant and community-centred. This underpins the contention that "institutions are not self-generating or self-sustaining and they achieve little on their own" (Leftwich & Sen, 2010, p. 11). The imam's support or opposition to a development activity at the local level may have a significant effect on its results. As found by Atallah, Khan and Malkawi (2001, p. 57), "Imams are more capable of reaching the public than water specialists". The findings demonstrate that the mosque has a key role in bridging the gap between outside and inside stakeholders and thus contributes to improved understanding between the two resulting in reduction of disaster risk and sustainable development outcomes. This role of local institutions in bridging the gap is clearly demonstrated in other publications (Anderson & Woodrow, 1989; Delica-Willison & Willison, 2004; Heijmans, 2009; Heijmans, Okechukwu, Peursum, & Skarubowiz, 2009; Wisner, 2010).

In this context, the study identifies the critical role of the mosque for disaster policy and practice. The mosque as a community institution is a key actor in disaster management and the imam is a key individual who influences how the community perceives and deals with disaster risk. Thus this study argues the case for engagement with community-based religious institutions and their leaders in support of an earlier finding that faith leaders are in a distinctive and critical community leadership position and they influence the achievement of public policy on DRR (Wisner, 2010). All seven imams and one Christian bishop interviewed during the fieldwork research showed willingness to work with the state for the religiously noble cause of saving people's lives from the vagaries of natural hazards.

This dissertation's results are consistent with earlier views that religious institutions were taken on board if they were perceived to be supportive of development activities, but ignored if perceived otherwise (Bano & Nair, 2007). Although a majority of public sector top officials acknowledged the exceptional potential of the mosque in the future, they did not formally approve interaction with the mosque during the disaster management cycle in the aftermath of the earthquake. This was because the institution of the mosque was perceived either as

unrelated or in opposition to disaster management in its current form (despite the fact that the religious leaders were willing to support any effort towards disaster management). There could have been practical reasons, such as the pressing needs for food and shelter in the immediate aftermath of a disaster, which impeded the building of new partnerships. However, this research emphasises the importance of more research to explore social viewpoints, in particular those of religious institutions, to reduce this gap in the disaster studies literature about their role (for example Chester et al., 2008; Wisner, 2010)

In view of this, the research supports the emerging stance that developing partnerships between international organisations and local community-based religious institutions is important to effectively increase local ownership, win trust and utilise local knowledge, organisations and resources. This conclusion is valid for both development (Department for International Development, 2005; Jacobs & Price, 2003) and disaster (Bamforth & Qureshi, 2007; Belshaw et al., 2001; IRRRC, 2005) contexts. The study has shown one example of an international organisation (USAID) that worked successfully with imams and mosques during the earthquake recovery, reconstruction and rehabilitation phase as a matter of policy. These involvements with the mosque led to a win-win situation for communities and the donor. There was strong community support and involvement, for example, for shifting a girls' school into a boys' school building and the boys' school into the mosque in Banda-3.

### 7.2.3 Religious institutions and gender issues

This research also raises gender issues regarding the future role of the mosque in the disaster management cycle. It agrees with earlier findings that religiosity strongly influences attitudes towards gender equality (De Cordier, 2010; Seguino, 2011). Women were not seen inside mosques. They could not join prayer congregations although they had a desire to do so. They did not form part of the decision making and consultation meetings about disaster management held inside mosques, although there were other channels, such as the wife of the imam and the men of their families, through which they stayed informed and involved. Due to cultural reasons (such as strong purdah custom), religious reasons (such as limitations of physical purity preventing entry to the mosque) and financial reasons (lack of resources to build a separate provision for women), the mosque as a physical place does not seem to be a promising venue for the involvement of women in disaster management in its current form. Despite these current limitations, this research identifies that religious influence is not unavoidably negative and the mosque as a forum can be utilised to further gender participation in disaster management. The female research participants who were literate had become so because of religious education that was accessible, free of cost, supported by imams and provided by seminaries attached to mosques. These women learnt how to read and write in addition to learning basic numeracy skills. The imams promoted socially appropriate income-generating and welfare activities for women such as sewing and mid-wife training respectively.

The need for gender-sensitive approaches during all phases of the disaster cycle is increasingly emphasised (Enarson, Fothergill, & Peek, 2006; Horton, 2012; Richter & Flowers, 2008). How can gender-sensitive disaster management practices thus be promoted through the mosque? This research provides evidence of women's involvement in disaster management, as was the case in the Community-based Disaster Risk Management Programme (CBDRM), where their participation was secured through the support of imams. If appropriately negotiated and engaged, mosques, in an institutional capacity, could be used to promote women's participation in disaster management. Most importantly, in an institutional capacity, the mosque's backing or opposition can make a significant difference to the success or failure of disaster management policy and empowerment of women in particular. This finding corroborates Wisner's (2010) view that even a little support from religious leaders would make a big difference to the secular efforts of DRR. In cultural settings where women are not visible in public places, the mosque performs the role of a "gatekeeper" (Crang & Cook, 2007, p. 21) negotiating to facilitate the initial contact of outside actors (from the state, civil society and private sector) with communities. This occurred when imams assisted the staff of an international private sector firm (Mott MacDonald International UK) to carry out third party validation of housing reconstruction after the 2005 earthquake. The staff used the mosque to introduce them to the community and to stay overnight, and they used the services of imams to talk to women whose husbands were absent. In such an environment, the mosque is a critical community institution that can foster social acceptance for women to participate and contribute towards effective disaster management. These findings are in-line with the growing realisation among international organisations (such as DFID and ICRC) of the value of engagement with international faith-based organisations based on their local grassroots connections including religious institutions (Berger, 2003; Bonney & Hussain, 2001; Clarke, 2006; Department for International Development, 2001, 2005; IRRRC, 2005).

Another example of the mosque and imams supporting the fight against poverty with a civil society organisation (Akhuwat, 2010) was found during the fieldwork. This organisation, Akhuwat, used the mosque as its office to hold gatherings, saving money on its operational costs and the mosque environment to employ a moral responsibility for returning interest-free loans offered to the poor. The distinctive advantage of this approach, having the mosque as a recognised community institution in disaster and development contexts, could be its in-built cultural appropriateness, local ownership, broad participation of communities and therefore greater chance of success in achieving the objectives of development and disaster management strategies and policies.

#### 7.2.4 Moving beyond political sensitivities associated with the mosque

In the political context, the study questions simplistic pejorative labels attached to the mosque such as being a centre for preaching radical views in society and therefore not a safe partner in disaster management. Such labels belittle and fail to recognise the distinct position of the

mosque as a central community institution (Abdel-Hady, 2010; Haque, 2009) drawing attention to the use of the mosque and its social conduct rather than the mosque itself. On this point, it presents a case for engagement rather than disengagement with the mosque as shown by some organisations and Muslim-minority western countries such as the USA (Jamal, 2005). As a community-based religious institution that is embedded in the everyday socio-cultural life of people, the mosque continues to exist, serve, and enjoy its revered position in society. In this way, people will not change their priorities and abandon their affiliation with the mosque just because it has become contentious for the state and any other multi-lateral development or humanitarian role-player. The findings show that all the seven imams and one Christian bishop included in this research showed readiness to engage with the state for the religiously virtuous cause of saving human beings in the face of disaster. Therefore, this dissertation argues that local, regional, national and international level disaster management institutions should acknowledge and engage with the mosque, and utilise its grassroots position for effective and efficient disaster management and to reduce the loss of human lives and assets.

This research adds to a growing understanding that it is difficult to ignore the increasing role of religious institutions where religion is one of the defining features and custodians of the social and cultural values and norms of communities (Chester & Duncan, 2010; Clarke, 2007). Disasters give rise to a situation where people from different parts of the world, quite unfamiliar with each other, come in contact to save lives, provide necessities and rebuild homes during the disaster management cycle. International civil society and private sector organisations have concerns about how to maintain neutrality, stay safe, ensure respect for local sensitivities and win the necessary support of communities to carry out their job (IRRC, 2005). The fieldwork findings show that all the five mosques have been entry points to access communities during response and relief. One mosque (in Banda-3) even facilitated public and private sector activities during the recovery, reconstruction and rehabilitation phase. In cases where mosques and imams could not actively provide this support, this was not due to any inherent ideological conflict with disaster management activities on their behalf, but rather because of communities' reluctance to see their imams involved in apparently non-worship activities. In this context, the research draws attention to the fact that not all mosques and imams were 'equal' with regards to their involvement in disaster management activities. There was diversity in how communities related to their mosques and consequently the roles that mosques played in post-disaster settings. Therefore, it is even more critical to work with this key community institution in both pre- and post-disaster times.

### 7.2.5 The influence of religiosity on disaster risk perceptions

In the psychosocial and spiritual context, the conceptual framework developed in Chapter Two and Three emphasised the inclusion of the mosque because it significantly shapes people's attitudes and perception towards the physical and social environment they live in; and it is especially significant to their attitudes and actions in the face of disaster risk. The results are

consistent with findings that disaster risk perception is fundamental to people's responsiveness, preparedness and ultimately to the promotion of disaster prevention culture (Cannon, Twigg, & Rowell, 2003; Oliver-Smith, 2004). On the one hand, it confirms the findings of earlier studies such as Chester, Duncan and Dibben (2008), who found that perceptions of disaster risk are strongly influenced by the religious views of faith-based communities. On the other hand, none of the seven Imams interviewed during this study ascribed the earthquake to institutional sinfulness such as failure of the government to fulfil its responsibilities to minimise hazard risk before the earthquake. This finding differs from the growing trend in some of the Christian organisations and leaders who hold institutions responsible for disaster losses, as found by Chester and Duncan (2010). However, when involved in training and engaged by UN-Habitat, Imams adopted physical interpretations of the earthquake and persuaded communities to build seismic-safe houses. Thus there is the potential for them to take a broader perspective on the causes of disasters.

The dissertation findings show that the communities had a parallel interpretation and understanding of disasters: religious and scientific. The international and national disaster management-related organisations base their policy structure on scientific interpretation of disasters. The scientific interpretation, in turn, is neither considered nor expected to accommodate people's (or popular) interpretations of disasters, which are religious more often than not in communities where religion is a defining feature of society. However, this dissertation argues that ignorance of religious interpretations of disasters could lead to failure of compliance with disaster management policies. Therefore, the aim of securing lives from disaster losses through an integrative approach to disasters may not be achieved without understanding the religious context (where it matters) of disaster risk perception.

This research finds that the way the state or development organisations explain disasters is not always the same as how disaster-affected people perceive them and that mosques have an important role in influencing people's perceptions of disaster risk. People's perceptions were strongly influenced by the messages from the mosques. These perceptions had both negative and positive implications. Among negative repercussions was that the religious interpretation of the earthquake lessened people's willing compliance with disaster preparedness measures even in the aftermath of such a deadly calamity as the 2005 earthquake. In addition, communities did not fully adhere to seismic safety codes although they participated in other preparedness initiatives such as the CBDRM programme. This is different from the findings of Paradise (2005) who found that those who thought that the earthquake occurred because of the order of Allah were totally fatalistic. However, this dissertation shows that research participants exhibited only some fatalistic tendencies, which is similar to Kennedy's (2001, para. 2) findings which showed that about 7,000 Sicilians responded to state evacuation calls, and also held mass prayer gatherings to defend against the volcanic eruption.

Of the positive effects, resilience was greatly enhanced during the disaster management cycle in the aftermath of the earthquake due to the contribution of the mosque. Prayer gatherings grew stronger and increased in size as more men returned to the mosques in the case study villages. The study confirms earlier findings that people believe they get closer to God during times of a disaster (Gibson, 2006). Utilising this opportunity, the mosque through the imam offered a unique interpretation of the earthquake to the people. This interpretation was socially and culturally acceptable and it created resilience in communities to be able to cope with the trauma and shock, engendered hope and fostered psychosocial recovery. Communities were advised to repent, reconcile and mend their relationship with Allah and stay patient since the earthquake was either a punishment of their sins or a test. Other studies also acknowledge the contribution of religious institutions to increasing resilience in disaster-affected communities (for example see Laditka and Murray (2010) for the support of churches after Hurricane Katrina) or otherwise mentally stressful situations (for example see Ni Raghallaigh and Gilligan (2010) for the contribution of churches in the lives of unaccompanied asylum seekers in Ireland). Keeping in view the positive and negative aspects of religious interpretations of disasters, it is only through meaningful engagement with mosques and imams that strategies are sought to curtail fatalistic tendencies and strengthen resilience among communities. This may help lead communities away from the path of reinforcement of vulnerability during the recovery and reconstruction phase in the aftermath of a disaster.

### 7.2.6 The role of the mosque in supporting livelihood recovery

In the economic context, the findings confirm earlier results such as Rahmani (2006) that the mosque plays a critical role as an information centre in underdeveloped rural communities at the local level. The findings demonstrate that men's gatherings in the mosque led to livelihood decisions such as collective watering and harvesting of crops in addition to exchange of information regarding any employment opportunities in the area during the recovery, reconstruction and rehabilitation phase of the earthquake. The mosque was an intra-community information exchange centre; information came from outside and was dispersed from the mosque to the whole village through loudspeaker announcements. The mosque platform was also utilised by humanitarian organisations (such as World Vision) to seek the assistance of the imam in collecting information about the poor and the marginalised in a community. This information was to serve different purposes including disbursement of cash grants to the poor but also to devise programmes of income generation for them.

### 7.2.7 Summary

In summary, this research has made a contribution to the understanding of the role that mosques and other religious institutions can play in disaster management. It suggests that key actors from the state, civil society and private sector involved in disaster management need to understand the complex relationships (between people and their religious institutions), and

their joint impact on the social environment. A collaborative approach with other actors based on mutual understanding might allow the mosque to realise its potential as a community-based religious institution. This attention and engagement might enable the mosque to perform the eight core functions of the two principles of the UNISDR strategy – directly ‘connecting’ with and ‘convincing’ (UNISDR, 2010a) 1.5 billion Muslims around the world how to work towards a safer future. The centrality of the mosque as a physical structure and a community institution means it is capable of connecting communities by coordinating, campaigning, advocating and informing about DRR activities. Equally, the mosque is able to convince local people by organising, promoting, encouraging and providing for DRR initiatives.

### 7.3 Improving disaster management in Pakistan

This section discusses key issues of disaster management in Pakistan as identified in Chapters Five and Six and provides some suggestions to address them. It also deliberates upon the significance of the role of the mosque in improving the effectiveness the country’s disaster management structures.

#### 7.3.1 Organisational structure of disaster management

The findings show that the practice of the integrated approach to disaster management (for example Blaikie et al., 1994; McEntire, 2001; Pearce, 2003; UNISDR, 2005b), as popularised by the United Nations since the 2000s, suffers from serious institutional shortcomings in the case of Pakistan. Despite new legislation (Government of Pakistan, 2007b) and the framework (National Disaster Management Authority, 2007) to deal with disasters prepared with the technical assistance of the United Nations Development Programme (UNDP), patterns of horizontal and vertical functional overlap among government disaster-related organisations at federal, provincial and district levels have not faded away. In opposition to the prescriptions of the integrated approach emphasising local level capacity building (UNISDR, 2011), the Pakistan disaster management structure remains ad-hoc and top-heavy with only marginal resource transfer to the local level in practice.

Investigation of 50 years of the development planning history of Pakistan has shown that the country’s disaster management policies remained narrowly focussed on dealing with only one of kind of hazard (flooding) before the 2005 earthquake. The disaster management structure was overhauled after the 2005 earthquake in a bid to make it more effective according to the guidelines of the integrated approach. However, the study results illustrate that the addition of new actors increased complexity of the disaster management structure and created new institutional challenges such as friction and conflict of interest without solving the previous ones, including power and resource struggles. The pattern of erecting new disaster management structures without evaluating, upgrading, merging or dismantling the former continued even when the country was hit with one calamity (2005 earthquake), after the other (SWAT Internally Displaced Persons’ crisis 2009 and then 2010 flooding). A fire-fighting

attitude has dominated the disaster management practices despite the government's paper commitments to pursue an integrated approach to disasters in the new framework (National Disaster Management Authority, 2007). These findings are similar to other studies on Pakistan identifying systematic patterns of vulnerability and narrowly focussed structural hazard approaches (Mustafa, 1998; Mustafa & Wrathall, 2011).

In view of the above, the government can get rid of ad-hocism by eradicating duplication of roles (for example the ERRA and NDMA) and implement resource transfer at the local level (to DDMA's and downwards to Union Councils) to benefit from the best practices advocated by the integrated approach to disasters in Pakistan. Meanwhile, the importance of community institutions such as the mosque becomes critical in saving lives and reducing disaster losses. The government help may arrive later than expected and communities might have to survive longer on their own; and therefore it is critical to build DRR into the on-going lives of communities through community-based religious institutions such as the mosque.

### 7.3.2 How disaster management structures could work more effectively with the mosque

The study has demonstrated that the mosque has played a multi-faceted and visible role in the response, relief, recovery, reconstruction and rehabilitation phases of the disaster management cycle in the aftermath of the 2005 earthquake. Nevertheless, this role of the mosque is far from realising its full potential. The readiness of all the seven imams to welcome any initiative soliciting their cooperation to save people's lives and properties is a critical finding for disaster management policy makers and practitioners. The findings support rare voices which argue that the great hidden potential of religious communities and their leaders could be tapped by engagement (Haque, 2009; Wisner, 2010). The mosque is like an 'entrance door' to communities and the imam is the 'key' to this door. If the entrance door (the mosque) and the key (the imam) are engaged, involved and taken on board in disaster management, the ultimate goal of saving human lives and reducing disaster losses might be better achieved at the local level where disasters hit the hardest.

The suggestion of the chairman of ERRA interviewed during the research is worthy of attention: building the capacity of the imam through first aid and vocational training. Imams (equivalent to religious/faith leaders) need to be embedded and involved in disaster preparedness initiatives at the local level since they could become "agents of safety" (Rowel, Mercer, & Gichomo, 2011b, p. 5). In the aftermath of the 2005 earthquake a strong suggestion has been made that the mosque and the Imam be engaged to announce imminent threat as part of an early warning mechanism at the local level (Dekens, 2007; Sudmeier-Rieux, Jaboyedoff, Breguet, & Dubois, 2011; Sudmeier-Rieux et al., 2008). Local religious leaders could undergo specialised disaster training that combines religious and scientific knowledge to create synergy. Moreover, such training need not be one-way; it could help key agencies involved in pre- and post-disaster situations better understand the nature of communities and

the role of the mosque and the imam. However, the findings also show that a communities' perception of the role of an imam can also be a constraint on his social conduct. As found in Banda-1 and -2, despite their desire, the imams could not openly participate in relief and recovery activities since communities did not approve of their engagement in apparently non-worship matters. Therefore, such training of imams may also build their capacity to educate and enlighten their communities' views about the social roles of the mosque. This dissertation does not suggest that the mosque can solely fulfil all objectives of the UNISDR strategy in its current form. Rather, it corroborates the emerging view that religion and spirituality be regarded as significant (Lunn, 2009) and that it is timely to engage with community-based religious institutions as important stakeholders in disaster management. It underscores the imperative for wider community training and education programmes where imams and disaster agencies work as partners to build shared understanding of disaster risk and measures to reduce such risk.

This is the first in-depth case study of its kind examining the role of the mosque in disaster management in the context of Pakistan. The research findings support the literature arguing that the proper employment of the mosque, a hugely underutilised social institution, can help to address several social issues in Pakistan (Council of Islamic Ideology, 1993; Haque, 2009; Mahr, 2005). The significance of the mosque as a public opinion making institution of society was formally acknowledged by the government when the Ministry of Population trained and involved imams in birth control advocacy programmes (Ministry of Population Welfare, 2005, 2006, 2009). The government can benefit from the experience of the Ministry of Population to look for more meaningful ways of engagement with mosques in disaster management. Although hesitant to engage with the mosque, the top policy makers of the government called it an immensely under-employed community resource that had ample potential to transform society and address social issues.

#### **7.4 Development, disasters and the place of religious institutions: employing post-development theory**

At conceptual and practical levels, there were seminal undertakings to delineate the development and disaster nexus nearly two decades ago (Blaikie et al., 1994). This dissertation underscores the need for scholars in disaster research and development studies to examine the interrelationships between community-based religious institutions and other stakeholders including the government, the private sector and civil society organisations. This is particularly important in view of the increasing need for disaster management at the international and national levels, and DRR to be constructively linked to actions at the local level. This linkage is not well developed yet and there is a growing gap between international efforts such as the United Nations Hyogo Framework for Action 2005 and its implementation at the local level as pointed out in the report titled 'Clouds but Little Rain' (Global Network of Civil Society Organisations for Disaster Reduction, 2011).

The dissertation chose the post-development lens to analyse the role of the mosque in the aftermath of the 2005 earthquake, in its capacity as a community-based institution. This choice is justified by showing the convergence between the disaster (Anderson & Woodrow, 1989; Delica-Willison & Willison, 2004; Heijmans, 2009; Lewis, 1999; Maskrey, 1989; Maskrey, 2011; Quarantelli, 1997) and post development studies literature (Escobar, 1995; Escobar, 2010; Esteva & Prakash, 1997; Gibson-Graham, 2011; Ziai, 2007): emphasising acknowledgement and utilisation of local knowledge, resources, skills, social networks and engagement with community-based and grassroots institutions and organisations, which can contribute to risk reduction.

Employing post-development theory, this dissertation demonstrates the vital constructive role that can be played by community-based institutions (in this case, the religious institution of the mosque) in disasters. This is a new application of post-development theory in a disaster context. In addition, it provides new insights into the role of community-based religious institutions, drawing on both disaster (for example Haque & Etkin, 2007; Paton, 2006; Wisner, 2010) and development studies literature (for example Esteva, 2010; Gibson-Graham, 2011; McGregor, 2009; McKinnon, 2008) literature. Within a disaster context, this research has shown how a local community-based institution, the mosque, can help to save lives, reduce disaster losses, create resilience, provide psychosocial healing and build social networks in all the disaster phases of preparedness, response, relief, recovery, reconstruction and rehabilitation.

How can development be practised differently in a disaster context from a post-development theory point of view, where communities' choices and priorities are valued? This research shows new possibilities and presents examples of practising development differently during the recovery, reconstruction and rehabilitation phase in the aftermath of the 2005 earthquake in Pakistan. The local staff of disaster-related organisations approached imams to win their support for involving communities, including women, in the CBDRM programmes. Although, the programme guidelines do not contain any reference to religious texts the staff, using local knowledge, incorporated the appropriate religious references (such as the story of Noah's ark from the Koran) in their training programmes, to relate to religious leaders and communities. Through this action, communities understood the importance of the programme, felt motivated to join training and men allowed women to participate. Similarly, an NGO imparting masonry training to the earthquake-affected communities chose to build community toilets onto the side of the mosque in the village during the training. Although, this (secular) NGO was not involved with any religious institution, it supported the local religious institution (the mosque) that was important to local communities during the recovery, reconstruction and rehabilitation phase. This action built the trust of local communities for this NGO, which was critical for ensuring community participation in its development activities. These examples illustrate the possibilities of pursuing post-development theory ideals in a disaster context at the local level and are consistent with the scarce literature on this subject (McGregor, 2007; McGregor,

2010). During the rebuilding and reconstruction in the aftermath of 2004 tsunami, McGregor (2010) noted that some NGOs moulded their agenda, which had been to not build religious places, and supported building and repair of religious places. However, they referred to this activity as building of 'community centres' instead of 'religious places' while reporting back to their donors who would not allow spending money on religious buildings. In other research in Timor-Leste, McGregor (2007) observed that some local organisations would only partner with those donor agencies who would support their goals of development and not vice versa. Thus, this research adds value to the exploration of possibilities of practising post-development theory in a disaster context whereby the priorities of local communities, which do sometimes centre on their religiosity, are not ignored in development efforts. It has provided examples of the influence of community-based religious inspirations making their way into the agendas of international development organisations while these organisations interact with local environments and realities.

From a post-development theory point of view, this study identifies that the integrated approach to disaster management falls short of being fully holistic in practice. The integrated approach did not accord due importance to communities' choices particularly those of relating to religious institutions during the recovery, reconstruction and rehabilitation phase in the aftermath of the 2005 earthquake. The contradiction between theory and practice became apparent when this approach did not take into account the role of the key community stakeholder, the mosque. As found in the UNISDR's definition and examples (UNISDR, 2009), and in practice seen at the ERRA's international conference, it is schools and hospitals, not religious institutions, which are considered to be critical community structures. This dissertation shows that the mosque was considered the safest shelter, constructed by the community itself and prioritised above the school building in terms of safety. However, the government did not support or monitor its repair or reconstruction as per seismic safety codes in the aftermath of the earthquake. Even though it was acknowledged in the programme documents (the CBDRM guidelines) that the mosque was part of the critical community infrastructure, such an acknowledgement was not backed by actions. It was apparent that the government, at no point in infrastructure rebuilding and rehabilitation considered repairing or rebuilding mosques that were damaged or destroyed due to the earthquake. The government did not think of the mosque rebuilding as a priority and necessity due to practical reasons of paucity of time and resources, as explained by the chairman of ERRA in his interview during this research. However, this kind of marginalisation of local religious institutions despite their critical significance for local communities (such as places for psycho-social recovery) is not uncommon, as seen in post-disaster reconstruction in other places, for example Aceh. McGregor (2010, p. 735) observed that "... religious institutions were often marginalised, deemed out of sight, [and] unimportant..." by international development organisations during reconstruction in the aftermath of the 2004 tsunami in Aceh.

In view of the above and looking at it from a post-development theory view (Bankoff, 2004a; Cutter, 2006; Esteva & Prakash, 1997) this study finds that the integrated approach is still influenced by the mainstream development and disaster studies literature. As shown from the fieldwork research in Pakistan, this approach over-simplified the complex reality of life, and followed “conventional universalism” (Esteva, 2010, p. 67) by ignoring individual and communities’ religious identities and spirituality (Rahnema, 1992). The integrated approach followed by the government in collaboration with donors implemented uniform policy prescriptions for operational simplicity and failed to empower communities to ‘own’ their risk and chart their own course for recovery in the post-disaster setting.

This research, however, emphasises the need for the integrated approach to better recognise multiple influences, including religious worldviews, at the community level. This acknowledgment is essential for an all-encompassing development approach that is supported and sustained by communities. External support will bring positive development outcomes only if the methods of community support are in congruence with the prevailing social fabric and built upon legitimate community institutions (in this case, the mosque) with appropriate linkages to local, regional, national and international actors and institutions. These findings are consistent with the growing academic scholarship in the development (Deneulin & Rakodi, 2011; Lunn, 2009) and disaster studies literature (Chester, 2005c; Gaillard & Texier, 2010; Wisner, 2010) which exhorts pro-people development, giving due recognition to people’s religion, spirituality and religious institutions.

## 7.5 Looking ahead: future research

Increased understanding of disaster complexities shows that no matter how resourceful a country may be, the goal of effective disaster management to accomplish the United Nations Millennium Declaration (Clause 23 (5), which “resolves to intensify cooperation to reduce the number and effects of natural and man-made disasters” under the heading IV (Protecting Our Common Environment) (United Nations, 2000, p. 6), cannot be achieved without due engagement of communities at the frontline (UNISDR, 2010b). There have to be linkages to ensure benefits from the combined efforts of frontline communities with state, civil society organisations and the private sector in reducing hazards risks. At a policy level, this dissertation illustrates that there is a vacuum in understanding between the top (disaster management policy makers) and the bottom (disaster-affected communities) of the two comparative narratives – religious versus scientific interpretation of disasters.

Future research needs to look into the development of a new approach to addressing disasters. Such an approach may endeavour to find synergies by combining religious and scientific interpretations of disasters while accepting and valuing the former as a valid social explanation of disasters. This synergy may be achieved without acknowledging and valuing community-based religious institutions, including churches, mosques, synagogues and temples as important role-players in disaster management. Research should seek to find ways

to overcome the fatalistic tendencies of a religious interpretation of disasters but also use this interpretation to win honest compliance with seismic safety reconstruction codes and other such disaster preparedness measures. Likewise, future research might suggest how to further benefit society by channelling the multi-faceted contribution of community-based religious institutions such as their psychosocial and spiritual healing services, the trust and community ownership that they enjoy and their ability to influence public perception.

One example of exploring such approaches could be learning from the experiences of the CBDRM and UN-Habitat ground staff who involved imams in training, as shown in this dissertation. Through the imams' engagement, they were able to harmonise the apparently conflicting religious and scientific interpretation of disasters. This kind of understanding is required at the disaster management policy level and there are other such examples in the development literature where religiously-driven and morally-contextualised approaches have been used for the material welfare of communities (Akhuwat, 2010; Shah et al., 2001).

This research has shown that community-based religious institutions are useful but underestimated and underutilised platforms available to disaster management policy makers and practitioners. While actual roles and manifestations of local religious institutions may vary at different locations, further studies may reveal several untapped benefits of engagement with these institutions in other parts of the world. For example, even in Muslim minority countries, mosques were instrumental in raising funds and sending volunteers to Kashmir in the aftermath of the 2005 earthquake (Rehman & Kalra, 2006). Mosques continue to serve as a place for dissemination of community welfare messages for social organisation even in countries with a small Muslim population (Wardak, 2002). Similarly in New Zealand, mosques were involved in fundraising activities during different disaster relief and rehabilitation operations in the country (recent examples are for the two Christchurch earthquakes of September 4, 2010 and February 22, 2011) and overseas (for example the 2011 flooding in Australia and Pakistan) (The Federation of Islamic Association of New Zealand, 2011). To raise funds, Muslim men and women were called upon by imams to donate generously, motivated through divine promises of reward from Allah. Such donation calls were warmly received in the Muslim community who sold food to Friday gatherings in addition to giving cash donations. Future research, therefore, may look at the different roles of community-based religious institutions, such as mosques; for example their role as information, awareness and fund raising centres during disaster relief and rehabilitation and their role in relation to other actors in disaster management in Muslim minority countries.

## 7.6 Final statement

This research has attempted to reduce the gap in the body of knowledge about the role of local community-based religious institutions in disaster management by highlighting the hidden, underrepresented but multi-faceted role of the mosque in the aftermath of the 2005 earthquake in Pakistan. It has created new knowledge about the role of community-based

religious institutions, particularly the mosque, in the response, relief, recovery, reconstruction, rehabilitation and preparedness phases of a disaster. It has added to the body of theoretical knowledge on post-development theory by providing a new example of working with communities through a community-based religious institution. In societies where religion is a defining feature of individual and collective identity, a powerful religious narrative and worldview is likely to permeate, if not prevail, in the socio-cultural environment. As disasters occur, community-based religious institutions such as mosques radiate their views and interpretations among disaster-affected communities.

This research argues that the makers of disaster management policy and structure should rethink their conservative stance of staying disengaged from religious institutions at both policy and practice levels. By documenting and analysing the role of the mosque in disaster management through an in-depth case study, it has disputed their wisdom of underestimating the apparently invisible roles of religious institutions, by highlighting their ability to influence the social, economic and political processes that affect communities' response to hazards. It furthers the case for engagement and dialogue with community-based religious institutions including churches, mosques, synagogues and temples while acknowledging and valuing them as important stakeholders in disaster management. This dissertation puts forward the case for adopting a new collaborative approach that acknowledges both the religious and scientific views in disaster management. Such an approach may enable us to better prepare and survive future disasters both materially and spiritually.

## Appendix A: Ethics approval



**Massey University**

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(Research Ethics)  
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11 March 2009

Abdur Cheema  
School of People, Environment and Planning  
PN331

Dear Abdur

**Re: HEC: Southern B Application – 09/06**  
**The role of religious institutions in achieving disaster risk reduction: A case study of the role of mosques in the aftermath of 2005 earthquake in northern Pakistan**

Thank you for your letter dated 10 March 2009.

On behalf of the Massey University Human Ethics Committee: Southern B I am pleased to advise you that the ethics of your application are now approved. Approval is for three years. If this project has not been completed within three years from the date of this letter, reapproval must be requested.

Please note that travel undertaken by students must be approved by the supervisor and the relevant Pro Vice-Chancellor and be in accordance with the Policy and Procedures for Course-Related Student Travel Overseas. In addition, the supervisor must advise the University's Insurance Officer.

If the nature, content, location, procedures or personnel of your approved application change, please advise the Secretary of the Committee.

Yours sincerely

Dr Karl Pajo, Chair  
**Massey University Human Ethics Committee: Southern B**

cc Dr Regina Scheyvens  
School of People, Environment and Planning  
PN331

Dr Bruce Glavovic  
School of People, Environment and Planning  
PN331

Dr Imran Muhammad  
School of People, Environment and Planning  
PN331

Dr Henry Barnard, HoS  
School of People, Environment and Planning  
PN331

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Massey University Human Ethics Committee  
Accredited by the Health Research Council

To Kaitiaki  
ki Pūrāhoro

## Appendix B: Information sheet for community members

My name is Abdur Rehman Cheema and I am here to carry out fieldwork for my dissertation for a doctoral qualification in Development Studies. I am associated with the Development Studies Programme, Massey University, Palmerston North, New Zealand. My research is supervised by Associate Professor Regina Scheyvens, Coordinator, Development Studies Programme, School of People, Environment and Planning, Massey University, Palmerston North, New Zealand. Her contact details are R.A.Scheyvens@massey.ac.nz. In Pakistan, I can be contacted at *to be provided once in the field*

The main objective of this study is to understand the role played by mosques after the 2005 earthquake in Pakistan in the earthquake affected areas. Some of the participants of this research have been identified on the basis of their age, gender and literacy/ illiteracy level. If you are interested in participating you are invited to spend time with me and you are welcome to ask further questions you may have about participating in the research. If you agree to participate in the research, you may have to sign a consent form. If you are unable to sign a consent form, your verbal consent for participation in the research will be audiotaped. You will be involved in one or two interviews lasting for about an hour each, depending on your availability. You may be asked to be engaged in a focus group discussion, which is a discussion of four to five people on a topic of common interest. I will also be noting down observations of life in this community while I am here conducting research. During this time, I will ask your permission before I ask questions, take photographs or videotape you.

If you decide to take part in this study, you have the right to withdraw at any time. You have the right to refuse to answer any particular question, to refuse to have your photograph taken or to be videotaped. You also have the right to ask for any recording to be stopped and erased at any point in time.

All the data will be transcribed by me. While every effort will be made to ensure your confidentiality, this cannot be guaranteed. Your name will not be included in any publication without your consent. During the analysis, pseudonyms will be used and data will be referred to in aggregates to protect your confidentiality. All recorded interviews will be kept safe for your confidentiality during the research and will be the property of the university after completion of the research. The transcripts and consent forms will be destroyed by the university after five years.

This project has been reviewed and approved by the Massey University Human Ethics Committee: Southern B, Application 09/06. If you have any concerns about the conduct of this research, please contact Dr Karl Pajo, Chair, Massey University Human Ethics Committee: Southern B, telephone 0064 4 801 5799 x 6929, email [humanethicsouthb@massey.ac.nz](mailto:humanethicsouthb@massey.ac.nz).

I hope this information sheet has answered all your questions. Thank you kindly for considering my request for you to participate in this research.

Abdur Rehman Cheema  
PhD Candidate  
Email: [A.R.Cheema@massey.ac.nz](mailto:A.R.Cheema@massey.ac.nz)

## Appendix C: Information sheet for experts

My name is Abdur Rehman Cheema and I am here to carry out fieldwork for my dissertation for a doctoral qualification in Development Studies. I am associated with the Development Studies Programme, Massey University, Palmerston North, New Zealand. My research is supervised by Associate Professor Regina Scheyvens, Coordinator, Development Studies Programme, School of People, Environment and Planning, Massey University, Palmerston North, New Zealand. Her contact details are [R.A.Scheyvens@massey.ac.nz](mailto:R.A.Scheyvens@massey.ac.nz). In Pakistan, I can be contacted at *to be provided once in the field* *to be provided once in the field*

The main objective of this study is to understand the role played by mosques after the 2005 earthquake in Pakistan in the earthquake affected areas. Some of the research participants have been identified from different organisations on the basis of their expertise and experience in disaster research and rehabilitation.

If you are interested in participating, you are invited to spend time with me and you are welcome to ask further questions you may have about participating in the research. If you agree to participate in the research, you will have to sign a consent form. You will be involved in one or two interviews lasting for about an hour each depending on your availability.

If you decide to take part in this study, you have the right to withdraw at any time. You have the right to refuse to answer any particular question, to refuse to have your photograph taken or to be video-taped. You also have the right to ask for any recording to be stopped and erased at any point in time.

All the data will be transcribed by me. While every effort will be made to ensure your confidentiality, this cannot be guaranteed. Your name will not be included in any publication without your consent. During the analysis, pseudonyms will be used and data will be referred to in aggregates to protect your confidentiality. All recorded interviews will be kept safe for your confidentiality during the research and will be the property of the university after completion of the research. The transcripts and consent forms will be destroyed by the university after five years.

You are free to express your views as an individual or as a representative of your organisation. If you require permission from your organisation before you speak for yourself or on behalf of your organisation, such permission should be obtained prior to your interview.

This project has been reviewed and approved by the Massey University Human Ethics Committee: Southern B, Application 09/06. If you have any concerns about the conduct of this research, please contact Dr Karl Pajo, Chair, Massey University Human Ethics Committee: Southern B, telephone 0064 4 801 5799 x 6929, email [humanethicssouthb@massey.ac.nz](mailto:humanethicssouthb@massey.ac.nz).

I hope this process has answered all your questions. Thank you kindly for considering my request for you to participate in this research.

Abdur Rehman Cheema  
PhD Candidate  
Email: [A.R.Cheema@massey.ac.nz](mailto:A.R.Cheema@massey.ac.nz)

## Appendix D: Informed consent

### **The role of religious institutions in disaster management: A case study of the role of mosques in the aftermath of the 2005 earthquake in northern Pakistan**

I have read the information sheet for this study and have had details of the study explained to me. My questions about this study have been answered to my satisfaction and I may ask any further questions at any point during the study. I understand that I have the right to withdraw from the study at any time.

I know that I can decline to answer any question during the interview and that I may request that any comments be taken off the record. I understand that I can answer the questions and not be recorded or have notes taken at the time. I also know that I have the right for the audio or video-tape to be turned off at any time during the interview.

I consent to provide information on the basis that it will only be used for the purpose of completing the research project. I understand that I will not be identified by name if I wish so and every effort will be made to maintain my confidentiality but it is not guaranteed. If I participate in a focus group discussion, I consent not to disclose any information discussed in this forum.

This project has been reviewed and approved by the Massey University Human Ethics Committee: Southern B, Application 09/06. If you have any concerns about the conduct of this research, please contact Dr Karl Pajo, Chair, Massey University Human Ethics Committee: Southern B, telephone 04 801 5799 x 6929, email [humanethicsouthb@massey.ac.nz](mailto:humanethicsouthb@massey.ac.nz). I agree to participate in the study under the conditions set out on the information sheet.

Signature: -----

Name: -----

Designation /organisation: -----

Contact information:-----

Date:-----

## **Appendix E: Interview schedules**

### **Discussion themes:**

Disaster risk reduction (relief, rehabilitation and preparedness), risk management and the role of mosques.

### **Interview schedule for government officials**

What were the main local institutions or organisations you chose to work with in the aftermath of the earthquake?

Did you engage with mosques for carrying out the earthquake relief and rehabilitation processes? Why/why not?

Did you utilise the institution of the mosque for circulating any information relating to the earthquake management processes? Why/why not?

Did you experience the contribution of mosques including imams in the whole earthquake relief and rehabilitation drive?

What was the role of the mosque as a community institution in the earthquake relief and rehabilitation?

What did you experience in the rehabilitation process after the earthquake regarding the reconstruction of mosques? Did you accord any priority to the reconstruction of mosques as compared to other community institutions?

Do you think that the institution of the mosque including imams can be mobilised more effectively for achieving the common good of disaster risk reduction? If so, in what ways?

What kind of role you foresee in the future for mosques in a) disaster preparedness, b) relief and c) rehabilitation?

### **Interview schedule for community members/earthquake survivors**

Why do you think earthquakes occur?

Do you think that belief in Allah or fate hinders, facilitates or does not affect your attitude towards disaster perception, preparedness, relief and rehabilitation?

Did you receive any kind of help from a mosque, for example spiritual or material, after the 2005 earthquake?

Was the topic of the earthquake discussed in the Friday sermons? And what kind of interpretation of the earthquake did you receive from the pulpit of the mosque through the imam?

Did you receive any useful information regarding earthquake relief, rehabilitation or preparedness for future disasters from the mosque?

Do you think that the institution of the mosque can be mobilised for achieving the common good of disaster risk reduction? If so then in what ways?

### **Interview schedule for the imams of earthquake affected areas**

What do you think why earthquakes occur?

Do you think that belief in Allah or fate hinders, facilitates or does not affect your attitude towards disasters perception, preparedness, relief or rehabilitation?

What role was played by your mosque in the whole earthquake relief and rehabilitation process? What kind of support was provided to the earthquake survivors from this mosque?

In what ways did you personally contribute to the earthquake relief and rehabilitation after the earthquake?

Were you approached by any relief, rehabilitation, government or private organisation for delivering information to the mosque attendees in the aftermath of the earthquake?

What message did you deliver to the Muslim community through your sermons about the occurrence of the earthquake?

Did you ever talk about an earthquake in your Friday sermons before this earthquake, or have you done so since the earthquake to prepare the community members for future disasters?

What kind of role can you foresee for your mosque for disaster preparedness, relief and rehabilitation in the future?

Do you think that the institution of the mosque can be mobilised for achieving the common good of disaster risk reduction? If so, in what ways?

**Interview schedule for other organisations including secular and faith-based organisations involved in the earthquake relief and rehabilitation**

Does your organisation have a policy on working with faith-based communities or organisations?

Did you use the mosque for any activities while carrying out relief and rehabilitation tasks after the earthquake? If so, how? If not, why not?

Did you experience the contribution of mosques including imams in the whole earthquake relief and rehabilitation drive? For example, identification of the poor and needy, or connecting the vulnerable to other safety networks like Zakat and other faith-based organisations.

Do you think that engagement with the institution of the mosque can play a role in understanding the socio-cultural environment of local communities?

Do you think that the institution of the mosque can be mobilised for achieving the common good of disaster preparedness, relief or rehabilitation? If so then in what ways?

Did you experience that the survivors' belief in Allah (Muslim name of God) affected their perception or response to the earthquake?

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