

# ABBOTTABAD

## District Disaster Risk Management Plan



# ABBOTTABAD

## District Disaster Risk Management Plan



Building Enabling Governance and Institutions  
for Earthquake Response (BEGIN-ER)



Copyright © 2007 United Nations System in Pakistan

Material in this publication may be freely quoted or reprinted, but acknowledgement is requested.

Printed by Instant Print System (Pvt.) Ltd., Islamabad – Pakistan.

---

This Publication is available from:

1. Country Director - UNDP  
UN House  
House No. 12, Street No. 17, F 7/2  
Islamabad, Pakistan.  
Tel: +92-51-8255600  
Fax: +92-51-2655014 -2655015  
  
Website: <http://www.undp.org.pk>
2. Earthquake Reconstruction & Rehabilitation Authority (ERRA)  
Prime Minister's Secretariat  
Constitution Avenue  
Islamabad – Pakistan  
Tel: +92-51-9222373  
Fax: +92-51-9204197  
  
Website: <http://www.erra.gov.pk>

## Table of Contents

Acronyms	iii
Acknowledgements	iv
Foreword	vii
Message From Deputy Chairman ERRA	ix
Message From The Chief Secretary NWFP	xi
<b>Section 1: Disasters and District Abbottabad</b>	<b>1</b>
1.1. District Introduction	1
1.2. Hazard, Vulnerability and Capacity Analysis	2
1.2.1. High Priority	2
1.2.2. Medium Priority	5
1.2.3. Disaster Trends in Abbottabad	6
1.3. District Capacity for Disaster Risk Management	8
<b>Section 2: Disaster Risk Management Structure and Functions</b>	<b>11</b>
2.1. Institutional Mechanism for Disaster Risk Management	11
2.1.1. District Disaster Management Authority Abbottabad	11
2.1.2. Organizational Structure and Members	12
2.1.3. Disaster Risk Management at Tehsil, Union Council and Village Level	19
2.2. Disaster Risk Management Plan-Purpose, Scope and Principles	21
2.2.1. Purpose of the Plan	21
2.2.2. Scope of the Plan	21
2.2.3. Guiding Principles of the Plan	21
2.2.4. Planning Assumptions	22
2.2.5. Definition of Terms	22
2.2.6. Process	22
2.2.7. Distribution of Copies	23
2.2.8. Plan Preparation Date and Updating Notes	24
2.3. Priority Areas for Disaster Risk Reduction and Response in Abbottabad	24
2.3.1. Priority Area 1: Institutional and Legal Arrangements	24
2.3.2. Priority Area 2: Hazard and Vulnerability Assessment	28
2.3.3. Priority Area 3: Training, Education and Awareness	31
2.3.4. Priority Area 4: Community and Local Risk Reduction Programming	35
2.3.5. Priority Area 5: Multi-Hazard Early Warning System	38
2.3.6. Priority Area 6: Mainstreaming Disaster Risk Reduction into Development	41
2.4. References	43

<b>Section 3: Annexures</b>	<b>47</b>
Annex I: District Abbottabad Profile	49
Annex II: Tehsil / Union Council Wise Population Of District Abbottabad	57
Annex III: Major Faultlines Affecting District Abbottabad	62
Annex IV: Abbottabad Landslide Vulnerable Areas	63
Annex V: Disaster Risk Management Terms	70
Annex VI:	
a. District Level Damage, Needs & Capacity Assessment Form	72
b. Union Council Level Damage, Needs & Capacity Assessment Form	75
c. Village Level Damage, Needs & Capacity Assessment Form	78
Annex VII: Menu Of Disaster Risk Reduction Options	83

## Acronyms

ADB	Asian Development Bank
AHI	Avian & Human Influenza
AJK	Azad Jammu & Kashmir
BHU	Basic Health Unit
CBDM	Community Based Disaster Management
CBO	Community Based Organization
CCB	Citizen Community Board
CD	Civil Defence
CRED	Centre for Research on the Epidemiology of Disasters
DCO	District Coordination Officer
DDMA	District Disaster Management Authority
DDRO	Deputy District Revenue Officer
Dept.	Department
DEOC	District Emergency Operations Centre
DERA	Drought Emergency Relief Assistance
DM	Disaster Management
DO	District Officer
DRM	Disaster Risk Management
DPO	District Police Officer
DRO	District Revenue Officer
DRR	Disaster Risk Reduction
DRU	District Reconstruction Unit
DSP	Deputy Superintendent Police
EDO	Executive District Officer
EOC	Emergency Operations Centre
ERC	Emergency Relief Cell
ERRA	Earthquake Reconstruction and Rehabilitation Authority
EWS	Early Warning System
FFC	Federal Flood Commission
GoP	Government of Pakistan
HFA	Hyogo Framework for Action
HRDO	Human Resource Development Officer
IEC	Information, Education, Communication
INGO	International Non-Governmental Organization
IT	Information Technology

LGO	Local Government Ordinance
NDMA	National Disaster Management Authority
NDMO	National Disaster Management Ordinance
NESPAK	National Engineering Services Pakistan
NFIs	Non Food Items
NGO	Non-Governmental Organization
NWFP	North West Frontier Province
OCHA	Organization for Coordination of Humanitarian Affairs
PAK	Pakistan Administered Kashmir
PDMA	Provincial Disaster Management Authority
PERRA	Provincial Earthquake Reconstruction and Rehabilitation Authority
PMD	Pakistan Meteorological Department
PRCS	Pakistan Red Crescent Society
RHU	Rural Health Unit
RTIs	Respiratory Tract Infections
SOPs	Standard Operating Procedures
SUPARCO	Pakistan Space and Upper Atmosphere Research Organization
TMA	Tehsil Municipal Authority
TMO	Tehsil Municipal Officer
UC	Union Council
UNDP	United Nations Development Programme
UN-ISDR	The United Nations Inter-agency Secretariat of the International Strategy for Disaster Reduction
VC	Village Council
WAPDA	Water and Power Development Authority
WB	World Bank

## Acknowledgements

This document has been developed through an extensive process of consultations and builds on the ongoing Disaster Risk Reduction Strategy of the NWFP Government. Acknowledgement is due to following district government officials, departments and stakeholders who participated in the consultation process for the development of this plan.

- Arshad Majeed Mehmoud, DCO Abbottabad
- Habibullah Khan, HRDO Abbottabad DCO Office
- Malik Ghulam Sarwar, Civil Defence Officer - DCO Office
- Mohammed Ishaq Qureshi, EDO - Finance and Planning Dept.
- Anayatullah Waseem, DO - Finance Dept.
- Mohammad Shafiq, DO - Planning Dept.
- Mohammad Tayab, DD - Information Dept.
- Muneer Hussain, DDO - Works & Services Dept.
- Shahab Khan, DO - Revenue and Estate Dept.
- Nisar Khan Tanoli, District Police Officer - Police Dept.
- Rustam Khan, District Forest Officer - Forest Dept.
- Ishtiaq Khan, District Housing Coordinator - DRU
- Mohd Mushtaq Abbasi, EDO - Agriculture Dept.
- Zahida Yasmeen, DO - Community Development
- Bashir Hussain Shah, EDO - School & Literacy
- Dr. Mohammad Javed Khan, TMO - TMA
- Col. Kamran Khan, Co Bridge Battalion - Pakistan Army
- Naeem Iqbal, Manager - SUNGINGO
- Nazrul Islam, Programme Manager - CPDINGO
- Saqib Ali, Coordinator - CESSD NGO
- Sardar Haider Zaman Khan, District Nazim Abbottabad





## Foreword

The devastating earthquake of October 2005 brought about an acute awareness among government institutions and communities of the critical need for disaster risk management. As part of the joint UN response to earthquake relief and recovery, the United Nations Development Programme (UNDP) supported the government in restoring the operations of local government institutions for the planning and implementation of recovery activities through the “Building Enabling Governance and Institutions for Earthquake Response (BEGIN-ER)” project in the affected districts of North West Frontier Province (NWFP) and Pakistan Administered Kashmir (PAK). It was during the implementation of the capacity building component of this project that government officials, elected local representatives, community based organizations, and national and international NGOs identified the need for developing District Disaster Risk Management Plans.

Meanwhile, the Government of Pakistan promulgated the National Disaster Management Ordinance in December 2006. The Ordinance provides for a coherent disaster risk management system through the establishment of National Disaster Management Commission (NDMC) and National Disaster Management Authority (NDMA). It also calls for instituting similar bodies at the provincial and district levels. The NDMA has been established to ensure that appropriate policies, strategies and programmes for risk management are developed and implemented to reduce disaster risks in a proactive, organized and effective manner.

Considering these national level developments and the needs expressed by local authorities, UNDP engaged national and international planning experts to develop disaster risk management plans for the districts of Mansehra, Abbottabad, Shangla, and Battagram in NWFP. During the process, they conducted a series of bilateral meetings and had consultations with the provincial and district government officials and civil society representatives. Based on review of the secondary data and consultations, draft plans were prepared, which were presented in district level stakeholder workshops for final comments. The plans were also shared with Earthquake Reconstruction and Rehabilitation Authority (ERRA) and we are grateful especially to Lieutenant General Nadeem Ahmed for his valuable inputs to finalize and endorse the district plans.

I am glad to present the District Disaster Risk Management Plan (DDRMP) of district Abbottabad, which has been developed with a primary objective of saving lives, properties and infrastructure of the district from existing and future natural and human-induced hazards. The Plan consists of three sections: a) description of hazards, and physical and socio-economic features of district Abbottabad; b) details of strategies, structures and roles of stakeholders in disaster risk management; and c) reference material including policies, laws, ordinances, and recommended readings on the subject.

I am grateful to our experts Mr. Noel Puno and Mr. Amjad Gulzar for putting together their efforts in producing the Plan. For guiding the planning process we are thankful to Mr. Mohammad Zafar Iqbal, Mr. Zubair Mureshed and Mr. Irfan Maqbool. Thanks are also due to Ms. Shaista Hussain, Mr. Tariq Rafique and Mr. Usman Qazi for review and editing of the plan, and Ms. Asma Rashid and Ms. Jamila Sikander Khan for the copy editing. The preparation of this document and publishing has been made possible with support from United Nations secretariat of the International Strategy for Disaster Reduction (UN-ISDR).

The production of District Disaster Risk Management Plan is only a first step towards achieving the broader objective of reducing disaster risks. We hope that the provincial government would extend all possible support to the district government through the establishment of the District Disaster Management Authority and provision of resources for the implementation of this plan.



**Mikiko Tanaka**  
Acting Country Director  
UNDP Islamabad

## Message from Deputy Chairman ERRA

In the post-earthquake phases of emergency relief, early recovery, rehabilitation of the affected populace, and the on-going process of reconstruction in NWFP and Azad Jammu & Kashmir, the United Nations Development Programme Pakistan has so far played a commendable role through its continuous support to the Earthquake Reconstruction and Rehabilitation Authority (ERRA).

Most significantly, the BEGIN-ER (Building Enabling Governance and Institutions for Earthquake Response) project has been a great success in terms of providing critically needed prefabricated offices to the local government institutions in the most affected districts and enhancing capacities of elected representatives, government officials, and community based organizations for an effective and integrated response to the earthquake disaster.

I am glad that under the training component of the BEGIN-ER project, UNDP has been able to produce District Disaster Risk Management Plans for Muzaffarabad, Rawalakot, Bagh and Neelum districts in AJ&K and Abbottabad, Battagram, Shangla and Mansehra districts in NWFP.

I congratulate Mr. Mohammad Zafar Iqbal, Assistant Resident Representative, UNDP and his team for such a tangible and timely output. It is expected that these plans can be used as guidelines for development of plans by National Disaster Management Authority for other districts of Pakistan.

The ERRA, on its part, would extend all possible assistance to the district governments for successful implementation of the disaster risk management plans in due course of time. Additionally, the planning guidelines and framework would also be shared with other district governments in Pakistan to be followed during the future development discourse.

I am confident this initiative would lead towards achieving the overall objective of making communities more resilient against future hazards and putting the country on the path of integrating disaster risk reduction into development plans, ensuring sustainable development.



Lieutenant General Nadeem Ahmed  
Deputy Chairman, ERRA



## Message from the Chief Secretary - NWFP

The tragedy of October 8, 2005 Earthquake is unprecedented in the history of Pakistan. The globally acclaimed relief and recovery response has managed to recreate a semblance of normalcy in the lives of the affected people, but the challenge of making the future less disaster prone is still ahead of us. An optimistic outcome of the tragedy is the increased sensitization about strengthening disaster risk management capacities at all levels.

The decentralized governance system of Pakistan puts the district-based structures at the forefront for planning, management, and oversight of service delivery initiatives. It is therefore, most appropriate that the efforts towards strengthening the capacities for disaster risk management are centred on the district-level stakeholders.

UNDP-Pakistan having a history of a most productive development partnership with the people and government of NWFP has facilitated the compilation of District Disaster Risk Management Plans (DDRMPs) for Abbottabad, Mansehra, Shangla, and Battagram districts. It is most heartening to note that these Plans are the product of a thorough consultative process with participation from a wide range of stakeholders. This process has not only enriched the contents of the Plans by reflecting the peculiarities and particularities of the area but also ensures their ownership by the government functionaries, the civil society, the private sector, and the communities at large.

The Government of NWFP is fully committed to promote a culture of resilience, safety and security for its citizens and the DDRMPs will contribute significantly in this noble pursuit.



Shahibzada Riaz Noor  
Chief Secretary, NWFP



## SECTION 1

### Disasters and District Abbottabad

#### 1.1. District Introduction

The city of Abbottabad was founded in 1853 by Maj. James Abbott, who was the first Deputy Commissioner of Hazara District. Hazara remained a district right up to its conversion into a division in 1976. In October 1976, Mansehra was given the status of a full fledged district. Subsequently in July 1991, tehsil Haripur was separated from Abbottabad and made a district. Thus, only the old tehsil of Abbottabad remained, which was declared as district Abbottabad.

District Abbottabad lies on the eastern border of the NWFP between 33° - 50' to 34° - 23' north latitudes and 72° - 35' to 73° - 31' east longitudes. It is bounded by district Mansehra on the north, district Haripur on the west and southwest, district Muzaffarabad of Azad Jammu and Kashmir on the east, district Rawalpindi on the south and federal capital Islamabad on the southeast. River Jhelum is on the eastern side and River Kunhar is on the northeast of district Abbottabad. Abbottabad's total area is 1,969 square kilometres and is divided into two tehsil divisions of Abbottabad and Havelian. Abbottabad district has a population of over 875,157 (1998 Census) where around 300,000 live in Abbottabad city.

The district is endowed with scenic and green mountains and a temperature that is not too cold in winter, nor too hot in summer. This weather has made the district as one of the most sought after summer resorts of Pakistan. Abbottabad city is also called "*The City of the Maple Trees*" because prior to the 1980s, large maple trees lined the main highway cutting through Abbottabad leading to Mansehra. However, these trees were cut down in recent years to widen Abbottabad because of increasing population and the need for new settlements. The northeast area of the district consists of a wide range of mountains collectively called Gullies which serve as attractive tourist resorts. (For details see *Annex 1: Abbottabad District Profile*)

The earthquake of October 8, 2005 caused severe damage and destruction to life, infrastructure and economy in district Abbottabad. The earthquake highlighted limitations of the current reactive and emerging response oriented approach to disaster risk management in district Abbottabad. The awareness of policy makers, media, civil society, NGOs and other stakeholders remains low about disaster risk management. Capacities have improved, however, after the experience of the October 2005 earthquake but a more systematic approach towards disaster risk management is still lacking.

Realizing the importance of disaster risk management for sustainable social, economic and environmental development, the GoP has embarked upon establishing appropriate policy, legal and institutional arrangements, and strategies and programmes to minimize risks and



vulnerabilities. In this regard, a National Disaster Management Ordinance has been passed in 2006, the implementation of which would be ensured by the National Disaster Management Commission.

The National Disaster Management Authority (NDMA) is tasked to be the focal point for coordinating and facilitating the implementation of strategies and programmes on disaster risk reduction, response and recovery. Similarly, Disaster Management Authorities are being established at provincial, district and municipal levels.

This Abbottabad District Disaster Risk Management Plan has been formulated to guide the work of entire district system in the area of disaster risk management under the umbrella District Disaster Management Authority. It has been developed through wide consultations with stakeholders from community, local, provincial and national government levels.

## 1.2. Hazard, Vulnerability and Capacity Analysis

Experiences, available data and hazard mapping exercises conducted by government officials and other stakeholders identified the following hazards and scenarios as the most likely to affect the people of Abbottabad that would require a response from the government:

- High priority      Earthquake  
                            Landslides  
                            Flash Floods
- Medium priority    Vehicular/Transport Accidents  
                            Infectious Diseases and Epidemics
- Low priority        Drought  
                            Forest Fire  
                            Urban Fires

### 1.2.1. High Priority

#### a. *Earthquake*

District Abbottabad is part of the geological set-up of the NWFP province that can transmit earthquake waves. Major faults that may affect district Abbottabad are the Main Mantle Thrust (MMT), the Main Boundary Thrust (MBT), and Oghi Shear Zone Mansehra, Jhelum Boundary Thrust Fault line, Darband Fault Tarbela, Khairabad Fault, Kalabagh Fault and other small scale faults common in NWFP. (For details see *Annex 3: Fault lines affecting Abbottabad*) From 1974- 1990, approximately 5669 people were killed due to earthquakes in the Northern Areas, NWFP (including Mansehra) and Balochistan. A trembler in NWFP in February 2004 resulted in 24

<sup>1</sup>Monitoring & Evaluation Wing, PERRA, Govt of NWFP, Peshawar

deaths and over 129,000 affected.

Scientists from the Quaid-i-Azam University Islamabad and NESPAK identified the MBT Fault as the source of the October 8, 2005 7.6 magnitude earthquake. Reportedly 521 people were killed, 767 were injured and 49,745 houses were totally or partially damaged in district Abbottabad, NWFP. 239 schools were destroyed while 262 were partially damaged. 17 basic health units out of 53, 1110.10 km of roads and 144 administrative government buildings were fully or partially damaged.<sup>1</sup> Tehsil Havelian was not affected as much as tehsil Abbottabad, however, Havelian had to accommodate affected persons who temporarily evacuated the area.

#### Earthquake

**Scenario** houses, buildings, public infrastructure collapse, landslides, inaccessibility of affected areas, displaced persons and communities (either within or outside the district)

**Impacts and Secondary Hazards** people panic, lack of shelter, loss of houses and land, death and injury, road infrastructure damaged, temporary mass evacuation, disruption of water, power and gas supplies services, temporary evacuation

**Capacity** community cooperation, community donation of food and shelter, family support, volunteers involved in response, non-governmental organizations, local government structure and personnel, donor and international community support

**Vulnerability** lack of awareness, lack of capacity and resources, inaccessibility of the affected areas, sub-standard buildings and houses, poverty

**Humanitarian Needs** food, non-food items (NFI), temporary shelter, clean water, health, security, sanitation, reconstruction of houses and infrastructure, psychosocial support, rehabilitation support, resettlement/relocation or land allocation for affected households, livelihood assistance (access to market opportunities)

### b. Landslides

The mountain and hillside areas of the district are particularly vulnerable to the hazard of landslide. Aside from the young geology and fragile soil type of mountain ranges around Abbottabad, accelerated deforestation is a major cause behind increased incidences of landslides. Small and isolated landslides happen frequently in these areas and more may occur in future because of decreasing forest cover.

Landslides in Abbottabad are usually generated by earthquake, flash floods and heavy snow burden. Landslides usually happen during the Monsoon season from July to September when heavy rainfall softens rock and earth surfaces especially in mountain areas. Several roads become temporarily blocked and



*Landslides and building collapse are the common damages during disasters*

inaccessible whenever landslides occur during this period. (For details see *Annex 4: Landslide vulnerable areas*)

### Landslide

**Scenario** houses, buildings, public infrastructure collapse, unstable ground, inaccessibility of affected areas, road/pavement cracks and depressions

**Impacts and Secondary Hazards** death and injury, loss of houses and land, road infrastructure damaged, disruption of water, power and gas supplies services, disruption of transportation due to damaged roads, small scale temporary evacuation

**Capacity available** heavy equipment, community cooperation, community donation of food and shelter, family support, volunteers involved in response, non-governmental organizations, local government structure and personnel

**Vulnerability** lack of awareness, lack of early warning system, settlements in landslide-prone areas (e.g. hills and cliffs), lack of resources, poverty

**Humanitarian Needs** food, NFIs, shelter support, clean water, reconstruction of houses and infrastructure, psychosocial support, rehabilitation and livelihood support, resettlement/ relocation or land allocation for affected households

### c. *Flash Flood*

Floods in the NWFP province affect 0.384 million acres of the total provincial area of 25.14 million acres. Total population affected in the flood zone is 0.56 million of the total province population of 10.82 million.

Floods are a normal feature of district Abbottabad's rivers, *nallahs* (water streams) and seasonal hill torrents. The mountainous catchments areas of the rivers, *nallahs* and seasonal hill torrents with their steep denuded slopes and limited water storage capacity contribute to rapid build up of floods. Likewise, human encroachment for agricultural and residential purposes has worsened forest denudation and narrowing of river channels and thus increased flash flood occurrence. Increased silt load of rivers due to landslides and encroachment of public and forest areas also contributes to siltation of rivers and has changed river morphology over the years. Floods usually occur in the district during the Monsoon season from July to September. However, there have been instances of floods happening in June and October as well.

### Flash Flood

**Scenario** occurs especially in villages along the Dour and Harno Rivers during or after a period of heavy rainfall, buildings and public infrastructure damage, inaccessibility of affected areas, riverside landslides

**Impacts and Secondary Hazards** death and injury, houses and crops damaged, livestock and livelihoods lost, road infrastructure damaged, disruption of water, power and gas supplies services, epidemics, temporary isolation due to inaccessible road/rivers, temporarily evacuation

**Capacity** previous experience, existing flood early warning system but needs to be made available and adapted to village level and communities, non-governmental organizations, local government structure and personnel

**Vulnerability** lack of early warning infrastructure especially from district to village level, lack of knowledge/understanding of community based response and preparedness, lack of resources to prepare and respond to emergencies, poverty, people living and farming in flood prone areas

**Humanitarian Needs** *Immediate* - rescue and evacuation, temporary shelter, food, clean water, sanitation, health, security. *Longer term* - health issues, livelihood assistance (access to market opportunities), rehabilitation, assistance to rebuild and/or relocate, water and sanitation, better quality housing, setting-up of village level early warning teams

## 1.2.2. Medium Priority

### a. *Vehicular and Transport Accidents*

Vehicular accidents are a regular occurrence in Abbottabad. However, these are considered as manageable emergency events and not disasters, according to the police. The district has an emergency reporting system where a dedicated telephone number (115) and a control room manned 24-hours by the police is available to receive all emergency related calls from the district. What is lacking in the district is fully equipped ambulances that can perform first-aid and pre-hospital medical services to accident victims. The district does not have this capacity at the moment.

#### Vehicular Accidents

**Scenario** temporary road closures, may happen anytime of the day, traffic flow disruption

**Impacts and Secondary Hazards** death, injury, loss of livelihoods of affected persons, infrastructure damage or loss

**Capacity** existing police network, available government hospitals to treat accident survivors, ambulance services available but need to be upgraded

**Vulnerability** deteriorating road quality especially after the earthquake and after rainy season, irresponsibility of drivers, lack of preventive driving skills among drivers, enforcement of vehicle quality standards (example: seatbelts, regular maintenance)

**Humanitarian Needs** *Immediate* - rescue, extraction and first aid, security and road clearance. *Longer term* - enforcement of traffic rules and regulation, upgrading of ambulance and rescue services

### b. *Infectious Diseases and Epidemics*

Infectious diseases and epidemics especially water-borne diseases such as cholera and diarrhoea, Respiratory Tract Infections (RTI), dengue, malaria and skin diseases which are endemic in the area have also been identified as priority problems of the district. Likewise, there is the threat of the H5N1 virus, also known as "Bird Flu," affecting poultry farms in Abbottabad. In 2006, suspected H5N1 infected poultry from one farm were ordered culled to prevent the virus from spreading to other farms. Like Mansehra, Abbottabad is known in NWFP as one of the poultry producing districts.

**Epidemic**

Scenario Dengue, Malaria, Cholera, (occur during and after Monsoon season or areas struck by flash flood) Avian & Human Influenza (AHI) are common, others unknown, rapid onset and difficult to control

Impacts and Secondary Hazards human health, death, panic and morbidity, loss of livestock (disease and culling), economic loss, loss of employment, emergency situation in health department

Capacity existing disease early warning system, health services exist but lack specific surveillance for AHI, treatment and isolation capabilities, health volunteers involved in response, available health department contingency plan

Vulnerability lack of awareness, poor sanitation and use of contaminated water, lack of immediate medical services and medicines, pre-existing medical conditions (e.g. HIV/AIDS) and poor living conditions, malnutrition, late recognition and declaration of emergency, lack of community based health education and initiatives, high-density population, communities with high-density chicken, duck and migratory birds and fowls

Humanitarian Needs urgent medical services, provision of clean food and water, disinfection, containment, quarantine/specialized medical services, sanitation, vaccination

**1.2.3. Disaster Trends in Abbottabad**

Hazard analysis of district Abbottabad clearly indicates an increasing trend in the number, frequency, severity and intensity of hazards affecting the area. Pressure on the environment brought about by unplanned development and abuse of forest and natural resources increases the risk of hazards becoming disasters. Global climate change also exacerbates the situation. Likewise, economic pressures on the populace pushes more and more people to live in and around hazard-prone areas. Unplanned and new settlements that are springing-up with expanding population are also vulnerable to hazards.



Rain falls during the Monsoon season from 10<sup>th</sup> July up to mid September and rains-snowfall during winter season from mid November to mid February usually isolate the people of the Gullies area and some portions of Bakot Circles from trade places, health care units and livelihood activities. Though floods in district Abbottabad rarely happen, still, the seasonal nallahs and hill torrents become nuisance to adjoining areas and the populace. A devastating rainfall in 1992 resulted in loss of lives and property. Also, heavy snowfall in 2004-2005 engulfed the entire Gullies area and the Bakot Circle, isolating them from the district centre.

Although the epicentre of the October 8, 2005 earthquake was several kilometres from Abbottabad, the district is still very much vulnerable to earthquakes occurring in the northern part of Pakistan. However, capacities of local government and community, despite experience and efforts already achieved for disaster risk management especially after the earthquake, are still weak. The above scenarios and contexts forebode that disasters in future can be more frequent

and their social, economic and environmental impacts higher than in previous years and episodes. Areas not previously affected and prone to certain hazards (e.g. droughts, flooding) may also experience disasters in the future.

The table below shows the preliminary list of areas vulnerable to landslides, earthquake and heavy rain.

### Tehsil Abbottabad

S #	UC	Landslides	Earthquake	Heavy rains and snow
1	Dalola		(whole District is vulnerable)	
2	Boi			
3	Kukmong			
4	Nambal			
5	Pattan Kalan			
6	Bakot			
7	Berote Kalan			
8	Palak			
9	Nagril Bala			
10	Nathia Gali			
11	Namli Maira			
12	Bagnotar			
13	Beerangali			
14	Sarbana			
15	Phalkot			
16	Bagh			
17	Kuthwal			
18	Banda Pir Khan			
19	Baldheri			
20	Mirpur (50%R)			
21	Kakul			
22	Dhamtour			
23	Sheikhulbandi (50%R)			
24	Salhad (50%R)			
25	Jhangi (75%R)			
26	Pawa			
27	Chamhad			
28	Pind Kargu Khan			
29	Kuthiala			
30	Jarral			
31	Sherwan			
32	Central Abbottabad			
33	Kehal (Urban)			
34	Nawanshehr (Urban)			

## Tehsil Havelian

S #	UC	Landslides	Earthquake	Heavy rains and snow
1	Ghari Phulgran		(whole District is vulnerable)	
2	Bandi Attai Khan			
3	Jhangra (25%u)			
4	Majohan			
5	Langrial			
6	Nara			
7	Dewal Manal			✓
8	Goreeni			
9	Phallah			
10	Lora	✓		✓
11	Langra			
12	Havelian (urban)			
13	Seer Gharbi	✓		
14	Tajwal	✓		✓
15	Nagri Totial			
16	Seer Sharqi Bhattian	✓		

### 1.3. District Capacity for Disaster Risk Management

Unfortunately, a reactive emergency response approach has remained the predominant way of dealing with disasters in Pakistan and district Abbottabad is no exception. Awareness of district, tehsil, union council and village leaders as well as media, civil society and communities on DRM remains low. In the earthquake of October 2005, due to lack of heavy equipment and skill for debris removal, road clearance took days and weeks and rendered many areas inaccessible for days and weeks in the district. Some district government staff died or got injured during the earthquake, especially in the most affected union councils.

The Earthquake 2005 has given the impetus to the government of Pakistan to take a more proactive approach to disasters through the promulgation of a National Disaster Management Ordinance. Under the NDMO 2006, National, Provincial and District Disaster Management Authorities are being established to provide central leadership in disaster risk management.

In district Abbottabad, the District Disaster Management Authority is yet to be established. A Civil Defence Organization, however, is organized and functioning in the district. The Civil Defence office publishes articles, reports and/or other informative materials for general public awareness. The Civil Defence Organization consists of government officials i.e. Chairman/Administrator Municipal Committee as Chief Warden, and volunteers from private sectors. At present there are 282 volunteers working in the district Abbottabad under Civil Defence Organization are supposed to be ready to meet any emergency. The activities of the civil defence are:

- civil defence training

- first aid
- fire fighting
- rescue services
- flood relief
- bomb disposal
- fighting against any emergency situation in the area.

A district contingency plan was drafted in 2006 but this was specific to earthquake and did not cover the various phases of DRM as well as other hazards affecting the district. And although not much affected by the 2005 earthquake, the intensity of the quake further stretched already limited resources of the district. Likewise, many government buildings and public infrastructure were destroyed or damaged.

The table below describes disaster risk management in the district.

District Capacity; Current Gaps & Requirements for Effective DDMA	
Current Level	Requirements for Effective DDMA
DDMA not yet established, Civil Defence Office not organized and disaster management focal person not appointed yet	DDMA needs to be established with clear roles and functions, disaster management focal person be appointed and able to formulate district disaster risk management plan based upon local risk assessment and coordinate its implementation
Annual Development Plan available but risk assessment not integrated	Able to review development plans of government departments and provide guidance on mainstreaming disaster risk reduction measures in these plans
Poor coordination in the wake of disaster –pre, during and post	Establish linkages and institutionalize cooperation with PDMA, government departments and other agencies by updating them on the district hazards, provide comprehensive understanding of the policy requirements and operational aspects of disaster management
Link with research institutions and universities is weak	Capacity to conduct education, training and public awareness programs for local officials, stakeholders and communities on disaster preparedness and mitigation
Lack of effective operational guidelines for Disaster Risk Reduction/Management	Capacity to prepare guidelines and standards for district government and local stakeholders on Disaster Risk Reduction/Management
Existing District Control Room with staff, office and 2 telephone lines	Establish a fully equipped and staffed District Emergency Operations Centre (DEOC) capable of coordinating emergency response in the district
Local ordinances exist on housing standards and land use but enforcement is lacking	Capacity to enforce and examine construction and if hazard safety standards are not being followed, direct the relevant entities to ensure compliance of such standards



The focus of provincial and national authorities is emergency driven and relief focused; and district disaster management and preparedness activities are missing	Undertake appropriate preparedness measures at district level; e.g. maintain an early warning system, identify buildings to be used as evacuation sites, stockpile relief and rescue materials and identify alternative means for emergency communications
Lack of resources to deal with snow and road clearance	Able to procure materials/equipments needed for debris removal and road clearance emergencies
Risk assessment available form the "District Disaster Risk Management Plan"	Ability to continuously monitor hazards, risks and vulnerable locations/conditions within the district, tehsil, union council and village level

There are however some initiatives that have been taken by the district government Abbottabad, UN and NGOs to support capacity building. The Earthquake Reconstruction and Rehabilitation Authority (ERRA) is also making positive efforts to build capacity of the district line departments. ERRA has established District Reconstruction Unit (DRU) in the district to carry on infrastructure rehabilitation activities as well as capacity building. However, as DRU is a temporary body, all schemes and infrastructure core projects, upon successful completion will be handed over to the responsible district departments for maintenance.

Likewise, several NGOs are currently working in the district providing relief and undertaking rehabilitation work for earthquake 2005 affected communities in cooperation with different district departments. Among these are:

- SUNGI Development Foundation
- CPDI, Local NGO of Abbottabad
- CESSD, NGO Abbottabad
- National Commission for Human development, District Abbottabad
- Church World Service

The District Nazim and the DCO, with the support of different departments are in process of developing a comprehensive mechanism to develop institutional capacity for responding to disasters. During the development process of this plan, district authorities participated and contributed many good ideas and expertise which have been incorporated into this plan. The following section describes the District Disaster Risk Management Plan which has been prepared with relation to current institutional capacity.

## SECTION 2

### Disaster Risk Management Structure and Functions

#### 2.1. Institutional Mechanism for Disaster Risk Management

The National Disaster Risk Management Framework was formulated to guide disaster risk management at all levels. Roles and responsibilities of district authorities, line departments, and other stakeholders have been defined in the framework. Broadly speaking, the district government and all stakeholders are expected to undertake the following actions to promote disaster risk management:

- integrate risk assessment in the planning and design stages of all new infrastructure/ projects
- assess vulnerability of people, infrastructure, assets and services
- develop disaster risk management plan
- integrate vulnerability reduction measures in new construction
- develop technical capacities to implement disaster risk management strategies
- allocate funds for disaster risk management in annual development budget
- conduct post disaster damage and loss assessments
- organize emergency response
- organize recovery and rehabilitation

##### 2.1.1. District Disaster Management Authority Abbottabad

As per the National Disaster Risk Management Framework and the National Disaster Management Ordinance of 2006, the District Disaster Management Authority (DDMA) Abbottabad will be established. The tasks of the District Disaster Management Authority are to:

- formulate district disaster risk management plan, based upon local risk assessment, and coordinate its implementation
- review development plans of government departments and provide guidance on mainstreaming disaster risk reduction measures in these plans
- continuously monitor hazards, risks and vulnerable conditions within the district
- prepare guidelines and standards for local stakeholders on disaster risk reduction
- conduct education, training and public awareness programs for local officials, stakeholders and communities
- encourage involvement of community groups in disaster risk reduction and response by providing them necessary financial and technical assistance for implementing community level initiatives

- examine construction in the area and if hazard safety standards are not being followed, direct the relevant entities to secure compliance of such standards
- invest in specific capabilities to meet requirements to manage all types of threat particular to the local area
- undertake appropriate preparedness measures at district level; e.g. maintain an early warning system, identify buildings to be used as evacuation sites, stockpile relief and rescue materials and identify alternative means for emergency communications
- in the event of a disaster, organize emergency response through the District Emergency Operations Centre (DEOC)
- keep linkages with the Provincial Disaster Management Authority and the Relief Department
- perform such other functions as the provincial authority may assign to it

### **2.1.2. Organizational Structure and Members**

As per National Disaster Management Ordinance chapter IV, the District Disaster Management Authority will comprise of District Nazim, District Coordination Officer (DCO), District Police Officer and EDO Health. Where appropriate, the District Nazim can appoint other officers as members of the DDMA. They may include EDOs from the education and agriculture departments, Civil Defence, Army, Red Crescent, NGOs, media, private sector, fire services, or any other local stakeholders.

#### ***a. DDMA Structure***

After consultations and meetings conducted with district officials and other stakeholders, the structure of the DDMA Abbottabad is proposed as below:



The District Nazim will be the ex-officio head of the DDMA. The Nazim will take overall responsibility of disaster risk management activities in the district. District Coordination Officer, being the coordinating head of the district administration will:

- co-ordinate all DRM activities in the district for coherent planning, synergistic development, effective and efficient functioning of the district administration
- exercise general supervision over DRM programs, projects, services, and activities of the district administration
- assist the District (Zila) Nazim in accomplishment of administrative and financial discipline and efficiency in the discharge of functions and activities

#### ***b. The DDMA Secretariat***

A Secretariat will be established to support the DDMA in its day-to-day activities. In district Abbottabad, the Civil Defence Office under the DCO will be delegated to perform the tasks of secretariat for the DDMA. The Secretariat will be composed of the District Coordination Officer, who will serve as the Chairperson, a District Disaster Officer as Executive Officer and a minimum of three staff members who will be in-charge of three tasks namely: Technical Support (training and education), Operations Group and Finance and Administrative Support. The number of staff, procedures and terms of reference of the secretariat will be further developed by the DDMA.

### c. *The District Emergency Operations Centre (DEOC)*

In the event of a disaster, the District Disaster Management Authority shall activate the District Emergency Operations Centre (DEOC) and take operational lead for district government response. The DCO will manage the EOC and is responsible for ensuring that the following activities are undertaken:

- advise the DDMA and District Nazim on the disaster situation
- coordinate Damage and Needs Assessment activities of various agencies
- receive disaster reports from the police, tehsils, union councils, villages and NGOs
- consolidate reports into a district disaster situation report and send this out to relevant agencies including the media
- coordinate with the Army
- supervise and monitor disaster management and relief activities
- coordinate the activities of
  - Police
  - Fire Brigade
  - Works and Services Department
  - Health department
  - Army
- enlist services of laboratories and expert institutions for specialized services through the health department as and when required
- operate a public information display area for immediate access to information by the public and media regarding the disaster and the current situation.
- requisition of accommodation, structure, vehicles and equipments for relief
- organize and coordinate clearance of debris
- set-up an information centre to organize sharing of information with the media and the public
- generate and provide all information contained in the hazard, capacity and vulnerability assessment document to other agencies
- monitor disaster warning or disaster occurrence and communicate the same to the tehsils, union councils and the wards for better preparedness and effective response in coordination with and on the advise of the following agencies :
  - NWFP Provincial Disaster Management Authority-
  - Meteorology Department (Heavy Rains, Storms)
  - Fire Brigade
  - Police
  - Health Department (Epidemics and Food Poisoning)

#### *d. Functions of DDMA Members and other Stakeholders*

To ensure a multi-agency approach to DRM in the district, the members and activities of the DDMA Abbottabad will be following:

##### **Agriculture Department**

- undertake vulnerability and risk analysis for food, agriculture and livestock sectors, particularly in relation to floods and landslides
- coordinate with DDMA and jointly identify appropriate actions for reducing vulnerability of food, agriculture and livestock to disaster risks
- develop disaster risk management plan to deal with impending hazards
- develop capacity and raise awareness of staff and extension workers and farmers on disaster preparedness for food, agriculture and livestock sectors
- assist in saving crops, agricultural land and livestock in disaster situation
- make available inputs like seed plant, fertilizers and agricultural equipment to victims of disasters on credit basis
- survey and investigate extent of damages to crops and livestock
- ensure adequate availability of food stocks in disaster situation

##### **Army**

- immediate search and rescue service in coordination with DEOC
- evacuate people to safer areas before and after the disaster
- assist set up of communication system if required
- maintain liaison with the DEOC for vital inputs during warning period
- assist in delivery of relief especially in areas difficult to reach
- provide medical aid where this service is not yet set up or as requested by the DEOC
- transportation of relief material
- provide logistic back-up (aircrafts, helicopters, boats, etc) and vehicles for transportation of relief material to the affected areas
- set up relief camps and oversee their running
- construct and repair roads and bridges

##### **Civil Defence**

- rescue and evacuation
- supplement disaster-response equipment of the armed forces
- build public confidence by introduction of more effective measures for protection and

- ensuring adoption of requisite preventive measures by the community
- communicate to DEOC details of all the above activities
- communicate to DEOC any additional resources required to perform the above tasks

#### **Education Department**

- identify and prepare inventory of vulnerable educational institutions and infrastructure of the department in hazard-prone areas
- implement actions to reduce vulnerability of built infrastructure in education sector in hazard-prone areas, e.g. retrofitting, renovation, rebuilding etc.
- conduct orientation programmes to raise awareness of education authorities, professors and teachers about disaster risks in hazard-prone areas
- develop curriculum for schools on disaster risk management
- encourage local educational authorities and teachers to prepare school disaster response plans and their implementation

#### **Finance and Planning Department**

- coordinate with DDMA regarding needs for financial resources to promote disaster risk management programmes in hazard-prone areas
- allocate financial resources based upon plans of the DDMA and other relevant departments for implementation of disaster risk management activities as part of the development plans
- monitor and evaluate utilization of funds by relevant authorities on disaster risk management
- incorporate provisions in micro-finance schemes to have flexible repayment schedules that can be activated in the event of recipients being affected by disasters

#### **Health Department**

- preventive medicine and anti-epidemic actions
- provide emergency treatment for the seriously injured
- ensure emergency supplies of medicines and first-aid
- supervise food, water supplies, sanitation and disposal of waste
- assess and co-ordinate provision of ambulances and hospitals where the injured could be sent, (public and private)
- provide special information required regarding precautions for epidemics
- set-up an information centre to organize sharing of information with public
- corpse disposal
- communicate to DEOC details of all the above activities
- communicate to DEOC any additional resources required for performing the above tasks

### Non-Governmental Organizations

- develop disaster risk management plans at national level and for all branch offices in the high risk
- search and rescue operations
- information dissemination
- first aid
- disposal of dead
- damage assessment
- management of information centres at temporary shelters
- mobilization and distribution of relief supplies including finances
- community mobilization, crowd control, rumour control, traffic management
- specialized services (psychiatric and mental health assistance)
- management of transit camps
- livelihood support
- community based disaster management

### Pakistan Red Crescent Society

- develop disaster risk management plan for branch offices
- develop teams of volunteers for disaster preparedness and response
- train volunteers in emergency preparedness and response (e.g. evacuation, first aid, fire fighting, early warning etc) in collaboration with the Civil Defence Department
- implement community level programmes on vulnerability reduction and disaster preparedness including the organization of drills and simulations
- work closely with local authorities in conducting joint assessments of damages and losses and needs of disaster survivors

### Police Department

- co-ordinate with district EOC
- cordon area to restrict movement of vehicular and pedestrian traffic
- shift the rescued/affected people to hospitals
- provide easy access to rescue and relief personnel/vehicles
- coordinate with health department for corpse disposal
- maintain law and order
- divert traffic on alternate routes as and when necessary in co-ordination with Works and Services Department (WSD)
- request WSD for providing access through roads during emergencies for specific time



duration and monitor the requirement of such an access

#### **Revenue Department**

- seek funds to support disaster risk management activities
- accept relief donations and relief support
- establish relief distribution centres
- request assistance from the DEOC as needed
- submit reports to DEOC of the operations and expenses

#### **Social Welfare and Community Development Department**

- assist the most vulnerable, poor families headed by widows and the disabled
- undertake public awareness raising
- provide vocational training to disabled
- collect data on survivors
- communicate to DEOC details of all the above activities
- communicate to DEOC any additional resources required for performing the above tasks

#### **TMA and UC Representatives**

- provide information on situation of the tehsil and union council and submit the same to the DEOC
- monitor progress of relief operations in their respective areas
- send advisories to the DEOC on the progress of disaster situation
- assist and facilitate Damage and Needs Assessment teams from the district and NGOs

#### **Works and Services Department**

- send advisories to the DEOC on road conditions especially regarding blocked or impassable roads
- drain flood waters from roads
- monitor flood situations and landslides on roads and co-ordinate with DEOC for mass transport requirements and advisory on rerouting of traffic, as needed
- set-up an information centre to organize sharing of information for public info purposes
- communicate to DEOC details of all the above activities
- communicate to DEOC any additional resources required for performing the above tasks

### 2.1.3. Disaster Risk Management at Tehsil, Union Council and Village Level

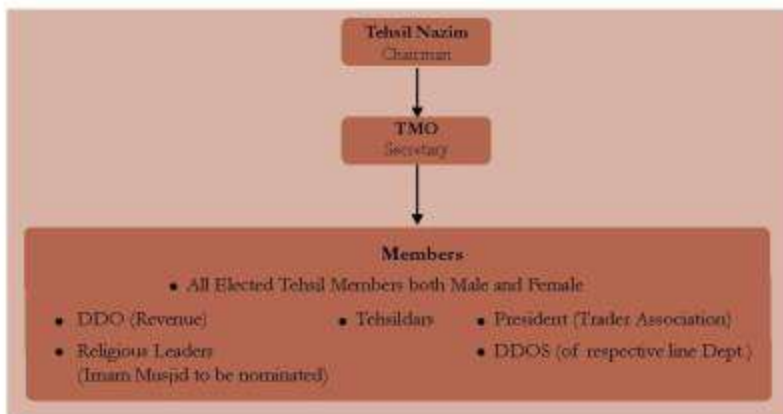
The National DRM Framework clearly mentions lower tiers of government as frontline of disaster risk management “where disaster activities are actually implemented”. For many line departments, the lower level of administration is where they interface directly with communities. Tehsils, union councils and villages are responsible for:

- prepare plans and procedures for disaster risk management in their respective locations
- take operational control in the event of a disaster or emergency so as to ensure that support is provided to the affected households and individuals
- mobilize needed finance and material resources for disaster management
- identify and map out all hazards in their respective location and conduct risk and vulnerability analysis
- establish civic groups for disaster reduction and relief operations

#### a. Tehsil Disaster Management Committee

A Tehsil Disaster Management Committee (TDMC) shall be framed to coordinate and implement disaster risk management activities at tehsil level. The Tehsil Nazim shall be the chairperson of the TDMC and the Tehsil Municipal Officer shall be the secretary. Members will include all elected tehsil members, DDO Revenue, president of traders association, tehsildars, DDOS of respective line departments and religious leaders who are to be nominated.

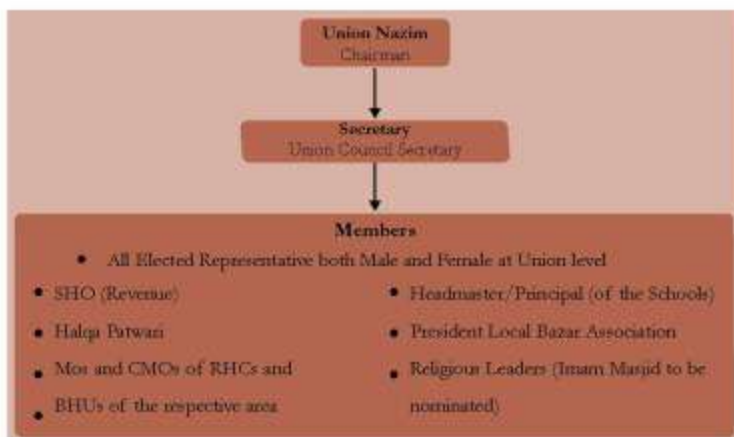
Specific roles and responsibilities of the TDMC and members will be further outlined by the District Authority.



### ***b. Union Council Disaster Management Committee***

At union council level, a Union Council Disaster Management Committee (UDMC) will be established to coordinate and implement disaster risk management activities. The Union Council Nazim shall be the chairperson of the UDMC and the UC Secretary shall be the UDMC secretary. Members will include all elected UC members, SHO of respective area, Halqa Patwari, MOs and CMOs of RHCs and BHUs, headmaster/principal of schools, president of local bazaar association and religious leaders who are to be nominated.

Specific roles and responsibilities of the UDMC and members will be further defined by the District Authority.



### ***c. Community Based Organizations and Institutions***

In order to promote community level disaster risk management activities, the capacity of existing community organizations will be developed and enhanced by district and Tehsil authorities. In the absence of community organizations, new groups would be established to work on disaster risk management. CBOs will be trained about local early warning system, evacuation, first aid, search and rescue, fire fighting etc. Linkages would be developed between CBOs and relevant local agencies; e.g. agriculture, banks, health and veterinary services to promote disaster preparedness. Skills and knowledge of CBO leadership will also be developed in financial management, people management, resource mobilization, interpersonal communication and presentation and negotiation skills. The provision of Citizen Community Boards (CCBs) in Local Government Ordinance (LGO 2001) provides a good opportunity to organize communities and mobilize resources for issues like local level disaster risk management.

Other organizations and institutions present in communities such as religious leaders and groups, farmers associations, parents and teachers associations, etc. shall likewise be drawn, enhanced and coordinated to support DRM.

## **2.2. Disaster Risk Management Plan-Purpose, Scope and Principles**

### **2.2.1. Purpose of the Plan**

Primary purpose of this plan is to save and prevent needless sufferings of the population, protect vital infrastructure installations, livestock, machinery, equipment and stock of resources from damage and destruction by floods, earthquake, landslides, epidemics and other disasters faced by district Abbottabad.

### **2.2.2. Scope of the Plan**

The plan includes aspects of vulnerability reduction and capacity building of key institutions, personnel and communities to address disaster risks in district Abbottabad. It provides guidelines for implementation of policies, strategies and programmes for all three phases of disaster risk management; including pre-disaster (risk reduction and preparedness), during disaster (response and relief), and post-disaster (rehabilitation, recovery and risk reduction).

The plan intends to provide direction and guidelines to all district officials, offices and local stakeholders. The plan is primarily for use by all departments in the district government, especially by those with roles and responsibilities have been outlined here and also by government staff at the tehsil, union council and village levels. This plan should help the provincial and national government, UN agencies, donors, non-government organizations and philanthropic individuals and companies to understand how they can provide support for disaster preparedness, response and mitigation in district Abbottabad.

All stakeholders should be familiar with the plan so that it can be quickly and effectively put into action if a disaster occurs. This will be complemented with ongoing training and practice.

### **2.2.3. Guiding Principles of the Plan**

- focus upon most vulnerable social groups; e.g. children, women, elderly, minorities
- promote community and local level preparedness culture
- follow multi-disciplinary and multi-sectoral approaches
- combine scientific knowledge with social knowledge
- make development policy, planning and implementation risk-sensitive
- develop culturally, economically and environmentally relevant technologies for safer construction in different parts of the district

- promote sustainable livelihood practices in high risk areas by multiple hazards
- establish and strengthen partnerships amongst multiple sectors; e.g. government, private sector, media, insurance, NGOs, civil society organizations, UN and donors
- work with other districts to promote disaster risk reduction
- acquire specific capacities/capabilities keeping in view hazard-risk profile of the district
- develop disaster risk management plans from village level upwards in view of specific requirements of the local area

#### 2.2.4. Planning Assumptions

For the purposes of this plan, the following planning assumptions are made:

1. regular or seasonal disasters are given higher priority as disasters such as the 2005 earthquake occur less frequently in the district
2. the NDMO clarifies and delineates the roles and responsibilities of various line departments at the national and provincial government levels and provides a broad guideline on how the Disaster Management Authority would be organized at the district, tehsil, union council and village levels
3. the activities herein stipulated will be planned and implemented with two separate target groups in mind; firstly, the district government and its personnel, and secondly, the vulnerable population within the larger public
4. resources and dedicated personnel will be committed in the implementation, updating and review of the plan by the district government and other support and aid agencies
5. a critical planning assumption is that all available resources will be under notice and where appropriate, under control of the DDMA. It is important that all government agencies (district, provincial, federal) collaborate in order to achieve an effective, efficient and timely response to disasters

#### 2.2.5. Definition of Terms

For the purposes of this plan, definition of disaster risk management terms are explained in Annex 5 of the document.

#### 2.2.6. Process

The DDRMP builds on the Disaster Management Plan (DMP) developed by district Abbottabad in 2005 through NWFP PO (LG) 1-22 /2005 dated 6<sup>th</sup> October, 2005 that directs NWFP districts to develop their DMPs. The plan is also informed by the NWFP Disaster Plan of 1977 and the District Disaster Risk Reduction Workshop Abbottabad conducted by UNDP, under BEGIN-ER project from January 23-25, 2007.

This Disaster Risk Management Plan has been developed through an extensive consultation process with various stakeholders. This process identified gaps and issues in the current practice, highlighted by the October 2005 earthquake and provided recommendations to address them.

The planning experts were engaged developing a District Disaster Risk Management Plan from February to April 2007. The draft plan was circulated among district and local stakeholders and a meeting was conducted in March 2007 to seek their comments. The said stakeholder consultation provided important inputs regarding gaps, priorities and capacity building needs. The plan was revised based upon feedback from stakeholders and the final plan was approved by the District Nazim.

### 2.2.7. Distribution of Copies

Copies of the Plan will be disseminated to the following persons and offices:

- District Nazim
- District Naib Nazim
- District Assembly
- District Police
- District Coordination Officer
- District Level Departments
- Tehsil Management Authority
- Union Councils
- Village Leaders
- Citizen Community Boards
- Provincial Relief Commissioner
- NDMA
- Army
- ERRA / PERRA
- Media
- Religious Groups & Leaders
- Corporate sector
- NGOs / INGOs
- UN and Donors
- Other relevant organizations

<sup>3</sup>The date of this plan is April 30, 2007. The next date for review and update is May 2008 or following any major disaster or emergency response.

### 2.2.8. Plan Preparation Date and Updating Notes

The priorities set-out in this plan are for the next three (3) years period.<sup>2</sup> It is expected that all relevant stakeholders would actively participate in the implementation of the identified priorities.

The DDRMP should be reviewed on an annual basis to ensure that the risk assessment and planning assumptions remain valid and to ensure roles and responsibilities are up to date and reflect current skills and positions. The annual review and updating should also reflect the lessons learnt after each emergency response carried out by the district government.

The person with overall responsibility for monitoring progress and updating the plan is the District Coordination Officer with the support of the Civil Defence Department. DDMA members and other relevant government offices and personnel can be delegated to provide further support.

## 2.3. Priority Areas for Disaster Risk Reduction and Response in Abbottabad

The National Disaster Risk Management Framework of Pakistan has set six (6) priority areas to promote disaster risk reduction and develop capacities at all levels of government. The priority areas provide broad descriptions of key strategies to achieve the overall goal of reducing disaster risk and vulnerability. The District Disaster Risk Management Plan (DDRMP) Abbottabad refers to the National Framework and has adopted a set of these component objectives to support the national government's plans and to enhance its own capacities in the district. These have been further detailed into concrete activities and work plans to build disaster risk management capacities in the district.

### 2.3.1. PRIORITY AREA 1: Institutional and Legal Arrangements

#### a. *Key Issues*

The National Disaster Management Ordinance 2006 provides for the creation of Disaster Management Authorities at National, Provincial and District levels to develop and implement effective disaster risk management strategies. In Abbottabad, local authorities have been made aware of the ordinance through trainings and workshops, especially DRM related activities conducted by UNDP under BEGIN-ER project. However, the ordinance has yet to be officially notified to the district by the provincial government. Thus, the District Disaster Management Authority Abbottabad is yet to be formally established.

Meantime, response to disasters, especially during the earthquake was generally adhoc, with the District Nazim and the District Coordination Officer appointing and delegating functions and

responses to government departments and individuals who were in the best position to implement and deliver the needed output or service. In district Abbottabad, the Internal Revenue Department and the Human Resources Department were focal units that delivered government response during the 2005 earthquake. With the Health and Education Departments, these 4 departments of the government conducted initial damage and needs assessment and later organized emergency assistance. The Civil Defence and Social Welfare Departments were clearly not capable enough and were not very noticeable in the response. Also very significant was the un-preparedness and the lack of role played by local officials from the village, union councils and tehsils in the relief and rehabilitation efforts. A District Disaster Contingency Plan was drawn in December 2005 but this lacked clearer instructions and activities that needed to be undertaken by various levels of government in times of emergencies.

The immediate establishment of the DDMA, with clear delineation of roles, functions and tasks before, during and after disasters is essential to develop and implement effective disaster risk management strategies in the district. The roles and functions of local government from the tehsil, union council, village council and citizen community boards will also have to be further clarified. Appropriate contingency plans and standard operating procedures should be developed to facilitate effective working and coordination within the DDMA and with other stakeholders. Constituting the DDMA would also include acquiring staff and/or identifying key personnel in charge of DRM as well as support staff. The DDMA will have to spend time and appropriate funds and resources to develop guidelines, standards and procedures.

#### ***b. Lead Agency***

The District Nazim, District Coordination Officer and the Planning Department will take the lead in this priority area. In developing these systems and procedures, consultations should be done with relevant agencies, organizations, local government and communities to inform development and to ensure ownership of the plan.

The Planning Department will support the district authorities to define appropriate planning and coordination methodology, identify the sources and amount of information and resources required and ensure that all responses before, during and after a disaster are well coordinated and duplication is avoided. The Planning Department is to support the DDMA in making sure pre-planned and agreed responses and activities are carried out during actual response to the disaster.

#### ***c. Activities to be accomplished within 6 months***

- provincial government notifies and establishes the DDMA Abbottabad
- identify and appoint DDMA members
- conduct first DDMA meeting to familiarize members about the DDMA set-up



- conduct orientations for each line department of the district
- conduct seminars to familiarize district assembly about the DDMA
- conduct workshops to further clarify DRM structure, roles and responsibilities at tehsils, union councils and village levels
- conduct seminars to familiarize tehsil authorities about the DDMA
- conduct seminars to familiarize union councils about the DDMA
- conduct seminars to familiarize villages about the DDMA
- call a multi-agency meeting with other stakeholders (CBOs, I/NGOs, donors, media, etc.) to introduce DDMA and discuss coordination mechanisms

***d. Activities to be accomplished within the First Year***

- establish and resource a functional District Emergency Operations Centre (EOC) that will support the DDMA in coordinating response and communications during emergencies
- conduct series of workshops to develop contingency plan per line department based on worst case scenarios for specific disasters affecting the district covering all aspects and phases of disaster risk management based on the District Disaster Risk Management Plan. Contingency plans will include Standard Operating Procedures covering the various DRM activities to be undertaken by the district
- support the tehsil, union council and village administration in developing their own Disaster Risk Management plans based on the district policies and procedures.

***e. Anticipated Supply and Equipment Requirements***

- planning and coordination manuals
- copies of national, provincial and local ordinances as reference
- funds for planning workshops and meetings
- various materials and equipment for training sessions
- District Emergency Operations Centre equipped with
  - telephone (with email services) units
  - 2 computer/printer sets for documentation, tables, bulletin and monitoring boards
  - 1 VHF base station / 1 VHF repeater / one VHF handheld for every key staff
- means of transport and heavy equipment like bulldozers during emergency operations

f. *Work Plan*

Activities	Lead Agency /Responsibility	Cooperating Agency /Department	Period of Completion	Budget Required	Verifiable Indicators
Provincial government notifies district government about the NDMO	District Nazim, DCO	NWFP Provincial Government, Abbottabad HRD & Civil Defence	within 6 months		Minutes of meeting, transmittal letter from NWFP
DDMA members identified and appointed	District Nazim, DCO	Planning Department and HRD	Within 6 months		Minutes of meeting, list of members
Conduct first DDMA meeting to familiarize members about the NDMO and the DDMA set-up	District Nazim, DCO	NWFP Provincial Government, HRD	Within 6 months		Minutes of meeting, participants list
Conduct separate DDMA orientation for each district line department and office	Planning Department and HRD	DCO, EDO of concerned department	Within 6 months		Minutes of meeting, participants list
Seminars for district assembly about the DDMA	District Nazim, District Naib Nazim	Planning Department and HRD	Within 6 months		Minutes of meeting, participants list
Conduct workshops to further clarify DRM structure, roles and responsibilities at tehsil, union council and village levels	Planning Department and HRD	Selected TMOs and UC officials, NGOs	Within 6 months		Minutes of meeting, participants list, terms of reference
Seminars for tehsil authorities about the DDMA	Planning Department and HRD	TMAAs	Within 6 months		Minutes of meeting, participants list
Seminars for union councils about the DDMA	Planning Department and HRD	UC officials	Within 6 months		Terms of Reference developed and clarified, List of members
Seminars for villages about the DDMA	Planning Department and HRD	Village Council members	Within 6 months		Minutes of meeting, participants list
Call a multi-agency meeting with other stakeholders to introduce DDMA and discuss coordination mechanism	Planning Department and HRD	District Nazim, DCO, concerned line departments	Within 6 months		Minutes of meeting, participants list, draft coordination mechanisms
Establish and resource a functional District Emergency Operations Centre (EOC)	Planning Department and HRD	District Nazim, DCO, concerned line departments	Within the 1 <sup>st</sup> year		Terms of reference, appointment letters
Series of workshops to develop contingency plan per line department based on worst case scenarios for specific disasters affecting the district	Planning Department and HRD	District Nazim, DCO, concerned line departments	Within the 1 <sup>st</sup> year		Minutes of meeting, participants list, contingency plans
Support the tehsil, union council and village Administration in developing their own Disaster Risk Management plans	Planning Department and HRD	District Nazim, DCO, TMAAs, UC council and Village Council	Within the 1 <sup>st</sup> year		Minutes of meeting, participants list, DRM plans

## 2.3.2. PRIORITY AREA 2: Hazard and Vulnerability Assessment

### a. *Key Issues*

Plenty of information is available with various agencies especially on status of earthquake affected communities and persons as well on the on-going reconstruction efforts. Several NGOs have started working on community-based disaster management in several villages and UCs. However, information on hazard risk, specific to vulnerable areas and at various levels (tehsils, union council, and village) is still limited. Also, information to support planning, identifying priorities and making decisions for risk reduction is not centrally available.

Hazard, Capacity & Vulnerability Assessment (HCVA) needs to be undertaken at village, union council, tehsil and district levels. To facilitate this, there is a need to develop a mechanism and system for collecting available information and continuous monitoring of hazard risks and vulnerabilities. Various departments regularly collect data on departmental concerns (i.e. Agriculture Department on agricultural statistics; Revenue Department on land and taxes etc.). These existing systems need to be reviewed to incorporate hazard and disaster risk analysis. Instruments to be developed would enable decision makers at all levels to take effective decisions to develop risk reduction policies, strategies and programmes.

Village, union council and tehsil level maps should include analysis on vulnerability of settlements, housing stock, important infrastructure and environmental resources. They will indicate location of key settlements in hazard-prone areas. The analysis will describe the types of existing housing stock in hazard-prone areas, and the potential of damage to various housing categories. The vulnerability analysis will identify key infrastructure and environmental resources in each local area that are prone to damage and loss from prevalent hazards. Vulnerabilities of various social groups in hazard prone areas will also be analyzed. The HCVA will inform development of Damage, Needs Capacity Assessment (DNCA) during actual disasters. There will be separate DNCA formats and procedures at various tiers of the government.

Technical support by experts from specialized government agencies such as National Engineering Services Pakistan (NESPAK), Pakistan Meteorological Department (PMD), Federal Flood Commission (FFC), Water and Power Development Authority (WAPDA), Geological Survey of Pakistan (GSP) etc. can be requested to ensure scientific analysis of the geology and past history of hazards. They would also review secondary data from the 1998 census and other sources. Consultations with selected communities and stakeholders would be organized to assess hazard exposure, disaster impact and vulnerabilities.

A central database should be developed and located at the District Emergency Operations Centre. The database will be made available to all stakeholders for access.

***b. Lead Agency***

The Revenue Department will be the lead agency in this priority area and will define appropriate assessment methodology, identify the sources and amount of information required and ensure that credible baseline data and standardized sectoral assessment protocols are available in order to facilitate a timely and efficient assessment of emergency situations. NGOs and other relevant agencies will be involved in the whole process.

***c. Activities to be accomplished within 6 months***

- review existing data gathering methods and tools of various departments to conduct disaster risk analysis
- develop HCVA tools and assessment methodologies
- identify HCVA facilitators from the district personnel and from priority tehsil, UCs and villages as well as from NGOs/CBOs
- conduct 1<sup>st</sup> Facilitator's Training of HCVA facilitators
- conduct HCVA of villages and union councils included in high priority hazard zones, mentioned in section 3.1 of the DDRMP, specifically generating hazard specific maps indicating the location of various hazards with zonation of risk levels; e.g. low, moderate and severe
- collation of HCVA's
- develop Damage Needs Capacity Assessment forms
- set-up database of district

***d. Activities to be accomplished within the First Year***

- update, contextualize and standardize assessment formats
- identify HCVA facilitators in other tehsils, UCs, villages and NGOs/CBOs
- conduct 2<sup>nd</sup> Facilitator's Training of HCVA facilitators
- carry out HCVA of other villages and union councils
- collation of HCVA
- update district database

***e. Anticipated Supply and Equipment Requirements***

- assessment format and protocols
- photocopy machine, computer sets and cameras (digital, still and video)
- transport and communication facilities during field operations
- funds for training sessions
- various materials and equipment for training sessions

f. *Work Plan*

Activities	Lead Agency /Responsibility	Cooperating Agency /Department	Period of Completion	Budget Required	Verifiable Indicators
Review existing data gathering methods and tools of various departments to conduct disaster risk analysis	Revenue Department	DCO, HRDO, Community Development, TMAs, NGOs, CBOs	Within 6 months		Minutes of meetings, TORs developed, appointment letters, list of assessment tools
Develop HCVA tools and methodology	Revenue Department	DCO, HRDO, Community Development, TMAs, NGOs, CBOs	Within 6 months		Minutes of meeting, draft reports, draft tools
Identify HCVA facilitators from the district personnel and from priority tehsil, UCs and villages as well as from NGOs/CBOs	Revenue Department / HRDO	DCO, Community Development, TMAs, NGOs, CBOs	Within 6 months		List of facilitators
Conduct 1 <sup>st</sup> Facilitator's Training of HCVA facilitators	Revenue Department / HRDO	DCO, Community Development, TMAs, NGOs, CBOs	Within 6 months		Training report, participants list
Conduct HCVA of villages and union councils included in high priority hazard zones mentioned section 3.1 of the DDRMP.	Revenue Department / HRDO / HCVA Facilitators	Community Development, TMAs, NGOs, CBOs	Within 6 months		Draft HCVA report per village
Collation of HCVAs	HCVA Facilitators	HRDO, Revenue Dept, Community Development, TMAs, NGOs, CBOs	Within 6 months		HCVA report per village
Develop DNCA procedures	HCVA Facilitators	HRDO, Revenue Dept, Community Development, TMAs, NGOs, CBOs	Within 6 months		DNCA forms for village, UC, tehsil and district level
Set-up database of district	Revenue Department / HRDO / HCVA Facilitators	Community Development, TMAs, NGOs, CBOs, DEOC	Within 6 months		HCVA report per village, UC and tehsil, HCVA database at DEOC
Update, contextualize and standardize assessment formats	Revenue Department / HRDO	DCO, Community Development, TMAs, NGOs, CBOs	Within the 1 <sup>st</sup> year		List of facilitators
Identify HCVA facilitators in other tehsils, UCs, villages and NGOs/CBOs	Revenue Department / HRDO	DCO, Community Development, TMAs, NGOs, CBOs	Within the 1 <sup>st</sup> year		List of facilitators

Conduct 2 <sup>nd</sup> Facilitator's Training of HCVA facilitators	Revenue Department / HRDO	DCO, Community Development, TMAs, NGOs, CBOs	Within the 1 <sup>st</sup> year		Training report, participants list
Carry out HCVA of other villages and union councils	Revenue Department / HRDO / HCVA Facilitators	Community Development, TMAs, NGOs, CBOs	Within the 1 <sup>st</sup> year		Draft HCVA report per village
Collation of HCVA	HCVA Facilitators	HRDO, Revenue Dept, Community Development, TMAs, NGOs, CBOs	Within the 1 <sup>st</sup> year		HCVA report per village
Update district database	Revenue Department / HRDO / HCVA Facilitators	Community Development, TMAs, NGOs, CBOs, DEOC	Within the 1 <sup>st</sup> year		HCVA report per village, UC and tehsil, HCVA database at DEOC

### 2.3.3. PRIORITY AREA 3: Training, Education and Awareness

#### a. Key Issues

Lack of knowledge of general public and local officials about severity of hazards that may affect them, associated risks, probable damage, and precautions to be taken is perhaps one of the most significant hindrances in present day efforts to mitigate the potentially disastrous effects of most hazards. It is only when the dangers are understood by the people and when everyone is aware of the precautions that must be taken that an effective government and community effort can be mobilized to save lives and minimize damages.

The government however does not have a public awareness strategy, an important fundamental in other countries. Because of this, an important priority cited for the DDMA is to identify and develop a medium term disaster awareness strategy and be equipped with financial and technical capacity to implement the strategy. DRM education, training and awareness are required in multiple sectors; e.g. civil servants in government departments and offices, staff of technical agencies, NGOs, media and politicians and communities themselves.

Training and education would involve orientation about disaster risks and vulnerabilities, skill development on risk assessment, vulnerability reduction, hazard mitigation and emergency response management. Specialised training in areas of response would also be needed; e.g. search and rescue, first aid, fire fighting, evacuation, camp management and relief distribution. Considering the importance of media, DDMA will establish partnerships with electronic and print media and develop awareness of media personnel. DDMA training, education and awareness program can minimize loss of life, injury, suffering and property damage in a community by:

- reducing ignorance about hazards, their nature, and the consequences of their impact
- increasing public knowledge about the severity of disasters due to natural causes and manmade contribution
- increasing public knowledge about preparedness measures
- promoting and developing practical skills among general public with a view to improve their response
- developing a warning system where the public knows what the warning means and what they should do when they hear it
- Achieving support for disaster plans, organizations and measures

DDMA will thus focus on following priority areas to enhance knowledge and develop technical skills on disaster risk management in the district.

- develop DRM training curricula
- identify competent trainers for DRM
- conduct courses for district, municipal and local Disaster Management Authorities in hazard prone areas
- develop public awareness materials (e.g. posters, brochures, booklets, videos) for training, education and public awareness
- organize media orientations about its role in promoting disaster risk management and community preparedness

#### ***b. Lead Agency***

The Human Resources Development Department under the Office of the District Coordination Officer will be the lead agency in this priority area and will assess levels of awareness, training and skills needed among government personnel, and thereafter design, implement and evaluate awareness campaigns, skills training and drills. Training Needs Assessment (TNA) based on departmental roles will be conducted to ensure appropriate training is provided to each person or task unit. The HRDO will liaise and work with other technical agencies, NGOs and UN to support training of personnel.

#### ***c. Activities to be accomplished within 6 months***

- identify a pool of district trainers coming from government, NGOs and technical agencies
- prepare resource inventory of training materials and curricula already in circulation
- assess and collect of available resources printed materials, equipment, trainers, service providers, possible collaborative partners, etc.
- develop training needs assessment tool/s

- conduct assessment (TNA) of government staff levels of awareness
- organize TOT for pool of trainers

***d. Activities to be accomplished within the First Year***

- conduct familiarization training of various government personnel from the district, tehsil, union council and village levels about DDMA
- design village awareness-raising campaigns
- implement awareness-raising campaigns in villages
- design a training program with the following likely components:
  - general disaster risk management awareness training for all personnel
  - first aid
  - collapse structure search and rescue
  - emergency response
  - radio operations
  - early warning
  - damage needs assessment
  - community based disaster management
  - media training
  - medical first responders training
  - mass casualty management
  - evacuation camp management
  - radio communications & notification systems
- implement the above mentioned training program
- implement drills and monitoring activities at the various levels
- review training curricula and materials

***e. Anticipated Supply and Equipment Requirements***

- transport facilities
- funds for training activities
- various materials and equipment for training sessions
- trainers and experts



f. *Work Plan*

Activities	Lead Agency /Responsibility	Cooperating Agency /Department	Period of Completion	Budget Required	Verifiable Indicators
Identify a pool of district trainers coming from government, NGOs and technical agencies	DCO, HRDO	EDO of line departments, NGOs, NCHD	Within 6 months		TORs developed, appointment letters, Facilitators list
Prepare resource inventory of training materials and curricula already in circulation	HRDO, trainers pool	As appropriate: line departments, NGOs, technical agencies	Within 6 months		Inventory list
Assess and collect available resources—printed materials, equipment, trainers, service providers, possible collaborative partners, etc.	HRDO, trainers pool	As appropriate: line departments, NGOs, technical agencies	Within 6 months		Assessment report, minutes of meetings
Develop Training Needs Assessment tool/s	HRDO, trainers pool	As appropriate: line departments, NGOs, technical agencies	Within 6 months		Draft TNA tool/s
Conduct assessment (TNA) of government staff's levels of awareness	HRDO, trainers pool	As appropriate: line departments, NGOs, technical agencies	Within 6 months		Report on current skills, awareness and capacity of district
Organize TOT for pool of trainers	HRDO, trainers pool	As appropriate: line departments, NGOs, technical agencies	Within 6 months		Training report, participants list
Conduct familiarization training to various government personnel from the district, tehsil, union council and village about DDMA	HRDO, trainers pool	DCO, EDOs, D Os, TMAs, UCs, Village leaders, NGOs, technical agencies	Within the first year		Minutes of meeting, District Nazim/DCO approval
Design village awareness-raising campaigns	HRDO, trainers pool	DCO, EDOs, Dos, TMAs, UCs, Village leaders, NGOs, technical agencies	Within the first year		Minutes of meeting, draft reports; draft tools
Implement awareness-raising campaigns in villages	HRDO, trainers pool	DCO, EDOs, Dos, TMAs, UCs, Village leaders, NGOs, technical agencies	Within the first year		Activity reports, participants list
Design a training program	HRDO, trainers pool	DCO, EDOs, Dos, TMAs, UCs, Village leaders, NGOs, technical agencies	Within the first year		Training curricula, training designs, training materials , participants list
Implement the above mentioned training program	HRDO, trainers pool	DCO, EDOs, Dos, TMAs, UCs, Village leaders, NGOs, technical agencies	Within the first year		Training reports, participants list
Implement drills and monitor activities at various levels	HRDO, trainers pool	DCO, EDOs, Dos, TMAs, UCs, Village leaders, NGOs, technical agencies	Within the first year		Training reports, activity reports, participants list
Review training curricula and materials	HRDO, trainers pool	DCO, EDOs, Dos, TMAs, UCs, Village leaders, NGOs, technical agencies	Within the first year		Assessment report, updated curricula, training design, materials

### 2.3.4. PRIORITY AREA 4: Community and Local Risk Reduction Programming

#### a. Key Issues

Programme implementation at community and local level is at the heart of disaster risk reduction strategies. Disasters are essentially local in terms of their impact and it is local communities and village authorities who first respond to any disaster.

Experience and historical analysis of disasters in Abbottabad demonstrate that most disaster events are localised in their scale, affecting few villages, union councils and sometimes villages or union councils located in adjacent tehsils. Considering this characteristic of disaster risks, it is imperative that risk reduction programmes are implemented at local level for capacity development of local officials, communities, civil society organizations and other players; e.g. builders, contractors, masons, teachers and doctors. The utilization of resources and energies at this level will have a more lasting impact. Effective local authorities, local religious leaders, educational institutions, NGOs and community groups can play an important role in this work.

The DDMA will support local government at tehsil, union council and village levels in adopting the DDRMP in their own disaster risk management plans. Tehsil, union council and village authorities will formulate disaster risk management plans for their respective constituents. The plans would include analysis of hazard-prone areas, vulnerabilities, resources available, strategies for risk reduction, and responsibilities of various stakeholders for disaster preparedness and response. Citizen Community Boards (CCBs) will play an important role in community disaster risk management.

Support to TMAs, UCs and village leaders would focus on community organizing, training, awareness-raising, masons training, volunteers training on search and rescue, first aid, evacuation, fire fighting etc. Based upon local risk assessment small scale schemes for mitigation, strengthening of livelihoods and local early warning systems would be implemented. Disaster preparedness activities will also be implemented at village, neighbourhood, city and school levels.

#### b. Lead Agency

At the district level, the Planning Department will take the lead in ensuring tehsils, union councils and villages develop their respective disaster risk management plans. However, support from the tehsil administration is required once lower government level planning is initiated. The tehsil officer for planning will be the focal person for DRM within the tehsil administration. He/She will ensure that disaster risk management planning is conducted at tehsil level under the guidance of the Tehsil Nazim. At union council level, he/she will be the secretary for community development who is responsible for DRM.

***c. Activities to be accomplished within 6 months***

- identify and appoint focal persons at tehsil, union council and village levels
- develop Local Planning Framework
- conduct Training Needs Assessment at tehsil, UC and village levels as well as community based NGOs/CBOs
- generate resources (funds/trainers) e.g. trainers from within and outside government

***d. Activities to be accomplished within the First Year***

- organize basic training of focal the policy requirements and operational aspects of DRM at tehsil, UC and village level
- conduct specialized skills training such as:
  - facilitator's training
  - early warning
  - community based disaster management
  - basic search and rescue
  - camp management
  - disaster preparedness training
- pilot testing of local DRM planning in one tehsil (at various levels including UCs and villages within the tehsil)
- develop public awareness campaigns and materials
- develop school-based disaster awareness and preparedness training modules and materials
- generate resources: (from government, NGOs, UN, etc.)
- conduct public awareness activities in villages and communities to increase awareness on hazards as well as preparedness and response activities, communities and households can implement
- conduct school based disaster awareness and preparedness seminars and activities
- identify and develop small preparedness and mitigation schemes
- implement small preparedness and mitigation plans
- assess/evaluate/ lessons learnt
- replicate local DRM planning in other priority tehsils in the district

***e. Anticipated Supply and Equipment Requirements***

- transport facilities
- emergency supplies
- equipped and trained search and rescue unit
- communication facilities to the health care providers
- funds for purchase of relief items

- warehousing facilities and arrangements
- communication facilities during field operations
- funds for purchase of camp facilities
- warehousing facilities and arrangements
- camp security arrangements
- various materials and equipment for training sessions
- trainers and experts

#### f. *Work Plan*

Activities	Lead Agency /Responsibility	Cooperating Agency /Department	Period of Completion	Budget Required	Verifiable Indicators
Identify and appoint focal persons at tehsil, union council and village levels	DCO, HRDO, Tehsil Nazim, UC Nazim	TMA, UCs, NGOs, HRDO	Within 6 months		Focal persons list, appointment letters, terms of reference
Develop Local Planning Framework	Planning Department, focal persons, HRDO	Selected line agencies, NGOs, TMA, UCs, DCO	Within 6 months		Planning Framework/Guide
Conduct Training Needs Assessment at tehsil, UC and village levels as well as community based NGOs/CBOs	HRDO, focal persons	TMA, UCs, NGOs	Within 6 months		TNA reports
Generate resources (funds/trainers) e.g. trainers from within and outside government	Planning & Finance EDO	District Nazim, DCO	Within 6 months		Funds available or appropriated
Organize basic training of focal persons	HRDO	Planning Department, NGOs, technical agencies, DCO, TMA, UC	Within the first year		Training report, participants list
Conduct skills training for focal persons	HRDO	Planning Department, NGOs, technical agencies, DCO, TMA, UC	Within the first year		Training report, participants list
Pilot test local DRM planning in one tehsil (at various levels including UCs and villages within the tehsil)	Focal Persons	Planning Dept. HRDO, Tehsil Nazim, UC Nazim, Village leaders, NGOs/CBOs	Within the first year		Training reports, draft plans
Develop public awareness campaigns and materials	Focal persons, HRDO	Media, IT department, education department, NGOs, HRDO	Within the first year		Public Awareness materials and kits
Develop school-based disaster awareness and preparedness training modules and materials	Focal persons, local teachers	Media, IT department, education department, NGOs, HRDO	Within the first year		School based awareness materials such as posters, billboards, comics, etc.

Generate resources: (from government, NGOs, UN, etc.)	Planning & Finance EDO, Tehsil and UC Nazims	District Nazim, DCO, focal persons	Within 6 months		Funds available or appropriated
Conduct public awareness activities in villages and communities	Focal persons and NGOs	Media, IT department, education department, NGOs, HRDO	Within the first year		Activity reports, participants list, photo documentation
Conduct school based disaster awareness and preparedness seminars and activities	Focal persons, local teachers and NGOs	Media, IT department, education department, NGOs, HRDO	Within the first year		Activity reports, participants list, photo documentation
Identify and develop small preparedness and mitigation schemes	Focal persons	TMA, UC, Village leaders and communities	Within the first year		Activity reports, implementation plans
Implement small preparedness and mitigation plans	Focal persons	TMA, UC, Village leaders and communities	Within the first year		implementation reports
Assess/evaluate/ lessons learnt	Focal persons, Planning Department, HRDO	DCO, Nazims, TMA, UC, Village leaders and communities	Within the first year		Assessment report, participants list, implementation reports
Replicate local DRM planning in other priority tehsils in the district	Focal Persons, Planning Department, NGOs	HRDO, Tehsil Nazim, UC Nazim, Village leaders, NGOs/CBOs	Within the first year		Replication strategy

### 2.3.5. PRIORITY AREA 5: Multi-hazard Early Warning System

#### a. Key Issues

The primary objective of a multi-hazard early warning system (EWS) is to generate advance warnings and thus improve capacity of decision makers and communities to take appropriate action prior to occurrence of a hazard. It consists of collection, consolidation, analysis and dissemination of risk information. Early warning has the potential to contribute significantly to reducing disaster losses.

District Abbottabad does not have many resources available to establish a state-of-the-art early warning system. However, there is capacity to establish community based early warning systems on seasonal disasters such as floods. Hazard Mapping and Analysis from village, union council and tehsil levels can feed into a district early warning system. Strengthening of monitoring and analysis capabilities at village level is a priority.

The Abbottabad EWS will be established by developing capacity at grassroots level in schools and villages and by improving and expanding existing resources and capacities and networks. The EWS will include facilitating multi-agency interface, and sharing of technical information and

indigenous knowledge about hazards amongst multiple stakeholders. Local media's role will be reviewed, enhanced and utilized to improve dissemination of warnings. Linking communities with warning agencies would be an essential component. Initiatives will be taken to build capacities of communities in early warning by connecting them and by providing necessary warning equipment.

Assistance from technical agencies such as the PMD, FFC, WAPDA, GSP, PNRA, etc will be sought to assist the district. Likewise, during the development of district and community based EWS, the existing provincial EWS will be considered.

### ***b. Lead Agency***

The Information Department with the support of other stakeholders will be the lead agency in developing the district EWS.

### ***c. Activities to be accomplished within 6 months***

- identify and appoint focal persons at tehsil, union council and village levels for early warning
- prepare resource inventory of available communications equipment with user location/addresses based on individual agency inventories.
- develop Standard Operating Procedures (SOPs) on the use and maintenance of communication equipment
- identify communication centres outside the government (such as UN, other agencies within and outside the district)

### ***d. Activities to be accomplished within the First Year***

- devise early warning system from village, union council, tehsil and district levels, utilizing forecast from technical agencies such as the Pakistan Meteorological Department, Dam Safety Council-WAPDA, etc.
- devise and develop public awareness schemes, activities and Information, Education, Campaign (IEC) materials to inform a wide number of people about the EWS
- establish community early warning teams in priority flood-prone villages
- organize community workshops to install the system
- conduct community trainings specific to EWS
- identify key media persons and companies
- call media meetings to develop coordination mechanisms regarding early warning
- develop and conduct media training on EWS

### e. *Anticipated Supply and Equipment Requirements*

- transport facilities
- emergency supplies
- equipped and trained search and rescue unit
- funds for purchase of early warning equipment
- communication facilities during field operations
- various materials and equipment for training sessions
- trainers and early warning experts
- functional Emergency Operations Centre (EOC)

### f. *Work Plan*

Activities	Lead Agency /Responsibility	Cooperating Agency /Department	Period of Completion	Budget Required	Verifiable Indicators
Identify and appoint focal persons at tehsil, union council and village levels for early warning	Information Dept, DCO, District Nazim, Tehsil Nazim, UC Nazim	HRDQ, Line Agencies, NGOs, technical agencies, DPO	Within 6 months		Terms of reference, appointment letters, focal persons list
Prepare resource inventory of available communications equipment	IT Dept., focal persons	Line agencies, NGOs, UN, other private groups, DPO	Within 6 months		Inventory list that includes location and type of facility
Develop Standard Operating Procedures (SOPs) on the use and maintenance of communication equipment	IT Dept., focal persons	Line agencies, NGOs, UN, other private groups, DCO, TMA, UCs, DPO	Within 6 months		SOPs, minutes of meetings
Identify communication centres outside the government (such as UN, other agencies within and outside the District)	IT Dept., focal persons	Line agencies, NGOs, UN, other private groups, DCO, TMA, UCs, DPO	Within 6 months		Communications centres list
Devise early warning system from village, union council, tehsil and district level	IT Dept., focal persons	Line agencies, NGOs, UN, other private groups, DCO, TMA, UCs, DPO	Within the first year		Draft Community EWS
Devise and develop public awareness schemes, activities and IEC materials	IT Dept., focal persons	Line agencies, NGOs, UN, other private groups, DCO, TMA, UCs, DPO	Within the first year		Public awareness materials related to EWS
Establish community early warning teams in priority flood-prone villages	IT Dept., focal persons	Line agencies, NGOs, UN, other private groups, DCO, TMA, UCs, DPO	Within the first year		EW teams list
Organize community workshops to install the system	IT Dept., focal persons	Line agencies, NGOs, UN, other private groups, DCO, TMA, UCs, DPO	Within the first year		Community meetings report, approved community based EWS

Conduct community trainings specific to EWS	IT Dept., focal persons	Line agencies, NGOs, UN, other private groups, DCO, TMA, UCs, DPO	Within the first year		Training module, training reports, participants list
Identify key media (persons and companies)	IT Dept., focal persons	Line agencies, NGOs, UN, other private groups, DCO, TMA, UCs, DPO	Within the first year		Media list
Call media meetings to develop coordination mechanisms regarding early warning	IT Dept., focal persons	Line agencies, NGOs, UN, other private groups, DCO, TMA, UCs, DPO	Within the first year		Minutes of meeting, participants list
Develop and conduct Media training on EWS	IT Dept., focal persons	Line agencies, NGOs, UN, other private groups, DCO, TMA, UCs, DPO	Within the first year		Training report, participants list

### 2.3.6. PRIORITY AREA 6: Mainstreaming Disaster Risk Reduction into Development

#### a. Key issues

An important issue that needs to be integrated into government procedures is to promote adoption of risk sensitive approaches in development planning and programming in all sectors. The purpose of mainstreaming efforts is to ensure that all development infrastructures in hazard-prone areas are built to higher standards of hazard resiliency; e.g. schools, hospitals, roads, bridges, dams and telecommunications infrastructure etc. This can be done by incorporating risk and vulnerability assessment into the project planning stage and by including vulnerability reduction measures in project implementation, in case the proposed projects are found vulnerable to hazard risks. In the 2005 earthquake, many losses were the result of sub-standard materials and structural design used for building houses. If building codes were enforced, lives lost and damages to property could have been reduced significantly.

There also exist initiatives on increasing the knowledge base of people involved in infrastructure schemes in terms of better design methodologies. Several NGOs and agencies have established training centres for skills training of masons, carpenters and other skilled people on proper building construction. The district government should integrate these in its own programs.

DDMA will review current and relevant district ordinances and procedures to incorporate risk assessment into project planning and implementation. The Planning, Works & Services and Revenue Departments will play a great role in the review of these policies. With the support of technical agencies and other organizations, DDMA will conduct workshops for selected line departments to orient them on integrating risk assessment in programme planning and design, and to include vulnerability reduction in programme implementation.



**b. Lead Agency**

The Planning Department is the lead agency to ensure disaster risk management is integrated in existing development planning process and procedures of the district.

**c. Activities to be accomplished within 6 months**

None

**d. Activities to be accomplished within the First Year**

None

**e. Activities to be accomplished in the second year (FY2008-2009)**

- organize workshops to develop mechanism to integrate DRR in Annual Development Planning
- get approval of recommended mechanism
- conduct training on DRR integration planning
- organize actual integration planning workshops

**f. Anticipated Supply and Equipment Requirements**

- transport facilities
- funds for DRR activities and projects
- various materials and equipment for training sessions
- trainers and planning experts

**g. Work Plan**

Activities	Lead Agency /Responsibility	Cooperating Agency /Department	Period of Completion	Budget Required	Verifiable Indicators
Organize workshops to develop mechanism to integrate DRR in annual development planning	Planning Dept.	DCO, Planning Department	FY2008-2009		Workshop minutes, draft mechanism
Get approval of recommended mechanism	DCO, District Nazim	DDMA, DCO	FY2008-2009		Integration Planning Guide
Conduct training on DRR integration planning	HRD	Planning Department, DCO	FY2008-2009		Training module, minutes of meetings
Organize actual integration planning workshops	EDOs of concerned departments	DDMA members, TMAs, relevant agencies	FY2008-2009		Training report, list of participants

## 2.4. References

### Consultations and Meetings

- Church World Services, CWS
- District Agriculture Department
- District Finance and Planning Department
- District Coordination Officer
- District Nazim
- District Reconstruction Unit DRU
- District Revenue Department
- District Social Welfare and Community Development
- District School and Literacy Department
- HRD office Distt. Abbottabad
- Hydrology and Irrigation Department NWFP
- Medical Superintendent, District Head Quarter Hospital Distt. Abbottabad
- Monitoring and Evaluation Section PERRA
- Pakistan Red Crescent Society
- PERRA Secretariat, Peshawar NWFP
- Provincial Relief Commissioner Secretariat
- Secretary Board of Revenue
- Sungi Development Foundation, NGO Distt. Abbottabad
- Tehsil Municipal Administration secretariat
- Works and Services Department

### Documents and Reports

1. Citizenry-Based Development Oriented Disaster Response, Annelies Heijmans & Lorna P. Victoria
2. Disaster Risk management Plan, Consultation by UNDP 2007
3. Disaster risk reduction workshops by BEGIN-ER UNDP for Line Departments of District Abbottabad January 23-25, 2007
4. Earthquake 2005, Lessons Learnt by Provincial Relief Commissionerate NWFP
5. Earthquake response reports of different Departments, UN bodies, NGOs and INGOs etc.
6. Earthquake Review report of One year, ERRA 2006

7. EM-DAT: The OFDA/CRED International Database, [www.em-dat.net](http://www.em-dat.net)
8. Evaluation of Disaster Response Agencies of Pakistan by OCHA, National Disaster Response Advisor, Islamabad, December 2006
9. Field Practitioners' Handbook, Imelda Abarquez & Zubair Murshed, ADPC, 2004
10. Guidelines for Elaborating a Community Risk Map by René Martorell and Rocío Sáenz, UN-ISDR Latin America & the Caribbean  
[http://www.crid.or.cr/crid/CD\\_EIRD\\_Informa/ing/No3\\_2001/Pagina15.htm](http://www.crid.or.cr/crid/CD_EIRD_Informa/ing/No3_2001/Pagina15.htm)
11. Guidelines for Producing A Community Risk Map, UNISDR Latin America & the Caribbean, Disaster Risk Reduction 1994-2004, UN-ISDR
12. Handouts on Training of Trainers in CBDRM, Thaubang District, Myanmar December 16-21, 2004. Conducted by Centre for Disaster Preparedness, Inc.
13. Introduction To Disaster Preparedness: Disaster Preparedness Training Programme, International Federation of Red Cross and Red Crescent Societies
14. Living With Risk, UN-ISDR, 2002
15. Local Government Ordinance 2001
16. Major Hazards, Family and Community Disaster Preparedness: Guide for Training Families and Communities, Department of Social Welfare and Development, Philippines
17. National Disaster Management Framework
18. National Disaster Management Ordinance 2006
19. National Library, Islamabad
20. Natural Calamity Act 1946
21. NWFP Disaster Plan, office of the Relief Commissioner 1977
22. NWFP Poverty Reduction Strategy Paper, Planning & Development Dept., NWFP, April 2003
23. Pakistan Profile 1998
24. UN (2005), *Pakistan 2005 Earthquake Early Recovery Framework*, Islamabad
25. UNICEF Report (2005), *One month Post-Earthquake Health Assessment*, November 8, 2005
26. World Bank and Asian Development Bank (2005), *Pakistan 2005 Earthquake, Preliminary Damage and Needs Assessment*, Islamabad

## Websites

### Government Links

Pakistan Government  
 Pakistan Meteorological Department  
 National Reconstruction Bureau  
 National Disaster Management Authority

<http://www.pakistan.gov.pk>  
<http://www.pakmet.com.pk/>  
<http://www.nrb.gov.pk/>  
<http://www.ndma.gov.pk/>

North Western Frontier Province  
Earthquake Reconstruction  
& Rehabilitation Authority  
SUPARCO

<http://www.nwfp.gov.pk>

<http://www.erra.gov.pk>

<http://www.suparco.gov.pk/>

### *UN and Donor Links*

ADB Pakistan  
UNDP Pakistan  
Relief Web (OCHA)  
UNHCR  
UN Systems Link

<http://www.adb.org>

<http://www.undp.org.pk>

[www.reliefweb.int](http://www.reliefweb.int)

<http://www.unhcr.org>

<http://www.un.org/News/dh/latest/syslinks.shtml>

### *INGO / NGO Links*

- CARE International
- CARITAS
- Save the Children
- OXFAM GB
- Church World Service
- Catholic Relief Services

<http://www.pakistanstudies-aips.org/en/ngos.htm>

### *Regional/Resource Centers*

Asian Disaster Preparedness Centre  
Centre for Research on the Epidemiology  
of Disasters

<http://www.adpc.net>

<http://www.cred.be/>

