National Disaster Management Authority Pakistan (NDMA)

In collaboration with

United Nations Development Programme

Operational Guidelines
for Municipal Disaster Management Cells (MDMC)
(Muzaffarabad & Mansehra)

**A Product of Earthquake Risk Reduction
and
Preparedness Programme**

United Nations Development Programme
In collaboration with

**National Disaster Management Authority
(NDMA)**

Operational Guidelines for Municipal Disaster Management Cells Muzaffarabad & Mansehra

*Earthquake Vulnerability Reduction and Preparedness
Project in Muzaffarabad and Mansehra Municipalities*

Table of Contents

I. Acronyms

AJK	Azad Jammu & Kashmir
CBOs	Community Based Organizations
DCO	District Coordination Officer
DM	Disaster Management
DRR	Disaster Risk Reduction
EIA	Environmental Impact Assessment
ERC	Emergency Relief Cell
EVR	Earthquake Vulnerability Reduction
LG&RDD	Local Government and Rural Development Department
MDMC	Municipal Disaster Management Cell
NGOs	Non-governmental Organizations
NWFP	North Western Frontier Province
NDMA	National Disaster Management Authority
PIC	Project Implementation Committees
P&D	Planning & Development
PDMA	Provincial Disaster Management Authority
TMA	Tehsil Municipal Administration
UNDP	United Nations Development Programme

INTRODUCTION AND BACKGROUND

The magnitude 7.6 earthquake that shattered Pakistan on October 8, 2005, caused the most damage in the city of Muzaffarabad and its vicinity, about 19 kilometers southwest of the earthquake's epicenter. Two uncovered fault lines pass through Muzaffarabad where the Eurasian and Indian tectonic plates meet. Likewise, Mansehra district in NWFP shares borders with AJK and is also located on the Main Boundary Thrust Fault which caused the 2005 earthquake. Human settlements and infra-structures still exist on the fault line which is alarming hazard.

The risk in urban centers is compounded due to unplanned urbanization, development within high risk zones, lack of adherence to building codes, deficient urban management practices and inappropriate construction practices.

The two municipalities of Muzaffarabad and Mansehra, in addition to being exposed to this specific earthquake risk, represent the general pattern of vulnerability and exposure to hazard risks like other major cities in Pakistan. In the mountainous terrain of Kashmir and NWFP people build houses using stones without any reinforcement and mostly without any chiseling. The urban housing and infrastructure suffers from lack of implementation of building codes. The majority of population in these two cities is classified as belonging to the middle and lower middle economic strata with their livelihood mainly in the areas of services. This shows that most do not have savings on which to fall back in case of emergencies. The social segment which struggles to cope with daily life cannot be expected to make earthquake vulnerability reduction a priority, and therefore suffers severely from disasters such as the October 2005 earthquake.

In continuation of United Nation Development Programme (UNDP) Pakistan support to development of policy and institutional frameworks for effective disaster risk management, a project titled Earthquake Vulnerability Reduction and Preparedness Project in Muzaffarabad and Mansehra Municipalities was initiated. This project aims to contribute to the process of integrating disaster risk reduction into recovery and development programming for safer communities in Muzaffarabad and Mansehra Municipalities.

In order to make the project interventions sustainable, institutional arrangements in the form of Municipal Disaster Management Cells (MDMC) in Muzaffarabad and Mansehra are developed, to effectively deal with issues of earthquake vulnerability reduction. The MDMC's will become the lead players in integrating earthquake vulnerability reduction into local development practice and perform the function of Project Implementation Committees (PICs). Operational guidelines for Municipal Disaster Management Cells in Muzaffarabad and Mansehra are compiled here to facilitate their functioning and improve their performance. The compilation is the first draft and, as such, open to suggestions for refinement and improvement.

1.1   Disaster - Dimensions and Facets

In general terms "Disaster" can be defined as an extreme event which results in wide spread social disruption, trauma, damage to property and loss of life. In legal lexicon the term means a catastrophe, or a calamity in an area, arising from natural or man made causes, or by accident which results in a substantial loss of life or human suffering or damage to, and destruction of property. Disaster, particularly natural disaster, can be classified into "sudden" and "slow" hazard events. Earthquakes, floods, landslides, torrents are sudden hazards while droughts and deforestation are slow hazards.

In terms of management, disasters are phenomenal disruptions affecting the whole spectrum of individual and societal life as such their management require a great deal of preparedness , wholesome and timely response, focused attention on recovery coupled with measures to rehabilitate and, above all, a complete plan of reconstruction. Managing disasters is now a technical discipline with a scope far wider than any other discipline in view of the fact that it requires preparation for something that can not be assessed in advance. In addition the management is induced in a situation of complete disruption and resultant chaos. Managing disasters, in factual terms, amounts to clinching life from the Jaws of Sudden Death. It is always risky, hazardous and difficult.

The term disaster has also been described as: "Any event (happening with or without warning) causing or threatening death, injury or disease, damage to property, infrastructure or the environment, which exceeds the ability of the affected society to cope using only its own resources."

Disasters are not always caused by physical factors. Several other factors may act together to produce human and material losses. In order to understand this process it is useful to develop ways with which to deal with disasters and put into place practical plans to manage these disasters if they should occur.

Mansehra and Muzaffarabad witnessed one of the most damaging disasters on October 8, 2005 when an earthquake of magnitude 7.6 on the Rector Scale hit Pakistan. Muzaffarabad in Azad Kashmir was just at a distance of 19 Kilometers from the Epicenter in its south east. Two unknown Fault Lines pass through the city where Euratian and Indian Tectonic Plates meet. Mansehra in the North West Frontier Province shares border with Muzaffarabad and is located on the Main Boundary Thrust Fault. Both districts and their headquarter cities are still home to a large number of people who have no option but to bear with the situation. Population of both the districts is concentrated in the urban areas which

carries the risk of vulnerability to natural disasters. It seems that urbanization and disasters are tied to each other. The magnitude of disasters in urban settlements as result of natural disasters is greater than that in the scattered rural settlements and likewise urban settlements attract more disasters than rural areas.

1.2   Concepts relating to disasters

Hazard

Hazards are threats to life, well-being, material goods and the environment. Extreme natural processes or technology causes them. When a hazard results in great suffering or collapse, it is usually termed a disaster.

Risk and risk assessment

Risk may be defined as the expected damage or loss caused by any hazard. Risk usually depends on a combination of two factors:

- How often and severe is the hazard (e.g., floods and drought).
- Vulnerability of the people exposed to these hazards.
- Risk perceptions are very complex as they are rooted in history, politics and economy. Therefore, finding suitable solutions to those at risk is not a simple or straightforward process.

Vulnerability

Vulnerability is the degree to which an individual, family, community or region is at risk of experiencing misfortune following extreme events. For example people living on steep hillsides or in areas prone to floods are particularly vulnerable during periods of intense rainfall. Hazards, caused by extremes in natural processes such as floods are exacerbated if they occur in areas where the vulnerability and risk to such events is high.

People are described as vulnerable to disasters depending on the extent to which they are likely to be damaged or disrupted by the impact of a disaster hazard. Besides the nature of the hazard, the scale and magnitude of a disaster usually depends on how vulnerable an area and group of people is. For this reason it is an important component of disasters and, therefore, disaster management. Vulnerability, like risk, is also complex and varies both in space and in time. Vulnerability may vary within an area and between groups of people. Vulnerability to a disaster usually follows a progression arising from such factors as poverty, lack of infrastructure, and a fragile environment. Poor communities living in makeshift structures in densely populated urban areas prone to flooding and lacking decent access routes are likely to be extremely at risk during periods of heavy rain or in a fire.

Vulnerability and Resilience

Vulnerability refers to the potential to experience some loss and resilience refers to the capacity to prevent, resist or restore that loss. Vulnerability and resilience are states that may be possessed by an individual, family, group or community. It is clear also that there are linkages and interactions between these social entities. Much work has been done on supporting individuals in disasters, but very little comparatively on supporting communities. As a matter of real life situation communities exist to support and embrace their members and thus any support to a community is likely to pass on to its' members. Vulnerability and resilience have many dimensions, and are not complete without them all, but community based and community centred activity offers another point of entry for service delivery

1.3   Types of disasters

Disasters are complex, making them difficult to manage and as such they require coordinated efforts between emergency services of municipalities. Disasters occur within various time scales, and can therefore be classified as those that are of a "slow-onset" type or those that are more "sudden".

Slow-onset disasters

Slow-onset disasters, or "creeping emergencies" result when the ability of people to support themselves and sustain their livelihoods slowly declines over time. Such disasters may also be aggravated by ecological, social, economic or political conditions. Drought is an example of a "slow-onset" disaster. This is a period when there is very little or no rain, and as a result much less water and crops than people need. This creeping disaster is one of the most severe types of disaster because it affects a much larger number of people than other types of disasters.

Poor infrastructure and water supply in an area, lack of employment, inadequate management of land, often heighten the impact of a drought. It often exposes the underlying problems that are characteristic of an area and as such worsens the conditions. Urban areas or Municipalities may not escape the ripple effects of droughts which are often viewed as having only a rural focus. When the flow of migrants into towns and cities during a drought period increases, so do the potential land, water and food supplies become scarce, with prices escalating. In this kind of situation water management strategy plays a vital role to mitigate the impact of disaster.

Examples of impacts of slow-onset disasters:

On Crops

Reduced crops and crop failure

Reduced income, food shortage, reliance on shops, unemployment, eviction

On Livestock

Weakened, diseased and dying livestock

Reduced health, food shortage, sales, slaughter and reduced income

On Water

Reduced and contaminated quantities

Human diseases, livestock diseases, crop failure and loss, migrations

On Employment

Layoffs, evictions

Loss of income, food shortages, increased unemployment and migrations

On Prices

Increased evictions, closure of farms, food shortages, homelessness and migrations

On Grazing

Reduced grazing areas resulting in weakening and dying livestock, their sales and slaughter, conflicts and land degradation

On Fuel

Reduction in fuel supplies resulting in disruption of domestic activities and societal conflicts

Sudden-onset disasters

A "sudden-onset" disaster is often caused by natural events such as earthquakes, floods, storms and fires. Although such events are more sudden, the impact can also be heightened by underlying problems associated with poverty.

In both rural and urban settings, fires are another example of a sudden-onset disaster. Sudden, uncontrolled fires can damage large parts of plantations and agricultural land. Livestock deaths can be particularly high. Disasters associated with fires in poor urban areas, where shack settlements are densely located, are disasters waiting to happen, unless

effective disaster management is implemented. Potential fire hazards in overcrowded urban apartment buildings with faulty or inadequate fire-prevention are also areas of concern.

1.4   Causes of disasters

It is important to note that disasters are not only the result of natural events. The level of development and management in a locality is strongly linked to disaster occurrence, as well as its extent and impact. Poverty is the single greatest contributor to disasters in urban and rural areas. In city areas, other causes of disasters may include rapid growth and inadequate planning, population density, ecological imbalances and inappropriate construction. Informal settlement areas are thus particularly vulnerable to disaster events. In rural areas, the causes of disasters may be associated with poor land-use management, erosion, deforestation, lack of employment and development.

Disasters are thus a mix of both physical factors- such as intense rainfall over a short period- and other social and economic factors- such as poverty and population growth. The causes of disasters, and in particular the factors which often heighten the impact associated with them, have been identified as follows:

- Poverty.
- Rapid population growth.
- Unmanaged urbanization.
- Transitions in cultural practices.
- Environmental degradation.
- Civil strife.
- Lack of awareness and information.
- Misuse or abuse of modern technology.

1.5   Disaster management

Disasters are not welcome events and usually when they occur, every effort is made to reduce the impact of such events. Disaster management should include administrative decisions and operational activities that involve prevention, preparedness, response, recovery and rehabilitation at all levels of government. Disaster management does not only involve official bodies, because the community and organizations also play a vital role.

Disaster management can be viewed in a number of ways. The more traditional approach has been to regard disaster management as a number of phased sequences of action. In this model disaster management occurs in stages which follow each other in a

sequence. That is to say, mitigation and preparedness precede a disaster. While this may well be the case, it is also often observed that disaster management occurs simultaneously. In this alternative view of disaster management, the process can be seen as a continuous process where disasters are managed in a parallel series of activities rather than in a sequence of actions. The relative weighting of the actions will also vary depending on the relationship between the hazard event and the vulnerability of the community involved. This approach acknowledges that disaster management usually includes a number of interventions and actions that may occur simultaneously and not always in phased succession. In the case of droughts, for example, drought relief, recovery and mitigation may often occur at the same time. Local government should therefore be constantly involved in disaster management. Management of disasters cannot be an add-on, chaotic set of actions during a disaster. Rather, disaster management should involve the following:

- Ensuring that development is well-planned and that poorly constructed houses are not built in flood-prone areas.
- Conducting risk assessment of vulnerable areas.
- Having a clear plan or strategy to deal with disasters.
- Ensuring that various responsibilities in disaster management are clear and understood.
- Ensuring that local government receives constant training in disaster management.
- Checks and regulation to prevent disasters.

Thus, when a disaster occurs, these "normal" activities are expanded to rapidly deal with the event. After the disaster event, emergency activities relax but the "everyday" disaster management activities such as training, risk assessment and monitoring continue, ready to be expanded when the next disaster occurs.

Despite the various views on disaster management, disasters are often managed haphazardly. The approach taken to disasters may thus be more costly than the event itself. People are unprepared, and when the event occurs it usually triggers haphazard reactions, which often result in crisis management. Awareness of disasters and one's vulnerability to such events can, however, reduce the impacts of such events. Community awareness of disasters can greatly reduce the overall costs of such events. Note that the awareness here is of all people concerned and not merely officials. Community awareness and effective mitigation are, therefore, critical elements of disaster management.

1.5.1 Disaster Management- The Principles

What, then, can be done to better manage disasters? The literature on the principles of disaster management is extensive and only some cases are presented here:

- The first priority of disaster management is the protection of the people who are most at risk. The second priority is the protection of critical resources and systems on which communities depend.

- Disaster management must be an essential part of development plans and objectives.

- The effectiveness of disaster management rests on an understanding of hazard risks and the capacity to deal with them before they become a threat to a community.

- Disaster management is based on interdisciplinary collaboration among people in governments, non-governmental organizations, research and training institutions and the commercial sector of affected communities.

- Effective disaster management depends on how much commitment, knowledge and capabilities can be applied at locations affected by hazards. To achieve this, international, national and local coordination is essential to develop capable levels of self-reliance.

1.5.2 Disaster Management- Critical Aspects

- It should address important human needs by focusing on the real causes of disasters and not merely symptoms.
- It should be driven at all levels of government.
- It should be transparent and inclusive.
- It should ensure community participation by involving all role players.
- It should accommodate local conditions.
- It should have legitimacy.
- It should be flexible and adaptable.
- It should be efficient and effective.
- It should be affordable and sustainable.
- It should be needs-orientated and prioritized.
- It should have a multidisciplinary and integrated approach.
- It should focus on key issues.
- It must emphasize prevention and mitigation.

1.5.3   Disaster management- The Centrality of Local Government Institutions

The prime responsibility for handling disasters vests with the local government. Immediate response, normally by the emergency services, should activate its contingency plan. If the local government cannot cope with the situation using only its own resources it must call on the province for assistance. At the local level municipalities should be responsible for the implementation and maintenance of an all-hazard, full-spectrum comprehensive disaster management programme, ensuring:

- Prevention.
- Mitigation.
- Preparedness.
- Response.
- Rehabilitation and reconstruction.
- Development.

If a disaster occurs at the local level, the prime responsibility for handling the disaster is vested with the local authority. The basic objectives of the response at local level are to save lives; prevent an escalation of the emergency; relieve suffering by fulfilling the basic needs for shelter, food, water and medical care; protect property; and facilitate subsequent recovery from the emergency.

It is thus the prime responsibility of the local authority to have a contingency plan to deal with any incident such as an emergency. As a matter of rule disaster management should be included in a municipality's integrated development plan.   Local disaster management should also be multidisciplinary, transparent and inclusive, and aimed at reducing vulnerability. While being inclusive, disaster management has to be taken seriously by government departments and it is important for each department involved in disaster management to assume ownership of its delegated responsibilities.

1.5.4   Local Disaster Management Strategies- Examples

- *Prevention*: Municipalities can better prevent a disaster by conducting certain activities before a disaster occurs for example constructing spurs to control flood water.
- *Preparedness and mitigation*: A disaster plan and institutional structure should be established. Each plan will be site or locality specific and as such must be tailored for the concerned area. For example the municipalities may develop a series of building

codes for constructions on sloppy lands so as to reduce losses in the event of heavy rains.

- Preparedness measures such as the maintenance of inventories of resources and the training of personnel to manage disasters are other essential components of managing a disaster. This should be an ongoing, regular function of local government institutions.

- Risk assessments (identifying those areas and people that may be at risk of a disaster before a disaster occurs) are also essential and may complement development strategies in local areas. The development of "suitable" housing for those living in urban areas cannot be undertaken without a risk assessment for development.

- *Response and relief*: If a disaster does occur, then response and relief have to take place immediately - there can be no delays. Delays will occur if municipalities have no clear plans to manage such events. It is therefore important to have contingency plans in place.

- A well-managed team of local government players should be prepared and know where to go, what to do. If the situations are managed in a crisis way, people rush off in all directions, waste valuable time and even make serious mistakes as a result of their actions.

- Search and rescue plans need to be clear and all members of the municipality need to know their role and function in such activities. A plan outlining who is responsible for what kind of activities needs to be in place.

- *Rehabilitation*: Interventions are also needed after a disaster occurs. In many ways this is the most difficult period for the victims. Job-producing activities, construction works and public works programmes may be needed, to name but a few. The victims cannot be forgotten once the disaster has abated.

Disaster management requires effort and commitment by the various role-players. The capacity to handle such events must be built, and training programmes are essential. Duplication of efforts should be minimized and financial resources appropriately controlled. In certain cases the expand and contract model is best, with local government personnel conducting disaster management in their "everyday" activities and then "expanding these" when needed. A local government cannot, however, conduct disaster management in isolation. Local communities and the commercial sector have to be engaged. They can do a great deal when it comes to preventing and preparing for disasters.

1.5.5 Disaster management- Local Role-Players

Communities have always played critically important relief role in disasters, particularly drought. Some evaluations of past involvement of non-governmental organizations and community-based organizations in past disasters have shown that non-governmental involvement in disasters has generally been positive.

Community groups have and do play a major role in disaster management. They are quick in response, have local knowledge and expertise to their advantage, and can also act as important channels for awareness-raising and education. Disaster management, therefore, needs to be a coordinated effort between government, various institutions, non-governmental organizations, community-based organizations and the commercial sector. Where communities are not directly involved and are passive recipients of relief, the result may be the aggravation of a "dependency" syndrome. Existing community networks and agencies can therefore play a major role in disaster management, but the pressing need is for such groups to expand their roles in disaster reduction and mitigation activities and not merely be focused on relief activities.

The commercial and private sector can also play an essential role in disaster mitigation. Usually the role of such players has been in the field of relief and recovery. While the value of such contributions is great, the commercial sector should play a greater role in the mitigation of disasters through training, education and capacity-building. Involvement by this sector can also be expanded from that of relief to proactive mitigation. Disasters are often large and unwieldy events to manage and cannot be tackled by an individual sector alone. The coordinated team efforts of a number of role players are an essential part of the management of a disaster.

1.5.6 Disaster management in Rural Areas- Essential Players

Communities, particularly those that are marginalized, have a range of coping mechanisms that enable them to survive "normal" everyday crises and longer- term disasters. Disaster coping mechanisms among the poor are a response to both the event and the underlying development constraints that they face. Disaster coping strategies include risk strategies, the sale of household or productive assets during a disaster, and social relations-based strategies for example utilization of kinship relations. Knowledge of these strategies and how and when they are implemented is fundamental to any disaster management programme.

1.5.7   Disaster Management in Urban Areas- Essential Players

Disaster management and mitigation in urban areas could include awareness campaigns that could be built onto existing organizational meetings in areas. Awareness about fires before the winter season could be raised and officials or owners could ensure that fire-fighting equipment is operational and functional, particularly in congested buildings.

Community organizations, together with various officials and organizations could also be involved in flood-disaster mitigation. A warning system could be organized, and planners and other technical groups could be involved in ensuring that housing development occurs in "safe" areas.

1.5.8   Disaster management – The Mitigation Component

Disasters have occurred and they will happen in the future as well. Preparedness and mitigation of such events can do much to lessen their impact. Disaster mitigation refers to measures that can be taken to minimize the destructive and disruptive effects of hazards and thus lessen the magnitude of a possible disaster. Disaster mitigation can occur at any time, but is most beneficial if taken before an event escalates into a severe disaster. Disaster management and mitigation activities can also by closely linked to development, thereby maximizing long-term development as well as risk reduction.

Disaster mitigation can be achieved through proper engineering, spatial planning, municipal management and conflict resolution. Examples of disaster mitigation are: protecting deep and shallow wells in a cholera-prone village, planting trees to stabilize a deforested landslide-prone slope, conducting household education campaigns on safety with fires before winter months, public works schemes in drought-prone areas, and a host of others.

1.6   Capacity at Community Level- Critical Factor in Disaster Management
(Condensed form Philip Buckle)

Across the entire range of disaster relevant policies, programmes, activities, arrangements and strategies, work is being undertaken to strengthen community capacity to prepare for, plan for, respond to and recover from disasters. The concept of developing capacity at community level is weaved around the core principle of supporting local people. This can be practically exhibited in the establishment of community based recovery planning committees, local recovery committees, engaging community development officers and the integration of local, regional and provincial programmes as a single, coordinated, accessible package of services. There is no denying the fact that response activities are dominated by

a "command model" of management despite the felt requirement of engaging local community as part of comprehensive local emergency management planning.

1.6.1 Principles of Managing Emergency at Community Level

Community and personal support services are most effective when they:

- are provided in a coordinated, timely and culturally-appropriate manner throughout the entire recovery process;
- are available for all people affected by disaster, including individuals, families, communities, groups, organizations, recovery workers and volunteers;
- include the affected community in their development and management;
- facilitate sharing of information as an integral part of services delivery;
- recognise that people will require accurate and current information about the situation and the services available;
- are integrated with all other recovery services, particularly with regard to financial assistance;
- provide assistance and resources to create, enhance and support community infrastructures;
- recognise that cultural and spiritual symbols and rituals provide an important dimension to the recovery process; and
- utilise personnel with appropriate capacities, skills and an awareness of the full range of available services.

These principles are based on the assumption that disaster management is most effective when it is worked with a community that is engaged in the processes of preparedness, prevention, response and recovery. Emergencies and disasters usually affect communities and from the community viewpoint the three vital links in dealing with disasters are individuals, voluntary organisations, and local governments. Individuals can do much to help themselves and others within their community by:

- being aware of local hazards and recommended protective measures;
- taking appropriate individual precautions against those hazards;
- being actively involved in community-based voluntary organisations; and
- making sure that their local government has effective arrangements in place.

1.6.2 Community Capability- The Essence

Community capability is not a well defined term; although it is clearly linked to and overlaps the concept of social capital which itself has numerous definitions. Key elements of the community capability relate to:

- Development of skills in the community;
- Ensuring local access to services;
- Developing local knowledge;
- Ensuring access to resources; and
- Developing information exchange and social networks within a community

Key elements of community capability building must target developing:

- commitment and initiative;
- leadership and management skills;
- decision making and problem analysis skills;
- improved access arrangements;
- management of change, and especially dynamic process of decline and growth;
- a sense of place and community; and
- mutually supportive programmes, skills and institutions

1.6.3 Community Based Emergency Management- Current Research

Research indicates that local people see themselves and their communities as central to effective disaster management and expect to have a say in the development of local policies and programmes. Improved preparedness, enhanced response capacity and greater resilience to recover could be achieved by support to the community as a whole in the provision of better infrastructure , improved access to services, strengthened and broader skills for management and development of services and support for community. Traditional values and norms in rural areas are important in bonding a community together. A sense of obligation to help neighbours, a commitment to the area, a sense of independence and self-reliance all work to support and sustain communities. These values are an asset for community capability building and for maintaining a volunteer presence.

1.6.4 Linking Disaster Management and Community Capability

Disaster management must have a clear commitment to community engagement and community participation. It therefore seems obvious that a capable community will be better able to work effectively in all areas of emergency management. Developing this capability,

whether it refers to knowledge, skills, networks, resources or values would seem to be a cornerstone of strategic disaster planning and preparedness.

Greater political commitment and management effort needs to be devoted to the strategic positioning of disaster management in a community capability framework. This may be achieved by drawing links more strongly between disaster management and other areas of community management and civil administration, such as health, policing, education, environmental management and business development.

This activity should occur within a framework whose boundaries are delineated by principles of sustainability, equity, accessibility and participation to ensure that developmental activity does not generate new hazards or enhance existing hazards.

1.7   Reducing Vulnerability and Enhancing Resilience

It is now accepted by many researchers and by many practitioners that a supportive, knowledgeable community with access to resources and the skills to use those resources will be better able to support its members. Given this a "more capable" community will be better able to support its members in areas such as:

- Generating and sustaining values of self-reliance, mutual aid and community obligation;
- Developing community morale;
- Analysing risks and developing appropriate management strategies;
- Accessing resources and services;
- Contributing to policy formulation and programme development;
- Developing, implementing and maintaining locally based protective and supportive programmes; and
- Ensuring that development is sustainable,equitable and relevant to local conditions

Disaster management - Conclusion

To be effective, the approach to managing disasters should cover all aspects of disaster management and also needs to include such aspects as prevention, mitigation, preparedness, response, recovery and disaster-related development. Some of the activities that are required for effective preparation are: vulnerability assessment, planning, information systems, institutional framework of development, warning systems, public education and training, development of a short-term and longer-term mitigation strategy. These activities should be an integral part of "normal" local government activities that are

expanded when needed (vulnerability assessment, for example, is a long, involved process that cannot be conducted only when an isolated disaster occurs).

An important aspect of long-term disaster preparedness is that such plans should not be counter to, or hinder, development. Poverty often exacerbates vulnerability to disasters, and disasters in turn contribute to the continuation of the cycle of poverty. Disaster management initiatives and plans should therefore not run counter to development and should, where possible, complement those programmes that already exist in an area.

1.8   Disaster Management- The National System

October, 2005 brought misery and destruction which shook the whole country and nation. Popular response to the situation matched the calamity but there were no institutional and systemic arrangements to optimize the overwhelming response by steering and streamlining interventions. The deficiency has been addressed through enactment of National Disaster Management Ordinance in 2006 which provides for the establishment of National Management System. This Federal Statute is the result of a national consensus. The system so created is weaved around the National Disaster Management Commission headed by the Prime Minister of Pakistan. The Commission is mandated to lay down policies, plans and guidelines for disaster management.

The National Disaster Management Authority (NDMA) acts as the implementing, coordinating and monitoring entity for disaster management. The Authority is mandated to:

(a)   prepare the National Plan for approval of the National Commission;

(b)   implement coordinate and monitor the implementation of the National Policy;

(c)   lay down guidelines for preparing disaster management plans by different Ministries, Departments and Provincial Authorities;

(d)   provide necessary technical assistance to Provincial Governments and Provincial Authorities for preparing their disaster management plans in accordance with the guidelines laid down by the National Commission;

(e)   Coordinate response in the event of any threatening situation or disaster;

(f)   Lay down guidelines for, or give directions to Ministries, Provincial Governments and Provincial Authorities regarding measures for responding to any threatening situation or disaster; and

(g)   Promote general education and awareness relating to disaster management;

Preparation of National Plan for Disaster Management for the whole country is the responsibility of National Disaster Management Authority (NDMA). This Plan is supposed to include:

(a) measures to be taken for prevention of disasters or mitigation of their effects;

(b) measures to be taken for integration of mitigation measures in the development plans;

(c) measures to be taken for preparedness and capacity building to effectively respond to any threatening disaster situations or disaster; and

(d) roles and responsibilities of different Ministries, Divisions of the Federal Government in respect of measures specified in clauses (a) , (b) and (c).

1.9 Disaster Management- The Provincial System

National Disaster Management Ordinance, 2006 requires the Provincial Government to establish Provincial Disaster Management Commission which is chaired by the Chief Minister. Members of the Commission include, besides others, the Leader of the Opposition in the Provincial Assembly and another member nominated by him. The Commission is mandated to lay down policy and plans for disaster management.The Commission may:

a) Lay down the provincial disaster management policy and provincial plan in accordance with guidelines given by the National Commission;

b) Approve the disaster management plans prepared by the departments;

c) Review implementation of the provincial plan;

d) Oversee the provision of funds for mitigation and preparedness measures;

e) Review developments of different departments for ensuring integration of prevention and mitigation measures; and

f) Review measures for mitigation, capacity building and preparedness in departments

Establishment of the Provincial Disaster Management Authority flows from Section 15 of the Ordinance and with implementation of policies and plans for disaster management as major function, its powers and functions include:

a. Coordination and monitoring implementation national policy, national plan and provincial plan;

b. Examining vulnerability of different parts of the province for specification of prevention and mitigation measures;

c. Prescribing guidelines for preparation of departmental and district disaster management plans;

d. Evaluation of preparedness at government and non-government level to respond to disasters and coordination of response in the event of disaster;

e. Directing actions for response to disasters;

f. Promotion of general education, awareness and community training;

g. Providing technical assistance and advice to local authorities; and

h. Securing compliance adherence to building codes

The Provincial Plan for disaster management shall include the description of vulnerability of different parts of the province to disasters, measures to be adopted for prevention and mitigation, the manner in which mitigation measures shall be integrated with development plans, capacity building and preparedness measures to be taken , the role and responsibility of different departments for responding to disaster situation and disaster.

1.10   Disaster Management- The Local Spectrum

Local arrangements for disaster management are weaved around District Disaster Management Authority which is headed by the District Nazim with District Coordination Officer, District Police Officer and Executive District Officer, Health as members. This Authority serves as the district level body for planning, coordinating and implementing disaster management activities in the district in accordance within the policy framework given by the National and Provincial Authorities. The district authority is responsible for**:**

a) Preparation of district disaster management and response plan;

b) Coordinating implementation of the national/ provincial policies and plans;

c) Identification of areas vulnerable to disaster and taking steps prevention and mitigation;

d) Ensuring adherence to prevention, mitigation, preparedness and response measures laid down by the National and Provincial Authorities;

e) Giving direction to district and local authorities for taking necessary for prevention and mitigation;

f) Prescribing guidelines for preparation of departmental disaster management plans at district level and monitoring their implementation;

g) Organizing specialized training programmes for officers, employees volunteers;

h) Facilitating community training and awareness programmes for prevention and mitigation;

i) Setting up and upgrading early warning system and dissemination of information to public;

j) Preparation of response plan and guidelines;

k) Coordinating pre and post disaster management activities;

l) Reviewing the district level plans of departments, local authorities to make necessary provision for prevention and mitigation;

m) Identification of buildings and places which could be used as relief camps and making water supply and sanitation arrangements there;

n) Establishing stockpiles of relief and rescue materials and ensuring availability of such material at short notice;

o) Providing information to Provincial Authority on different aspects of disaster management;

p) Encouraging involvement of voluntary organizations and social welfare institutions in disaster management; and

q) Ensuring periodical disaster management drills.

In addition to its mandatory functions the District Disaster Management authority is also empowered to:

a) Give directions for release and use of resources available with any department and local authority in the district;

b) Restrict vehicular traffic to and from vulnerable or affected area;

c) Restrict the entry of any person to vulnerable or affected area;

d) Provide shelter, food drinking water, essential provisions, health care and services;

e) Remove debris, conduct search and rescue operation;

f) Establish emergency communication system in affected areas;

g) Make arrangement for burial of unclaimed dead bodies;

h) Require experts to advise and assist;

i) Procure exclusive or preferential use of amenities from any authority or person;

j) Construct temporary bridges and structures; and

k) Ensure that non-governmental organizations carry out their activities in equitable and non –discriminatory manner.

The Local Authorities at district level are obliged to have the following as their contribution to disaster management:

a) Training their officers and employees for disaster management;

b) Ensuring that resources for disaster management are so maintained that they are easily available for use;

c) Conformation of construction projects within their jurisdiction to standards and specification laid down for prevention of disasters and mitigation; and

d) Carrying out relief, rehabilitation and reconstruction activities in the affected area in accordance with provincial and district plans;

2. THE MUNICIPAL DISASTER MANAGEMENT POLICY

Generally speaking hazards are caused often due to factors beyond human control, but vulnerability is in general a result of human activity. Some patterns of consumption, production and development have the potential for increasing the vulnerability to natural disasters, particularly of the poor and socially disadvantaged groups. Some of the root causes that increase vulnerability of people are population size, poverty, illiteracy and lack of scientific approaches of prevention.

While natural hazards cannot be controlled, the vulnerability to these hazards can be substantially reduced by planned mitigation and preparedness measures. Concerted efforts with in a sustained policy frame work ensure reduction in vulnerability of communities to disasters.

2.1 Need of a Municipal Disaster Management Policy:

This requires focus on pre-disaster aspects such as disaster prevention, mitigation and preparedness for reducing losses to hard earned development gains from intense disasters. This also reduces the massive expenditure on post disaster relief, rehabilitation and reconstruction activity. World over the Local Government Institutions and municipalities are treated as first respond-ness to disasters and disaster situation. Muzzafar Abad and Mansehra are two major municipalities in the most vulnerable region in the country and their location demand a greater level of preparedness, resources, capacity and response capability to address risks and disasters. For this, an effective policy for disaster management is the first step, providing for institutional structures for integrated command, control and co-ordination, with legal cover and the ability to achieve the disaster management needs of Muzaffarabad and Mansehra municipalities. In this context, the Municipal Disaster Policy for the municipalities of Muzaffarabad and Mansehra has been formulated to address pre-disaster as well as post-disaster phases, with adequate emphasis on efficient response mechanisms during an emergency.

2.2 Scope and Aim of the Policy:

This policy determines the basis of the actions to be taken by different entities involved in disaster management in the two municipalities. The disaster management

includes disaster prevention, reducing their impact as well as responding to and coping with their consequences. It also aims to minimize the loss of lives and properties including social, private and community assets because of natural or man made disasters, and contribute to sustainable development and better standards of living for all, more specifically for the poor and vulnerable sections by ensuring that the development gains are not lost to disasters and emergencies.

2.3   Objectives of Municipal Disaster Management Policy:

The main objectives of the disaster Management Policy for Muzaffarabad and Mansehra municipalities are to:

- recognize disaster risk and vulnerability reduction as essential for sustainable development;
- develop appropriate disaster prevention and mitigation strategies:
- assess the risks and vulnerabilities associated with various disasters;
- develop and establish systems, structures, resources and skills along with guiding principles for reducing disaster risks;
- facilitate institutional arrangements for disaster risk management;
- provide clarity on roles and responsibilities of various stakeholders;
- adopt an all hazards' and people-centered approach to Disaster Risk Management;
- establish and maintain a proactive programme of risk reduction.

2.4   Basis of Municipal Disaster Management Policy

Disaster management is not an isolated sector but an approach to solving problems relating to disasters impacting other sectors such as agriculture, environment and social. Eventually, disaster management is the responsibility of all sectors, all organizations and all agencies that may be potentially affected by a disaster. In this perspective, key principles of the Municipal Disaster Management Policy have been formulated. These principles are intended to provide guidance during all phases of disaster management and are consistent with National Disaster Risk Management Framework of Pakistan.

2.4.1   Mainstreaming Disaster Risk Reduction into Development Planning:

All the development projects taking place in the municipality should encompass the disaster mitigation and management component and disaster prevention and preparedness should be an integral part of every development policy concerning the municipality.

2.4.2 Sustainable and continuous strategy:

Sustainable development can only be achieved when the inherent strength of all agencies including the community to deal with disaster situations is enhanced as once the capacity is built, it must be sustained and this would be an ongoing and continuous activity. Attaining this objective requires sustained initiatives encompassing social, economic and infrastructure issues. Further, The Municipal Disaster Management Policy aims to improve on a continuous and sustainable basis. This also focuses on infrastructure and processes for relief, rehabilitation and reconstruction. Institutionalization of capacity building at all levels within the municipalities remains a priority in order to be able to mitigate the impact of disasters.
.

2.4.3 Inter- agency Synchronization

An effective disaster response requires a quick and structured response from all the stakeholders. The active participation of affected communities, NGOs, private sector and various departments like civil administration, police, civil defence, health and works and services is thus instrumental to any response activity. Therefore, the Municipal Disaster Management Policy focuses on establishing response mechanisms that are synchronized, fast, coordinated and participative.

2.4.3 Capacity Building through Training, Education and Awareness:

Disaster management by engaging only a handful of stakeholders would not only be inefficient but can also be catastrophic Therefore the Municipal Disaster Management Policy aims to strengthen the competence of NGOs, private sector and the local community to cope with disasters while at the same time building the capacity of the Institutional machinery to manage disasters. Effective disaster management requires that the community, especially vulnerable groups like elderly, women and landless labour be fully aware of the extent of their vulnerability to disasters and to reduce its impact before it actually happens. Furthermore, NGOs, private sector and the community must understand and be familiar with disaster management principles and practices including:

  i. preparedness and their responsibilities,

  ii. helping prevent disasters,

  iii. Appropriateness of reaction during disaster; and

  iv. supporting themselves and relief workers when required.

2.4.5 Autonomy and equity in Service Delivery

Every disaster is a tragic event that disrupts normal routine of life. Every disaster causes loss of property and sometimes life and brings immense suffering. Accordingly, any

Disaster Management effort should be neutral and non- discriminatory and it is therefore necessary that Disaster Management institutions possess the autonomy to make decisions in a fair, transparent and systematic manner. Disaster assistance and relief must also be provided in an impartial and consistent manner without regard to economic or social status of beneficiaries and no discrimination of caste, creed, religion, community or sex should be done.

2.4.6   Institutional and legal arrangements for Disaster Management Cell

The Municipal Disaster Management Cell will have the necessary legal sanction and validity with requisite powers for managing emergency situations. This is necessary to ensure that they are recognized by all stakeholders as the legitimate lead implementation arrangement.

2.4.7   Community and local level programming

Planning and efforts for Disaster management should be sensitive to local customs, beliefs, and practices and be adapted to local conditions. This will ensure participation of the local community and promote a culture of ownership for disaster management at all levels. Besides, aspirations of people should be accommodated in the planning and execution as the objective of any effort relating to disaster management is to benefit the community. People are central to the decision- making process for disaster management and their priorities should be reflected in the programmes in this regard.

2.4.8   Financial Sustainability

This is a critical area for any plan or policy of disaster management. Allocation and availability of resources ensures sustainability of disaster management effort. Long term sustenance and permanency of the Municipal District Management Cell in Mansehra and Muzzafar Abad shall depend on regular allocation of funds for the purpose and this can not happen unless it is accommodated as an essential feature of expenditure in the budget. There had to be a mechanism to slowly and gradually create the requisite pool of resources for disaster management.

3.   STRUCTURE OF MUNICIPAL DISASTER MANAGEMENT CELL

The Cell will assume the lead role at municipal level in integrating earthquake vulnerability reduction into ongoing reconstruction and development programming. Offices of the Cell will be set up in the premises of the Municipal Authorities with sufficient equipment and office furnishing. The Project Management Team, in consultation with UNDP Pakistan,

may shift into these Offices for smoother project delivery, enhanced competence, and more importantly to demonstrate that project ownership lies with the municipal authorities.

The establishment of the Cell would lay the foundation for sustainable local capacities for earthquake vulnerability reduction and preparedness in the two municipalities. This would allow not only continuing risk reduction activities in the two target municipalities, but also would develop local resource base to promote similar practices in other cities of AJK, NWFP and Pakistan.

3.1   Staffing Pattern:

The Cell will basically comprise of a core team of two staff members, a Coordinator and Assistant. The team will be responsible for implementation and management of the activities of the Cell and ensure that activities are implemented in an efficient manner and good quality standards are maintained. The role of Coordinator will be executed by Administrator Municipal Corporation in case of Muzaffarabad and Tehsil Nazim for Tehsil Municipal Administration Mansehra.

3.2   Decision Making:

Any development effort for the identified community can only bring requisite fruits if it involves and fully engages the local key stakeholder in decision making and also builds their capacities for its sustenance in the longer run, and disaster management, planning and implementation is no exception. All the decision making involved in the implementation of MDMC will be done through Municipal Coordination Committees (MCC) at the respective municipalities. Municipal Coordination Committee (MCC) is formed with the Coordinator as its Chairperson. The Committee will meet every quarter to review the progress made, discuss issues and take decisions on matters pertaining to disaster management and sustainable disaster risk reduction in the municipality. It will also play a facilitating role in improving and strengthening coordination with all departments and mainstreaming disaster management into their functioning. The Committees shall draw members from the respective stakeholders in the municipalities. These forums are to ensure continued engagement, interest and participation of all stakeholders in planning, management, review and reflection processes. Specific functions of the Committee are:

1. Identification and selection of damaged public buildings for retrofitting;
2. Selection of public buildings for demonstrative reconstruction;
3. Local level resource mobilization;
4. Coordination of simulation drills at community level;
5. Advise on safer construction guidelines;

6. Advise on training on DRM and safer construction;

7. Sharing of lessons learnt and their institutionalization at local level; and

8. Monitoring of project implementation progress.

4.   IMPLEMENTATION OF MUNICIPAL DISASTER MANAGEMENT POLICY

Successful disaster management can only be achieved if there is a better understanding of hazards and disasters, their behavior, and the risks they pose to the community. Therefore, an integrated approach to disaster management covers the following phases as essential components:

- Pre- disaster Phase
- Disaster/Impact Phase
- Post- disaster Phase

In order to implement the recommendations of the Municipal Disaster Management Policy, the roles of key agencies need to be defined. This envisions a set of procedures for the entities which play significant roles:

- The municipality and its administrative head as Coordinator of the Cell,
- Tehsil/District Administration,
- Health Department,
- Public Works Department,
- Education Department
- Civil Defence,
- Technical Institutions
- Non-Government Organizations(NGOs)
- Community Based Organizations (CBOs)
- Private Sector

The approach of the MDMC should be based on the assertion that disaster management is not a separate sector or discipline but an approach to solving problems that facilitates disaster management, developing skills and resources across stakeholders. Key element in this regard is to leverage the resources and capability of existing entities and build new capabilities, wherever necessary. For most activities, the implementation agencies remain the local authorities and public sector functionaries.

4.1   Pre-Disaster Phase

4.1.1   Prevention. Mitigation and Preparedness:

Prevention, mitigation, and preparedness are major activities in the Pre-Disaster phase. These activities involve extensive data collection, maintaining directories of resources, developing action plans, capacity building, training and community awareness activities. Government departments, district administration, local authorities and other relevant agencies will develop plans for prevention and mitigation of disasters and will build capacity and ensure preparedness in the event of a disaster actually taking place. The private sector, NGOs and the community would actively co- operate with the relevant agencies and would participate in training and other activities, conducted to augment their disaster management capabilities. In this context, the Cell will act as the focal agency for mitigation, preparedness and capacity creation and would facilitate and monitor the same in the respective municipalities. The Cell will develop linkages with other stakeholders such as lending agencies, government departments, local authorities, NGOs, private sector and community groups, locally based national and international agencies in order to share knowledge and enhance capacity. The capabilities developed in this phase will play a critical role in later phases.

4.1.2   Key Activities in Pre-Disaster Phase:

Following are the primary activities that will be carried out in the pre-disaster phase.

- **Planned Development:** There is a significant relationship in the way disasters and developments affect each other. A long- term disaster management approach requires that planning activities for development should include robust mitigation practices. The Cell would ensure that the planning activities in the municipal limits take into account disaster risks and provide for suitable preventive and mitigation measures. The relevant Departments, District administrations and local authorities shall ensure that the building codes and type designs correspond to the requirements for safe construction. Where any government scheme provides funding of construction, the guidelines of the scheme shall stipulate the need for adhering to the construction norms laid down for the hazards to which that area may be prone. The Cell in the respective municipality would promote participation of the corporate sector in finding out technological solutions for cost-effective disaster management measures.

- **Regular Development and Updating of Guidelines:** Effective disaster management requires the formulation of clear guidelines and subsequent compliance by all government authorities, private sector entities and the public at

large. The Cell will develop appropriate guidelines that would include civil, structural, land use planning specifications and development of regulatory frame that assist the implementation of guidelines for disaster management.

- **Articulating Command Structure:** It is imperative that a clear chain of command is established for effectively managing activities that immediately follow a disaster. This requires very clearly defined roles, responsibilities and accountability processes.

- **Risk Assessment:** Before commencing preventive and preparedness activities, it is important to identify and assess different types of risks. Relevant departments would co- ordinate with the Cell for a thorough assessment of hazards and vulnerability. The assessment will be used for developing detailed contingency plans and mitigation measures.

- **Placement of Information Network:** It is critical that relevant authorities should be in a position to quickly establish contact with people and resources in the aftermath of a disaster. The Cell will ensure that a comprehensive repository of information such as names and contact details is created, maintained and made easily accessible to the relevant authorities at all times. An information network is critical not only for managing disasters but also for effective performance of routine activities. This information network must enable timely collection of hazard related information and rapid dissemination of relevant information and warnings.

- **Building Capacities & Expertise:** It is necessary to build strong capabilities and expertise for handling various aspects of disasters. The Cell shall engage with a number of entities such as research institutions, disaster management specialists, NGOs, community groups, line departments, local authorities and other stakeholders to augment the capabilities of relevant entities.

- **Awareness Raising:** Awareness generation is a key prerequisite for mitigation and preparedness at the community level. People living in areas that are vulnerable to disasters will be sensitized to the hazards, which they face as well as methodologies for mitigating the risk. Wide publicity will be given to the specifications for construction in these areas.

- **Knowledge Management:** Previous disaster situations can provide valuable insights in managing disasters so it is imperative that these learnings are captured in organized manner and utilized through knowledge management systems and feedback mechanisms. The Cell shall develop systems and processes that enable knowledge management by capturing, storing and effectively utilizing information related to previous experiences. Information and

knowledge embracing all aspects of disasters from prevention to remodeling shall be disseminated to stakeholders.

- **Preparedness:** Disaster Management is an activity that requires pooling of resources across a wide spectrum of departments and agencies. All stakeholders will identify in advance the tasks, which they will be expected to perform in major disasters and the Cell will prepare a detailed plan for emergency response. The plan will identify the personnel and teams that will perform these tasks, the equipment necessary for the tasks and keep them ready for mobilization. Standard Operating Procedures will be laid down for all handling specific disasters. Control Room will be established at the municipal level with adequate communication equipment All communication systems available in different branches within the municipal limits will be available for use by the Cell. Major disasters will be documented and the lessons learnt used to reduce future vulnerabilities.

- **Formulation of Disaster Management Plans:** Detailed disaster management plans that are tailored to local needs would enable the authorities and the community to respond systematically and effectively. The guidelines for such plans will be prepared by the Cell in collaboration with stakeholders including government departments, district administration, local authorities and expert agencies. The Cell will ensure that these are constantly reviewed and updated.

- **Defining Flexible Procedures:** Emergency situations may warrant simplified procedures for decisions relating to evacuation, procurement of essentials, deployment of resources and such other activities. The Cell shall accordingly define flexible procedures for emergency situations.

- **Health and Medical Care:** Health and medical care is one of the most critical and immediate response components in any situation. The capacity for providing medical assistance in disaster situation including the emergency response quality will be developed through trained personnel and appropriate infrastructure.

4.1.3   Roles of Relevant Agencies

4.1.3.1 Municipal Disaster Management Cell

Municipal Disaster management Cell, in close collaboration with and support of government departments would:

- Formulate municipal disaster risk management plan, based on local risk assessment and coordinate its implementation

- Review development plans and provide guidance on mainstreaming disaster risk reduction measures in these plans

- Continuously monitor hazards, risks and vulnerable conditions within the municipality

- Prepare guidelines and standards for local stakeholders on disaster risk reduction

- Conduct education, training and public awareness programmes 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 have not been followed, direct the relevant entities to secure compliance of such standards

- Invest in specific capabilities according to the requirement to manage all types of threats peculiar to its area.

- Undertake appropriate preparedness measures at municipal level. The exercise may include maintenance of early warning system, identification of buildings to be used as evacuation sites, stockpiling relief and rescue materials and identifying alternative means for emergency communication

- Promote and support research, development of new technologies and the use of local knowledge in measures that are aimed at supporting risk reduction;

- Ensure that regional and international experience, knowledge and resources are made available to support efforts in risk reduction and disaster management.

4.1.3.2 Government Departments

Government departments must ensure adequate assistance to the Cell, the district administration and local authorities for activities in this phase. These departments should ensure their active co- operation in setting up communication centers, drawing up contingency plans, assisting in capacity building, developing plans, gathering data, and identifying and training appropriate personnel. Specific roles of government departments in the Pre-Disaster Phase may include:

Local Government and Rural Development Department

- Encourage disaster resistant technological practices in buildings and infrastructure.

- Encourage the people in earthquake prone areas to adopt earthquake resistant technologies.

- Prepare maps showing population concentration and distribution of resources.
- Liaise with line departments and agencies for a coordinated mitigation approach.

Police Department

- Impart training to the members of Police Force in first aid, evacuation, rescue and relief
- Train volunteers from among citizens and voluntary organizations.
- Identify the 'High Risk' and 'Risk' areas for different disasters and instruct the existing police installations located in those areas for keeping themselves in readiness for undertaking emergency rescue, evacuation and relief operations.

Health Department

- Carry out and disseminate a risk evaluation of the population.
- Develop a municipal plan on emergency preparedness and response
- Ensure adequate availability of Emergency Health Kits in high risk areas
- Train volunteers on emergency preparedness programmes such as first aid and preventive measure against diseases
- Preparing a list of medical and paramedical personnel in disaster prone areas.
- Establish and operate an early warning system for health threats based on the routine health information and in collaboration with other departments.

Information Department

- Popularize the techniques of preparedness and survival during pre-disaster, disaster and post disaster period through publicity compaigns.
- Prepare guidelines and policy for necessary action by mass media on reporting disasters.

Education Department

- Find out space and scope to educate students on disaster related matters in schools, colleges and technical streams.
- Arrange for training of teachers and students of disaster prone areas about the steps at different stages of disaster and organise them as volunteers and inspire them for rescue, evacuation and relief works.
- Ensure that construction of all educational institutions in earthquake zones is earthquake resistant.

Social Welfare and Women Development Department

- Sensitization of disaster managers related to gender issues in disaster management.
- Prepare special projects for socio economic uplifting of women towards disaster risk reduction.
- Organize health camps for regular medical checkups of women and aid to the needy.
- Organize training programs for women to cope with disaster situations.

Public Works Department

- Take precautionary steps for the protection of government property against possible loss
- Formulate guidelines for safe construction of public works.
- Prepare list, with specifications and position, of heavy construction equipment in the province.
- Organize periodic training of engineers and other construction personnel on disaster resistant

4.1.3.3 Private Sector

The private sector should ensure their active input in the pre-disaster activities in alignment with the overall plan developed by the Cell. They should also adhere to the relevant building codes and other specifications, as may be set by local authorities.

4.1.3.4 Community Groups and Local NGOs

Local community groups and voluntary agencies including NGOs should actively assist in prevention and mitigation activities under the overall direction and supervision of the Cell. They should actively participate in all training activities as may be organized and should familiarize themselves with their role in disaster management

4.2   Impact Phase

4.2.1   Emergency Relief Measures and Relief

The impact stage consists of all measures that are taken instantly in the aftermath of a disaster. The pace and effectiveness of the response in this phase will critically determine the loss to life and property. The ability of the Cell to respond to a disaster will be developed during the pre-disaster phase and the capabilities and institutions developed therein will be brought into play in this phase. Likewise important will be the deployment of trained

personnel, proper flow of information and speed of decision making. The municipal administration, in conjunction with local authorities, shall be responsible for carrying out relief activities when the impact of a disaster is restricted within the geographical boundaries of a municipality.

4.2.2   Key Activities in Impact Phase

Following are the main activities as part of emergency relief measures and in the relief phase to implement the Municipal Disaster Management guidelines:

- **Search & Rescue:** The first priority in the aftermath of a disaster is to minimize loss of lives by undertaking rescue efforts for the affected people and providing medical treatment. People who are trapped under destroyed buildings or are isolated due to floods need immediate assistance The Cell in coordination with local authorities will be responsible for the search and rescue operations in an affected region. In doing so, they will be guided by disaster management plans and will be supported by government departments.

- **Shelter, Health and Sanitation:** Disasters can disrupt food, water supply and sanitation mechanisms. They may also force people to abandon their houses, either temporarily or permanently. Such situations typically result in an immediate need for shelter and protection against an incidence of epidemic. The Cell shall coordinate the provision of temporary shelter, health and sanitation services to rescued victims in order to prevent an outbreak of disease.

- **Infrastructure and Essential Services:** Disasters can destroy the infrastructure in terms of roads, public buildings, airfields and communication network. An immediate priority after a disaster is to bring the basic infrastructure into operating condition and deal with fires and other hazardous conditions that may exist in the aftermath of the disaster. The Cell would work in close coordination with government departments to restore infrastructure to normal operating condition.

- **Security:** Usually, in a disaster situation, the police and security personnel are preoccupied with conducting search and rescue missions. Some people could take advantage of the situation and resort to antisocial activities. The Cell would be obliged to take necessary steps to ensure that the security agencies are assisted in preventing this so as to provide a sense of security to the people.

- **Communication:** The Cell would communicate to the larger community the impact of the disaster and specific activities that are being undertaken or need to be undertaken to minimize the impact. Some of these activities could include:
  - Media management for ensuring precise communication of the impact of disaster, relief measures being taken and generating goodwill;

- o Engaging communities with a view to prevent panic reactions, while providing relevant information and handling welfare enquiries;
- o Managing feedback to get updates on relief measures and urgent needs of various agencies in emergency relief measures and relief.

- **Preliminary Damage Assessment:** In the aftermath of a disaster, the Cell will be receiving simultaneous requests for assistance from scores of people. This would be a situation of over stretching. Hence, it is necessary to utilize and deploy the resources in most efficient manner. Such deployment is not possible without undertaking a preliminary damage assessment. Once a disaster strikes, the Cell shall carry out a preliminary need and loss assessment and mobilize resources accordingly.

- **Relief Payouts and Packages:** The Cell shall assist government agencies and departments in preparation and disbursing relief packages. This exercise will aim at covering all affected families without any discrimination of caste, creed, religion, community or sex whatsoever.

- **Post-Relief Assessment:** The Cell will document learning from the relief experience, which can be used as input into further mitigation, relief, rehabilitation and reconstruction plans.

4.2.3 Roles of Relevant Agencies

Emergency relief measures in the immediate aftermath of a disaster is mainly carried out under the supervision of the Revenue Department. As much as possible, the government departments shall carry out their functions in accordance with the action plan developed by the department.

4.2.3.1 Municipal Disaster Management Cell

The Cell shall develop guidelines to steer the emergency relief measures and relief in this phase. It would also facilitate, co- ordinate and monitor emergency relief measures and relief being carried out by other agencies in its area of operation. The Cell shall primarily focus the provision, maintenance and operation of municipal services.

4.2.3.2 Government Departments

Functionaries of various government departments will carry out relief operations as per disaster management plans developed, by the government.

Revenue Department

- Coordinate the activities of Municipal Disaster Management Cell.
- Provide necessary infrastructure to carry out relief works.

- Assess initial damage.
- Set up emergency evacuation shelters and transport affected people to the shelters

Police Department

- Carry out search & rescue operations.
- Maintain law and order, especially during relief distribution.
- Keep close watch for any criminal and anti-state activity in the area.

Health Department

- Mobilize medical teams and paramedical personnel for the affected areas as part of the Rapid Assessment and Quick Response Teams.
- Provide medical assistance to the affected population.
- Carry out technical assessment on health infrastructure availability and need

Information Department

- Take steps for publicity of government directives relating to the situation.
- Broadcast essential information on disaster.
- Arrange visit to the affected area by the local and foreign journalists in the interest of publication of accurate report.
- Ensure that broadcasts reflect true and clear presentation of actual position and do not lead to panic.

Education Department

- Place required number of education institutions and their buildings for using as emergency shelter and relief centres if necessary.
- Provide voluntary assistance for distribution of relief material and assistance to special needy people in the locality through teachers and students.

Social Welfare and Women Development Department

- Help establishment of camps for vulnerable segments of the society.
- Ensure minimum wages to labour during relief work in drought or other disasters.

Public Works Department

- Provide assistance to the damage assessment;
- Take steps to clear debris and assist search and rescue teams;
- Provide sites for rehabilitation of affected population;
- Collate and disseminate information regarding operational and safe routes to personnel operating in the field.

- Launch repair missions for damaged critical infrastructure.
- Take steps for prompt removal of uprooted trees on the roads.

4.2.3.3 Private Sector

The private sector would chip in the relief activities under the overall supervision and direction of the Cell. Based on the training and other capacity- building inputs received from the Cell and other authorities, they should be able to mobilize resources immediately and commence emergency relief measures and relief at the earliest. They should also actively provide information regarding magnitude of disaster, need for additional resources and help the authorities in conduct of a preliminary damage assessment.

4.2.3.4 Community Groups and Local NGOs

Local community and local NGOs are usually the first to respond in the aftermath of a disaster. The community and local NGOs should undertake rescue and relief measures immediately, to the extent possible on their own, before the government functionaries mobilize. After the intervention of the authorities they should continue rescue and relief under the overall direction and supervision of and in close coordination with the Cell to avoid duplication and ensure equity. They should take a pro- active role in assisting the victims of disaster and should provide inputs to relevant authorities as to the magnitude of disaster, need for additional resources and help the relevant authorities in the conduct of a preliminary damage assessment.

4.3   Post-Disaster Phase

4.3.1   Reconstruction & Rehabilitation

The driving force behind the government policy in the post disaster phase will be "Building Back Better" ensuring speedy return to normalcy and mitigation of long- term consequences of the disaster. The policy objective of the government in this phase will be to focus on economic and social consequences of the disaster and directing efforts to improve the same by building back better.

4.3.2   Key Activities in Post- Disaster Phase

The following activities would be carried out in the post disaster scenario to achieve the goals highlighted in the National Disaster Management Framework.

- **Detailed Damage Assessment:** While a preliminary damage assessment is carried out during the impact phase, a detailed assessment must be conducted before commencing reconstruction and rehabilitation activities. The Cell in collaboration with

government departments shall initiate detailed assessment at their respective level for damages sustained in housing, services, infrastructure, agriculture, health and education assets in the affected regions.

- **Assistance to Restore Houses:** The local authorities, in consultation with the people affected and under the guidance of the Cell, shall decide relocation needs taking into account criteria relevant to the nature of the calamity and the extent of damage. Relocation efforts will include:
    - o Getting endorsement of the affected population;
    - o Land acquisition;
    - o Urban land use planning:
    - o Customizing relocation packages;
    - o Obtaining due legal clearances for relocation;
    - o Getting necessary authorization for rehabilitation;
    - o Livelihood rehabilitation measures for relocated communities.

- **Finalizing Reconstruction and Rehabilitation Plan:** The success of any reconstruction and rehabilitation is based on thorough planning and vigilant monitoring of the relevant projects. The Cell will oversee reconstruction and rehabilitation work and ensure that it takes into account the overall development plans for the respective municipalities.

- **Resource Generation:** Reconstruction & rehabilitation projects are quite resource intensive. These projects have been financed in the past primarily through the national exchequer and donor funds. The government shall finalize the fund generation mechanism, including the covenants measures that govern fund inflow, disbursement and usage. This includes estimation of funds required based on detailed damage assessment reports and consolidation of the same under sectoral and regional heads; and contracting with funding agencies and evolving detailed operating procedures for fund flow and corresponding covenants.

- **Project Management:** Since rehabilitation and reconstruction effort usually involves the coordinated efforts of several entities, the government shall encourage the respective entities to reinforce program management capabilities to ensure that activities across and within entities are managed efficiently. In addition, it is also necessary to constantly monitor the activity to ensure that projects are executed on time, in accordance with the technical specifications and to the satisfaction of the beneficiates. The Cell, in conjunction with government departments will monitor the reconstruction activity that is carried out by various implementation agencies in its jurisdiction. The Cell may focus on these aspects of activities:

- o Strengthening and retrofitting of houses:
- o Reconstruction and Retrofitting of structures;
- o Restoration of basic infrastructure facilities, including water storage tanks, supply lines and sanitation carriages;
- o Creation of health centers, first aid centers, hospitals; and
- o Restoration of livelihood.

- **Communication:** Communication activities are necessary to convey to the community the scope and nature of the proposed reconstruction and rehabilitation effort to increase the stakeholder awareness. The Cell Shall try to:
  - o Manage media for ensuring precise communication of the reconstruction and rehabilitation measures to stakeholders;
  - o Liaise with community to inform them of efforts for their relocation, rehabilitation and reconstruction;
  - o Use communication to get feedback on reconstruction and rehabilitation measures.

- **Grievances Resolving Mechanisms:** The Cell, in conjunction with relevant agencies, shall institutionalize mechanisms to address beneficiary grievances at municipal level, as well as explore innovative ways of dispute minimization like involving the community in reconstruction initiatives.

4.3.3 Roles of Relevant Agencies

The post- disaster phase mainly involves reconstruction and rehabilitation activities. These activities will be primarily carried out by the local bodies and shall be in accordance with the reconstruction and rehabilitation plans framed by National and Provincial Disaster Management Authority at the National and Provincial Level.

4.3.3.1 Role of the Cell

The Cell shall through the line departments and local bodies

- Conduct detailed assessment of damage,
- Formulate estimates of financial support required
- Request funding from the government.
- Facilitate, co- ordinate and monitor reconstruction and rehabilitation efforts of various implementation agencies in terms of project timelines, processes, funds deployment and benefits to the affected community.
- Provide feedback on various parameters related to the progress and outcome of reconstruction and rehabilitation efforts to funding agencies and other stakeholders.

4.3.3.2 Government Departments

Government departments will conduct detailed damage assessment and will carry out reconstruction and rehabilitation activities, in accordance with National and Provincial policy. The more specific role of each department is described below:

Revenue Department

The Revenue Department plays a coordinating role in the municipality to ensure that various departments effectively carry out rehabilitation and reconstruction activities in this phase. The primary responsibilities of the Revenue Department in this phase are:

- o Quantify loss and damage;
- o Coordinate reconstruction and rehabilitation efforts;
- o Assist the Cell in monitoring progress and outcome of reconstruction and rehabilitation efforts;

Police Department

- o Arrange security of government property and installations damaged in disaster.
- o Participate in damage and need assessment.
- o Provide security cover to relief operations.

Health Department

- o Check outbreak and possibility of any epidemics and take pre-emptive steps.
- o Report health related activities in affected areas for planning interventions.

Information Department

- o Arrange dissemination of information of the short and long term measures of different departments and agencies for relief and rehabilitation of the affected people.

Education Department

- o Determine the extent of loss in educational institutions and prepare plans for their rehabilitation.

Public Works Department

- o Carry out detailed technical assessment of damage to public works.
- o Assist in construction of temporary shelters.
- o Organize repairs of buildings damaged in the disaster
- o Prepare detailed programmes for rehabilitation of damaged public works.
- o Arrange technical assistance and supervision for reconstruction works.
- o Assess damage to transportation infrastructure.
- o Take steps to ensure speedy repair and restoration of transport links.

4.3.3.3 Private Sector

The private sector should provide rational estimates of damage assessment to relevant authorities and provide feedback in terms of their priorities and concerns for work related to rehabilitation and reconstruction. They should assist in providing feedback regarding progress and outcome of rehabilitation and reconstruction projects undertaken in their vicinity.

4.3.3.4 Community Groups and local NGOs

Community groups and voluntary agencies, including NGOs should provide fair estimates of damage assessment to relevant authorities and discuss their observations in terms of their priorities and apprehensions related to rehabilitation and reconstruction. They should participate in the post- disaster activities, in co- ordination and alignment with the overall guidelines developed by the Municipal Disaster Management Cell.

NDMA Vision Statement

"To achieve, sustainable, economic, social and environmental development in Pakistan through reducing risks and vulnerabilities, particularly those of poor and marginalized groups, and by effectively responding to and recovering from all types of disaster events.