



Government of Pakistan



United Nations Development Programme

**National Capacity Building for
Disaster Risk Management**

National Disaster Management Authority

Prime Minister's Secretariat, Islamabad

SIGNATURE PAGE

Country: Islamic Republic of Pakistan

UNDAF Outcome(s)/Indicator(s): Effective systems for disaster risk management areas and communities affected by prolonged emergencies

Expected Outcome(s)/Indicator (s): Effective national, provincial and district level capability for disaster risk management

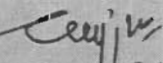
Expected Output(s)/Annual Targets: Institutions, structures, policies and capacities for disaster risk management developed and vulnerabilities of communities and society reduced.

Executing Agency: National Disaster Management Authority (NDMA)

Responsible parties: NDMA, Provincial/Regional Disaster Management Authorities, Federal Line Ministries, Departments, Training and Educational Institutions, UN agencies and NGOs

Programme Period:	August 2007-December 2011
Project Title:	National Capacity Building for Disaster Risk Management
Project ID:	00056807
Award ID:	00047326
Project Duration:	Five years (5)
Management Arrangement:	NEX

TOTAL BUDGET	US\$ 46.5 Million
Indicative resources:	
UNDP	US\$ 3.26 million
- TRAC	US\$ 2.5 million
- Cost sharing	US\$ 0.76 million
Parallel Funds	US\$ 5.8 million
Subtotal:	US\$ 9.06 million
Unidentified budget:	US\$ 37.44 Million

Agreed by (Government):  30.8.2007

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Islamabad

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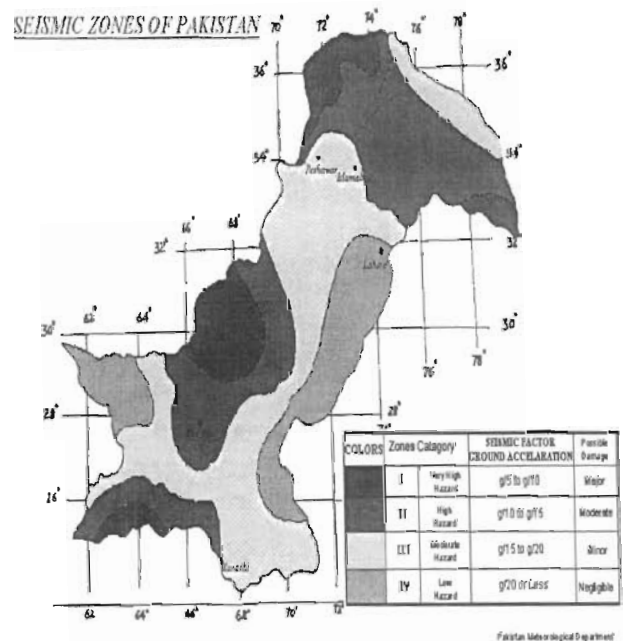
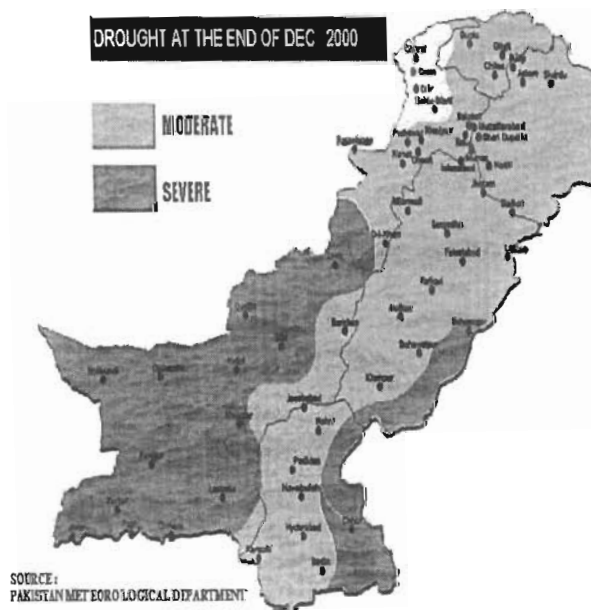
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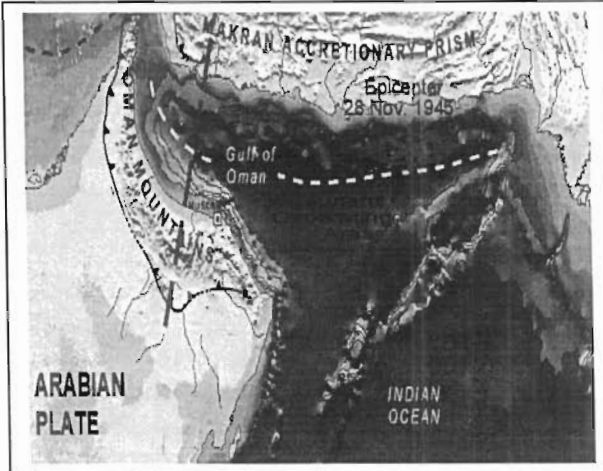
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SITUATIONAL ANALYSIS

Pakistan is in transition from a predominantly rural and agrarian to an industrial, service based and urban economy. The economy has been growing at an impressive average of more than 6 % over the past few years. Natural disasters threaten sustained economic growth by causing shocks, as the October 2005 earthquake did. The quake caused a loss of 5.2 billion USD which is staggering when compared to national budget for 2006-07 which was about USD 25 billion. The amount of losses was much higher than the total allocations for social sector development. Similarly, the economic damages suffered from 14 major flood events, since 1947, have been estimated, as USD 6 billion, by the Federal Flood Commission. The drought of 1997-2001 demonstrated that this phenomenon could have serious political, economic and social repercussions. Sustainable development in agriculture, livestock, water resources, food security and environment sectors is seriously threatened by droughts, particularly in Balochistan, Southern Punjab, Thar zone of Sindh and Southern Districts of NWFP. Therefore, it is not a coincidence that areas which experience disasters frequently, are amongst the poorest regions; e.g. Balochistan, Tharparker, Cholistan and Northern Areas. In order for Pakistan to ensure continuity of current economic growth in the medium to longer term, it must address risks posed by natural disasters.

Hazards that threaten Pakistan include avalanches, cyclones/storms, droughts, earthquakes, epidemics, floods, glacial lake outburst floods, landslides, pest attacks, river erosion and tsunami. Human induced hazards that threaten the country include transport, industrial, oil spills, urban and forest fires, civil conflicts and internal displacements of communities due to multiple factors. High priority hazards in terms of their frequency and scale of impact are:- earthquakes, droughts, flooding, landslides, cyclones and transport accidents that have caused widespread damage and losses in the past.





Poor construction practices, poor livestock and agricultural management, fragile natural environment, poverty, poor communication infrastructure and lack of critical facilities aggravate vulnerabilities of communities. In mountainous regions the non-availability of safer land for construction, scattered settlement patterns and harsh climatic conditions further exacerbate vulnerabilities. The size and growth of human and animal population, environmental degradation resulting from poorly managed urban and industrial development processes, and climate change and variability are major dynamic pressures that aggravate vulnerabilities of Pakistani society. In the coming decades

frequency, severity and impact of certain hazards may increase that might lead to greater social, economic and environmental losses.

A reactive, emergency response approach has remained the predominant way of dealing with disasters in Pakistan till now. The Calamity Act of 1958 was mainly concerned with organizing emergency response. A system of relief commissioners at provincial level was established under this Act. It also provide for an Emergency Relief Cell (ERC) in the Cabinet secretariat which coordinates disaster response by the federal government. The awareness of policy makers, media, civil society, NGOs, UN agencies and other stakeholders remains low about disaster risk management. The situation is relatively better as for the flood and drought mitigation. However, the country lacks a systematic approach towards disaster risk management. Lack of disaster risk management plans also remains a major gap. Even the districts and regions that have suffered from frequent hazards don't have plans, except few. Pakistan lacks application of building codes for construction of housing and infrastructure in hazard prone areas. This could be attributed to lack of political will, lack of trained construction workforce, lack of monitoring and evaluation mechanisms, corruption, and apathy etc. Pakistan also lacks an effective system for emergency response, e.g. Emergency Operations Centres, response plans, SOPs, capacities in Search and rescue, fire fighting, medical first response, evacuation etc, although some agencies (e.g. WAPDA, FFC) have developed systems and procedures to deal with certain hazards.

A number of situations in the aftermath of October 08 earthquake could be described as favourable opportunities to promote disaster risk management; e.g. i). heightened awareness of decision-makers, officials, media and civil society about disaster risks and vulnerabilities, ii). enhanced commitment of donors and UN for developing capacity on DRM, iii). approval of National Disaster Management Ordinance 2006 and establishment of NCMC, and the NDMA, and above all. iv). commitment of the NDMA leadership. Existing disaster risk management system also has a number of strengths. For example Pakistan has relatively well developed systems for flood mitigation, preparedness and response. Similarly Provincial revenue departments have policies, systems and procedures in place for disaster relief, particularly for floods and droughts. Pakistan armed forces are well trained in disaster response operations, particularly for floods. A number of departments including agriculture and irrigation have been implementing drought mitigation strategies. NGOs like Oxfam, Church World Services and Thardeep Rural Development Programme (TRDP) have extensive experience in community level disaster risk reduction and preparedness.

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, the implementation of which would be ensured by the National Disaster Management Commission.

The National Disaster Management Authority (NDMA) is 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. NDMA would provide technical guidance to national and provincial stakeholders about formulation of plans, strategies and programs for disaster risk management. NDMA would also work towards capacity development of national, provincial and local stakeholders in collaboration with PDMA's and DDMA's.

The National Disaster Risk Management Framework has been formulated to guide the work of entire system in the area disaster risk management. It has been developed through a process of comprehensive consultation with stakeholders from local, provincial and national levels. The Framework defines nine broad priorities for developing disaster risk management capacities. Those nine priorities have been included in this Project Document under 12 broad output areas. The purpose of this Project Document is to mobilize resources from international community for implementation of national priorities. The resources mobilized under this Project Document will compliment the work of national, provincial governments and that of the line ministries.

STRATEGY

The project will assist the Government of Pakistan in implementing priorities identified in the Framework to establish appropriate institutions and structures at national, provincial and local levels, and for developing systems and capacities of stakeholders at all levels to deal with issues of disaster risks and vulnerabilities in an effective manner. The Nine priority areas identified include:- i) Institutional and legal arrangements for DRM ii) National hazard and vulnerability assessment, iii) Training, education and awareness, iv) Disaster risk management planning, v) Community and local level risk reduction programming, vi) Multi-hazard early warning system, vii) Mainstreaming disaster risk reduction into development, viii) Emergency response system, ix) Capacity development for post disaster recovery.

Within the above mentioned broad priority areas, specific initiatives will be implemented based upon strategic needs, willingness of partners, and availability of resources from government at federal and provincial levels and from the international donors. The project will work closely with the federal and provincial and regional governments through the Disaster Management Authorities in order to implement capacity building initiatives.

Two core areas of intervention will include: 1) Integration of disaster risk reduction into sectoral development planning and implementation of different ministries, and 2) Local and community level capacity development and mitigation of specific hazards; e.g. earthquakes, droughts, floods, flash floods, landslides, cyclones etc. Other interventions under the project including planning, training, education, awareness raising, early warning and emergency response will be undertaken to contribute to the above two strategic goals.

The project in collaboration with NDMA will work for capacity development of federal ministries, departments and the provincial/regional and district disaster management authorities. The project would provide technical support to NDMA in implementation of strategies with federal, provincial

and local authorities; e.g. training services, facilitation of planning, implementation of risk reduction strategies and programmes, development of curriculum etc.

In collaboration with NDMA, the project will work with provincial and regional disaster management authorities for design and implementation of provincial and sectoral disaster risk management plans and capacity development of provincial line ministries and departments, based upon priorities identified in the Framework. The project will also work closely with the provincial and local authorities to develop local level disaster risk management plans and facilitate their implementation in priority districts in a phased manner.

Considering the fact that Pakistan is starting from almost scratch, simultaneous efforts for capacity development at various levels and in various sectors will be undertaken. Short term priorities would include formation of national and provincial disaster management commissions and authorities, as well as the organization of a national risk mapping. Development of National Disaster Response Plan and provincial disaster risk management plans will also be a priority for the first year. In order to enable the federal and provincial governments to deal with any future disaster events, capacity building of federal and provincial institutions in search and rescue and emergency response will be a high priority in the short term as well. Training of NDMA, PDMA's and selected DDMA's will be priorities in the short-to medium term. Education, awareness-raising at various levels, implementation of community level risk reduction schemes at a larger scale and recovery capacity building will be addressed in the Medium to longer terms. Detailed concept papers or proposal will be developed for specific activities for mobilization of funds or for implementation by using existing funds.

Costs have been given for the essential minimum staff required for implementation of the project. Other technical staff requirements will be identified during the implementation and the staff would be hired on need basis.

The project will be implemented by taking into consideration 1) the gradual build-up of NDMA's structures and capacity, and 2) the One UN Joint Programme that is due to be formulated by the end of 2007. The period between the signing of project document and end of 2007 will focus on supporting the set-up of NDMA and related systems with immediate priority activities. The work plan and budget for 2007 is attached to this Project Document and will be activated after the signature of the Project Document. Thereafter, work plans will be examined and approved by the Project Steering Committee on an annual basis.

An indicative list of schemes, equipment and personnel is given in the annexes of this Project Document. These schemes, equipment and their costs will be reviewed by the PSC or by respective sectoral working groups and final decisions on the nature of schemes and their costs will be taken by the PSC or the respective working groups.

THE PROPOSED PROJECT

Project Objective

The project intends to enhance capability of the Government of Pakistan at the federal, provincial and local levels in dealing with disaster risks/vulnerabilities in a systematic manner by establishing structures and systems and developing capacities in line with global good practices in order to achieve sustainable social, economic and environmental development through avoiding shocks from disasters.

Project Outputs, Activities and Implementation Arrangements

It is anticipated that upon completion of this project through achievement of following outputs, the government of Pakistan will have reduced the disaster vulnerabilities in high risk regions of the most vulnerable and poor segments of society. It is also expected that the targeted communities, district governments and provincial and national disaster management authorities will be in a much better position to quickly respond to disaster situations and reduce losses to life and property. The achievement of these twelve outputs would be the minimum prerequisite for an effective disaster risk management system.

Activity 1: Establishment of institutional arrangements

Output: Disaster Management Authorities functional at national, provincial and district levels in about 50 districts.

Narrative

Appropriate systems, rules and procedures would be developed to facilitate effective working of the NDMA. This would also include acquiring staff and resources. Subsequently the formation of provincial/regional Commissions and Authorities will be facilitated in four provinces, the AJK, FATA and NA as described in the National Disaster Management Ordinance and the National Disaster Risk Management Framework. Efforts will be particularly undertaken to form DM Authorities in prioritized hazard prone districts, municipalities and cantonments. The local level DM Authorities would include Nazims, DCOs, police chiefs, civil defence, fire services, EDOs for agriculture, education, health, works and rural development sectors. They would also include representatives of local Red Crescent societies, NGOs, civil society, private sector and media. Detailed functions of Commissions and Authorities will be developed in the light of the National Framework. The Commissions and Authorities can further define their functions once established. National Institute of Disaster Management (NIDM) will be established to promote training and education in the government and non-government sectors at all levels.

Activity 2: Strategies for building codes, land use and disaster insurance

Output: Strategies to implement building codes, land use plans, and risk insurance schemes developed through full participation of stakeholders, and available for public information.

Narrative

Initiatives will be undertaken to promote safer construction, and infrastructure and urban development. This may include updating of existing building codes and development of land use plans etc. Implementation of building codes is a major challenge. A consultation process will be undertaken with relevant agencies to develop strategies to promote implementation of building codes particularly in major urban centres; e.g. Karachi, Lahore, Islamabad, Peshawar, Quetta, Muzafarabad, Faisalabad, Gujranwala, Sialkot etc. The role of insurance sector in promoting disaster risk reduction in the shelter, infrastructure and industrial sectors couldn't be overemphasized. The NDMA and the PDMA's will work with insurance industry to devise and implement schemes against hazard risk for shelter, infrastructure and industrial sectors. Opportunities will also be provided to establish and manage a government managed insurance program for disaster mitigation.

Activity 3: National Risk Assessment

Output: Decision making tools to formulate policy and programs developed and available in print, digitized and database forms on spatial distribution of natural hazards, disasters and vulnerable areas.

Narrative

A Vulnerability Atlas of Pakistan will be prepared. This would include hazard maps indicating the location of various hazards with zonation of risk levels; e.g. low, moderate and severe. The Atlas will also include analysis on vulnerability of settlements, housing stock, important infrastructure and environmental resources. It 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. Vulnerability analysis will identify key infrastructure and environmental resources in each area that are prone to damage and loss from prevalent hazards. Vulnerabilities of various social groups in hazard prone areas will also be analyzed. Experts would undertake assessment based upon scientific analysis of the geology and past history of hazards. Data will be collated from the existing scientific organizations; e.g. NESPAK, WAPDA, SUPARCO, PMD, GSP, NARC, NIO, WHO etc. 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 disaster inventory will be developed in order to facilitate analysis on disaster and vulnerability trends. A national consultation will be organized to define the scope of database and categories of information that needs to be covered. The database will be developed through an analysis of past disasters and their impact. This will be done by reviewing secondary data from government sources as well as from media reports. The reports, charts and maps produced by the database will provide analysis on trends and patterns of risks and vulnerabilities. The analysis of small, medium and large scale disasters could provide proxy indicators for disaster risk. In this way underlying trends could be determined at a much lower cost and with less effort than with other methodologies. A computerized database will be produced and managed by NDMA. The database will be made available online, so that any interested stakeholders could access it. The PDMA and DDMA would be involved in managing the database at provincial and district levels.

Activity 4: Analysis on climate change related risks

Output: Updated analysis on the impact of climate change on glaciers and ice caps in the North available for better disaster risk reduction particularly for flood, drought and landslides mitigation.

Narrative

Major water resources of Pakistan lie in the frozen North. Damage to the glaciers and ice cap would enhance disaster risks of various kinds. A study would be conducted to assess any negative impact of climate change on glaciers and ice cover in the Northern Pakistan. The research work of National Agricultural Research Council (NARC) and WWF indicate that some of the glaciers are melting at speeds faster than average in the past. They attribute this to climate change. Further research would be conducted to develop an inventory of the glaciers and ice caps that are melting faster (most probably due to climate change) and other factors. Strategies for preservation of these glaciers would be identified. The research would also identify the potential

impact of the melting of various glaciers in terms of increase in hydro-meteorological hazards. The research would propose preparedness measures for the local communities to avoid flash flooding and GLOF phenomena.

Activity 5: Disaster Risk Education, Training, Awareness

Output: Disaster risk management education incorporated into the syllabus of training establishments of civil servants, media, armed forces, and modules available for training of district and municipal officials, politicians, and bureaucrats.

Narrative

This will include development of curriculum and training of the staff of NDMA, PDMA's and district and municipal authorities in hazard prone areas. Media orientation would also be an important activity. Public awareness materials e.g. posters, brochures, booklets, videos would be developed for orientation of parliamentarians, senators, bureaucrats, politicians etc. Disaster risk management education will be incorporated in the syllabus of Civil Services Academy, National Institutes of Management, the Administrative Staff College, National Defence University, Regimental Centres and armed forces training institutions including Staff College. In order to educate future managers and citizens, certificate and diploma courses would be developed and offered in universities and colleges. Initially this will be done in selected universities and colleges and slowly it will be expanded to all educational institutions, particularly those located in hazard prone areas. Curriculum for school students would also be developed particularly for those regions falling under high hazard zones.

Activity 6: Disaster Risk Management Planning

Output: Disaster Response Plan of the NDMA, and Disaster Risk Management Plans of PDMA's, and DDMA's in 50 districts and selected line ministries and departments available.

Narrative

NDMA will take the lead in formulating National Disaster Response Plan. The plan will define roles and responsibilities of federal ministries, departments and other entities with regards to organizing of disaster response by the federal government. The Plan will help various line ministries, departments and agencies to collaborate in providing needs-based efficient response.

NDMA will also work with selected federal ministries to support them in development of sectoral disaster risk management plans. As a first priority, the ministries may include:- agriculture, defence, education, environment, health, infrastructure, housing and works, telecommunications and information, ports and shipping and water and power.

Provincial DM Authorities would formulate disaster risk management plans for their respective regions. The plans would include analysis of hazard-prone areas (districts/municipalities), vulnerabilities, resources available, strategies for risk reduction, and responsibilities of various stakeholders for disaster preparedness and response. The PDMA's will also work with provincial/regional line departments to develop sectoral plans for disaster risk management.

NDMA will support PDMA's to particularly work closely with DDMA's and MDMA's in selected hazard-prone districts and municipalities to assist them in the development of disaster risk management plans.

Activity 7: local and community level program implementation

Output: Local institutions for DRR established and strengthened at village, neighbourhood and town levels, which are able to implement small structural mitigation schemes.

Narrative

In order to achieve goals and objectives of the National Law and the Framework, community and local level risk reduction projects and programmes will be designed and implemented in selected districts and municipalities (50 districts/municipalities). These may include local level programming on drought and flood mitigation or earthquake vulnerability reduction in priority regions in all four provinces, the AJ& K, FATA and NA. The programmes may cover any other hazards based upon outcomes of local risk assessment and prioritization by stakeholders. Considering the fact that historical focus of disaster mitigation in Pakistan has mainly remained on structural mitigation; e.g. embankments, dykes, dams etc, the current strategy would emphasize more upon non-structural aspects of mitigation.

Community organizations, training, awareness-raising, masons training, volunteers training on search and rescue, first aid, evacuation, fire fighting would be important strategies. 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 and city levels. School safety and preparedness programmes would be implemented in vulnerable villages and towns.

Activity 8: Strengthening of early warning systems

Output: Technical capacities of the Pakistan Meteorological Department and other warning agencies enhanced through expansion of flood, drought and cyclone monitoring networks and training.

Narrative

Technical and operational capacities of relevant scientific organizations (e.g. PMD, FFC, WAPDA, GSP, PNRA, NARC, SUPARCO, National Institute of Oceanography etc) to monitor and predict hazards with maximum lead time would be developed. This will be done by improving and expanding the existing technological networks. It will also include facilitating multi-agency interface, and strengthening the sharing of technical information about hazards amongst multiple agencies. The role of media will also be enhanced to improve dissemination of warnings. Linking communities with early 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. Community level activities will be undertaken under the output area 7. As immediate priority following activities will be undertaken.

Flood Forecasting System for NWFP and Balochistan

Based on environmental degradation and climate change, the incidence of flash flooding and river flooding in NWFP and Balochistan is expected to rise further in the coming years. Therefore enhancement of early warning capacities over there is an important requirement. The purpose of flood forecasting centre is to provide as much advance notice as possible of an impending flood. The higher reliability of forecasts and additional lead time would result in improved water management, flood fighting and evacuations from the areas likely to be affected by floods. At

present the PMD has a network of four radars at Karachi, R. Y. Khan, D. I. Khan and Islamabad. WAPDA also manages a flood telemetry network of 24 stations in upper catchments of Punjab, NWFP and AJK. The WAPDA network is being strengthened by installing another 20 stations further upstream. The PMD's Radar installed at Islamabad covers only surrounding areas and doesn't cover the hilly areas in Northern parts of the country. Thus installation of flood forecasting equipment would improve capability of PMD, FFC and related organizations and also improve the warning systems in NWFP. Considering the new developments in the areas of Gwadar coast and the risks of flooding, it would be important to strengthen early warning capacities for flash flooding in the Coastal belt and Northern Balochistan. This may include installation of weather radars and rain gauges in addition to the establishment of institutional arrangements for warning.

Tropical Cyclone Warning Centre

Objectives of establishment of a Tropical Cyclone Warning Centre are to minimize losses in the coastal areas of Pakistan. This activity will have two components: i) a transfer of advanced technology, experience, and training that will enhance the forecast and warning aspect; ii) infrastructure enhancement of the PMD to enable effective warning communication and education and training of emergency managers.

Institutional arrangements for early warning

A range of stakeholders are involved in an end-to-end EWS; e.g. hazard monitoring and forecasting agencies, NDMA, PDMAs, media and user departments, e.g. agriculture, health, information, police, fire services, Red Crescent, PNRA, irrigation departments etc. Interface and partnerships amongst these stakeholders are critical. Forums would be established to facilitate communication and dialogue amongst stakeholders for improving the EWS. This would involve stakeholder workshops and establishment of working groups for warning of various hazards.

Activity 9: Early Warning Systems for Epidemics

Output: Technical and management capacities of the Ministry of Health, Red Crescent, APPNA Sehat and Edhi Foundation increased for effective warning of epidemics and provision of health services to disaster victims.

Narrative

Disease Early Warning System

The Ministry of Health (MoH) manages a disease early warning system, which uses a combination of reporting by different health facilities, the community, and media, to identify possible outbreaks of communicable diseases and takes action to control them. The disease EWS was adapted to the earthquake affected areas, which proved very successful. Actions will be taken to identify hotspots. This would include training of health workers, research in potential hotspots, and better communication and reporting systems.

Activity 10: Mainstreaming disaster reduction into development

Output: At least ten federal and provincial ministries integrated disaster risk reduction into their sectoral policy, planning and programming.

Narrative

NDMA will focus on developing technical guidelines incorporating risk assessment into sectoral planning and on vulnerability reduction. NDMA will also work closely with the National Planning

Commission to develop criteria for assessment of development projects with a risk reduction lens. NDMA would conduct national and provincial workshops for selected line ministries to orient them for integrating risk assessment in programme planning and design, and to include vulnerability reduction in programme implementation. NDMA may initiate pilot projects with selected line agencies for mainstreaming of risk management in order to show case. Prior to initiating pilot projects, the NDMA will organize a review of current status on mainstreaming of DRR in sectoral work of line ministries and departments. It would produce case studies of good practice. Pilot projects, for mainstreaming DRR in five (5) selected ministries will be undertaken with the following sub-activities

- Establish dialogue and working group with the sectoral ministries/departments
- Plan pilot activity of using guidelines to undertake mainstreaming of DRM considerations in a planned or ongoing programme in the selected sector
- Implement pilot activity
- Document experience and lessons learnt during the project implementation
- Identify ways to extend mainstreaming in other programmes of the Ministries and / or other interested agencies/sectors

Activity 11: Effective Emergency Response System

Output: A system for effective emergency response established, comprising upon Emergency Operations Centres, Search and Rescue Teams, SOPs, common assessment and training methodologies supported by a National Disaster Management Fund.

Narrative

Emergency Operations Centres would be established at National, Provincial and District levels under the overall supervision of NDMA, PDMA and DDMA respectively. The NEOC would serve as a hub for receiving early warning and issuing necessary instructions to the response agencies. The EOCs would lead coordination and management of relief operations in affected areas. The EOCs will coordinate with Civil Defence, armed forces, NCMC, fire services, police, ambulance services, Red Crescent, Edhi Foundation and other agencies at respective levels. To ensure effective functioning of EOCs, Standard Operating Procedures (SOPs) will be drafted, which would define roles of federal, provincial and local agencies for their involvement in emergency response.

A methodology and system for common post-disaster damage, loss and needs assessment will be developed for collaborative action by multiple stakeholders. It will include a framework for damage and loss assessment, common reporting formats, data-collection methodologies, and roles and responsibilities of stakeholders. It would also include SOPs about activation, deployment, reporting and de-activation of assessment teams.

A database will be developed to record disaster response resources available with different departments at district, provincial and national levels. This would allow authorities to mobilize resources and deploy them in affected areas at the time of a disaster episode. Based upon an agreed list of resources and equipment, the departments will submit lists of resources available with them to the DDMA, PDMA and NDMA. The database will be made available on-line, so that all stakeholders can access this information when needed. The PDMA, DDMA and MDMA will manage the databases at provincial, district and city levels.

Three federal Search and Rescue teams will be established with capacity to respond to all kind of disasters. Pakistan Civil Defence will be closely involved in the development and management of SAR teams. The national teams may serve as the regional resource for South Asia region and they could be deployed to other countries based upon request from the host governments. Additional search and rescue teams will be developed at provincial levels on needs basis. Priority would be to establish such teams in provincial and regional capitals and in industrial cities like Gujranwala, Faisalabad and Sialkot. In this regard, training academies of Pakistan Civil Defence will be upgraded by providing relevant equipment and upgrading skills of the trainers.

Relevant national, provincial and local agencies will be encouraged by the NDMA, PDMA and DDMA to establish Godowns for stockpiling essential relief items for timely provision of relief to the disaster affected people.

A National Disaster Management Fund will be established for disaster response and relief activities. The NDMA will be able to draw money from this fund in order to acquire resources and supplies for organizing disaster response.

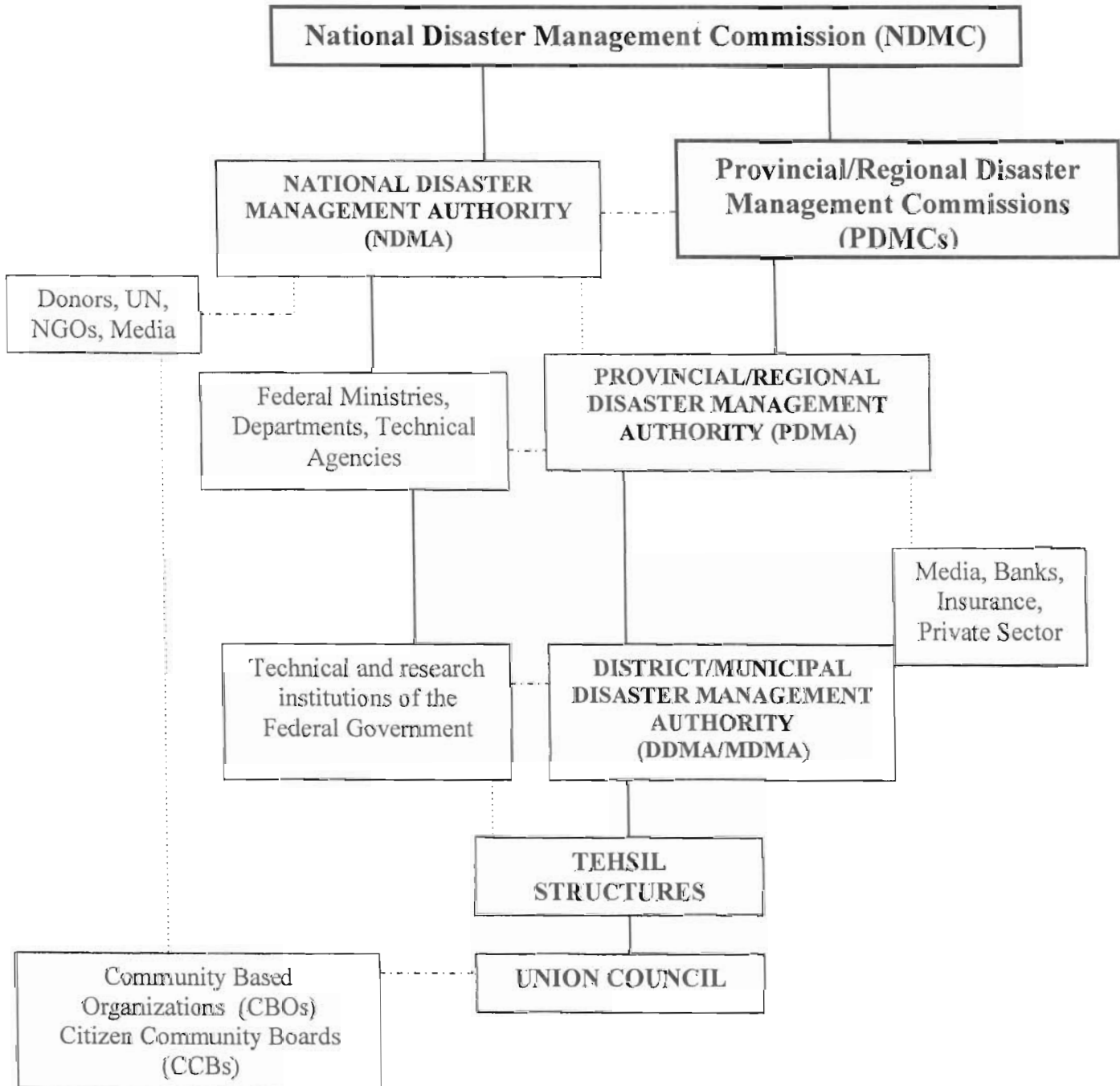
Activity 12: Capacity development for Post Disaster Recovery

Output: Institutional mechanisms established at national, provincial and district levels for effective post disaster recovery management.

Narrative

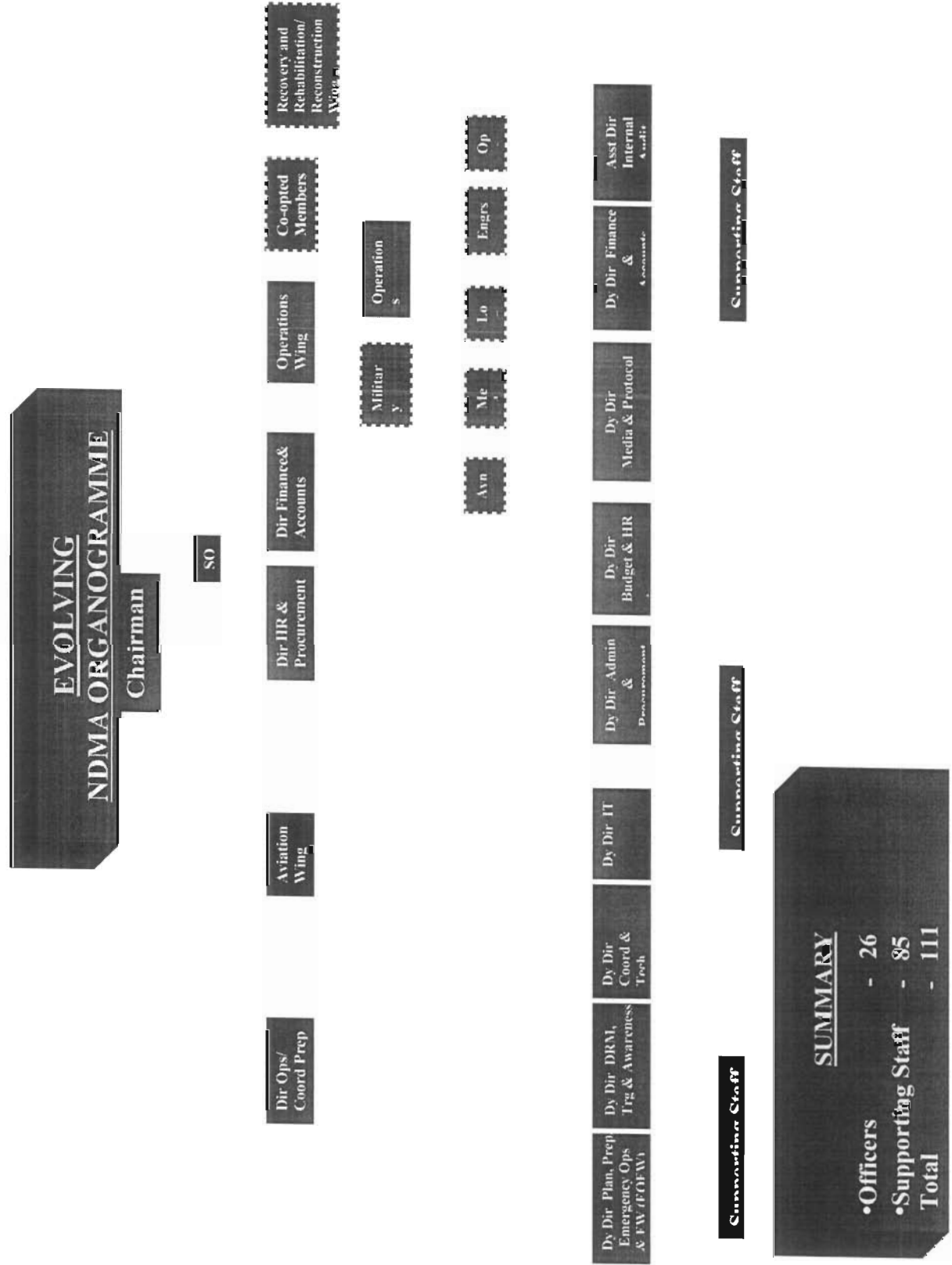
Guidelines for recovery needs assessment and recovery programme design and management would be developed for priority sectors; e.g. shelter, agriculture and livelihoods, health, education, environment, infrastructure. Lessons learnt exercises would be facilitated about the earthquake recovery experiences of ERRA, line ministries, district authorities, UN agencies, NGOs and communities. Lessons learnt exercises will help to identify gaps regarding effective recovery programming and identifying areas for capacity building. In this regard, NDMA will consider the work done by the International Recovery Platform (IRP) in Kobe. Orientation workshops would be conducted for officials of ERRA, line ministries and other stakeholders about recovery programme design and implementation. Sectoral strategies would be developed for the federal and provincial ministries and agencies for organizing recovery after disasters.

Structure for Disaster Risk Management



Organogram

National Disaster Management Authority



PROJECT RESULTS AND RESOURCES FRAMEWORK

Complete the table below for the outcome that the project is designed to address.

Intended Outcome as stated in the Country/ Regional/ Global Programme Results and Resource Framework: Effective national, provincial and district level capacity for disaster risk management			
Outcome indicators as stated in the Country/ Regional/ Global Programme Results and Resources Framework, including baseline and targets.			
Applicable MYFF Service Line:			
Partnership Strategy: The project will primarily work in partnership with NDMA. In close consultation with NDMA, the project will establish partnerships with PDMAs/RDMAs, DDMA and other federal and provincial stakeholders. The project will encourage all donors and federal and provincial governments to allocate resources for implementation of various strategies at the national, provincial and local levels either directly to the relevant authorities or through the Project modalities. In case other stakeholders would like to directly support the various DM authorities and stakeholders, the project would utilize UNDP funds in priority areas: i) disaster risk management planning, training, education, awareness raising, and small scale mitigation schemes at local/community levels and in school preparedness in hazard prone areas. The project would also support funding to undertake national hazard and vulnerability mapping.			
Project title and ID (ATLAS Award ID): National Capacity Development for Disaster Risk Management			
Intended Outputs	Output Targets for (years)		
Indicative Activities	Responsible parties		
Inputs			
<p>Output 1: Disaster Management Authorities functional at national, provincial and district levels in about 50 districts.</p>	<p>INDICATOR 1.2: Office of NDMA established with all staff in place and equipment and vehicles acquired (YEAR 1)</p> <p>INDICATOR 1.2: Offices of 4 PDMAs and 3 Regional DMAs established with all staff in place and equipment and vehicles acquired. Websites of provincial and regional DM Authorities developed. (YEAR 1)</p> <p>INDICATOR 1.3: DDMA established in 50 districts, their TORs available and memberships identified. (20 districts in year 2, 30 districts in year 3-5)</p> <p>INDICATOR 1.4: NIDM established with Office, Equipment and Training. (Year 1)</p>	<p>NDMA, Federal, Provincial & District Governments</p>	<p>Total Output 1 Cost = \$ 3.4 m</p> <p>Staff Work Load Project Manager 10% DRR Expert 10 % Information Expert 20 %</p>

Intended Outputs	Output Targets	Indicative Activities	Responsible Parties	Inputs
<p>Output 2: Strategies to implement building codes, land use plans, and risk insurance schemes developed through full participation of stakeholders, and available for public information.</p>	<p>OUTPUT INDICATOR 1.1: National building codes agreed by key stakeholders and available in print and on NDMA website, benefiting ministry of Housing and Works, contractors, builders, engineers, architects, banks, insurance companies (YEAR 1)</p> <p>OUTPUT INDICATOR 1.2: Land use plans approved by municipal corporations of Quetta, Karachi, Muzaffarabad, Sialkot, Gujranwala, Lahore, Peshawar and Faisalabad are available in print and electronically at websites of Municipalities and provincial authorities (Year 3-5)</p> <p>OUTPUT INDICATOR 1.3: At least two insurance schemes established either by private sector or by the Government of Pakistan for provision of insurance to shelter and infrastructure sectors against earthquake and floods hazards</p>	<ol style="list-style-type: none"> 1. Review and report of existing building codes 2. Consultation with relevant agencies on updating and implementation of building codes 3. Develop strategies for building codes implementation, publish and widely disseminate. 4. Develop land use plans for selected cities or integrate disaster risk lens into existing plans; e.g. Islamabad, Quetta, Karachi, Lahore, Peshawar, Muzaffarabad, Faisalabad, Sialkot and Gujranwala 5. Workshops on development or review of land use plans 6. Review of existing insurance schemes with regards to provision of insurance services for disaster risk reduction; 7. Consultation with stakeholders to develop strategies for insurance sector involvement in disaster risk management. Report on approaches and plan for insurance policies for disaster risk reduction 	<p>Ministry of Housing and Works, NESPAK, NDMA, Civil bodies of Islamabad, Karachi, Lahore, Quetta and other large size cities.</p>	<p>Total Output 2 Cost = \$0.16 m Staff Work Load Project Manager 5% DRR Expert 10 % Information Expert 5 %</p>

Intended Outputs	Output Targets	Indicative Activities	Responsible Parties	Inputs
<p>Output 3: Decision making tools on spatial distribution of natural hazards, and vulnerable elements available to decision makers to enable them to set priorities and develop policies and programs in a risk sensitive manner</p>	<p>INDICATOR 1.1: A national hazard and vulnerability atlas developed with active participation of relevant government agencies and non-government stakeholders available in digitized and print form.</p> <p>INDICATOR 1.2: 500 federal and 210 provincial/regional line ministries and technical departments officials, 1340 district/municipal departments officials and 1200 personnel from NGOs, UN, donors, insurance companies, media and research centres benefit from the Risk Atlas and Disaster Inventory of Pakistan</p>	<ol style="list-style-type: none"> 1. Workshop on National Hazard/vulnerability mapping 2. Primary research on hazard / vulnerability mapping 3. Data-gathering, collation, production of analytical reports, maps 4. Stakeholder meetings on mapping 5. Digitization of the hazard/vulnerability atlas 6. Production of the print version of the hazard/vulnerability atlas 7. Dissemination of the print and electronic version to relevant stakeholders 	<p>NDMA in collaboration with PMD, GSP, NARC, PNRA, Ministry of Health, SUPARCO, FFC, Surveyor General of Pakistan, NESPAK</p>	<p>Total Output3 Cost = \$3.43 m Staff Work Load Project Manager 10% DRR Expert 10 % Information Expert 15 %</p>

Intended Outputs	Output Targets for the Year	Indicative Activities	Responsible Parties	Inputs
<p>Output 4: Updated analysis on the impact of climate change on glaciers and ice caps in the North available for better disaster risk management particularly in the areas of flooding, droughts and landslides</p>	<p>OUTPUT INDICATOR 1.1: A status report on condition of glacier melt and dangerous lakes with scenarios of floods, GLOF, landslides and droughts available in print for use of national, provincial and local disaster management authorities.</p>	<ol style="list-style-type: none"> 1. Engagement of relevant government agencies and consultants for the study 2. Review of previous literature on climate change impact on ice caps/glaciers 3. Observation of scientific data and reports regarding climate change and its impact on glaciers/ice caps 4. Field visits 5. Production of report and dissemination to stakeholders 	<p>NDMA in collaboration with NARC, PMD, SUPARCO, FFC</p>	<p>Total Output4 Cost = \$.022 m Staff Work Load Project Manager 2% DRR Expert 10 %</p>

Intended Outputs	Output Targets for the Year	Indicative Activities	Responsible Parties	Inputs
<p>Output 5: Disaster risk management education incorporated into the syllabus of training and educational institutions of civil servants, media, armed forces, and modules available for training of district and municipal officials, politicians and bureaucrats.</p>	<p>OUTPUT INDICATOR 1.1</p> <p>Curriculum for training of NDMA and PDMA staff available;</p> <p>Curriculum for training of DDMA and MDMA available;</p> <p>Curriculum for training of media personnel available;</p> <p>Awareness materials for orientation of politicians and bureaucrats at national and provincial levels available;</p> <p>Educational curriculum for NIMs and Civil Services Training Academy available for use in all provinces</p> <p>Curriculum for armed forces training establishments available; Curriculum for certificate and diploma courses available for teaching to graduation and masters students;</p>	<p>Develop curriculum for training of NDMA and PDMA staff</p> <p>Develop curriculum for training of district and municipal authorities,</p> <p>Develop curriculum for training of electronic and print media</p> <p>Development of awareness materials for politicians, bureaucrats</p> <p>Review and development of educational curriculum for civil services academy and NIMs;</p> <p>Review and development of educational curriculum for armed forces training institutions;</p> <p>Review and development of curriculum of certificate and diploma courses for masters and graduation students</p> <p>Organize seven (7) training courses for NDMA and PDMA officials;</p> <p>Organize three (3) courses for staff of NEOC and PEOCs;</p> <p>10. Organize 20 training courses for district and municipal DM authorities on disaster risk management;</p> <p>11. Organize 30 training courses for district and municipal EOC/DM authorities on emergency operations management;</p> <p>12. Organize 17 training workshops for</p>	<p>NDMA, PDMA, Ministries of Education, Ministry of Defence, Civil Services Academy, NIMs</p>	<p>Total Output Cost = \$1.01 m</p> <p>Staff Work Load</p> <p>Project Manager 16%</p> <p>Training and Education Coordinator: 50 %</p> <p>Trainer: 50 %</p> <p>DRR Expert 10 %</p> <p>Information Expert 10 %</p>
<p>OUTPUT INDICATOR 1.2</p> <p>210 officials of NDMA and PDMA's trained in concepts of disaster risk management in 7 training events;</p> <p>90 officials of NEOC and PEOCs trained on running the Emergency Operations Centres in three training events;</p> <p>600 Officials of DDMA and MDMA trained in basic concepts of disaster</p>				

	<p>risk management in 20 events; 600 Officials of DDMA's and MDMA's trained about running the emergency operations centres in 30 events; 510 media personnel from national and provincial/regional levels oriented about the role of print and electronic media in disaster risk management in 17 workshops</p> <p>OUTPUT INDICATOR 1.3</p> <p>240 faculty of universities and colleges and officials of ministries of education from national and provincial levels oriented about disaster risk education and its incorporation in syllabus of educational institutions in 8 training events;</p> <p>60 Armed Forces personnel and 140 faculty members of civil services academy and NIMs are trained in 7 provincial/regional workshops on disaster management</p>	<p>national and provincial media electronic and print media;</p> <p>13. Organize seven (7) training events for the faculty of civil services academy, armed forces training institutes and NIMs</p> <p>14. Adaptation/approval of the curriculum by the Ministry of the Education for implementation in universities, colleges and schools;</p> <p>15. Organize (8) eight training events for faculty of selected universities, colleges and schools</p> <p>16. Certificate and diploma course offerings in 2 universities and three colleges, and integration of curriculum in 10 school</p>	
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Intended Outputs	Output Targets	Indicative Activities	Responsible Parties	Inputs
<p>Output 6: Disaster response plan of NDMA and Disaster Risk Management Plans of PDMAs, DDMA's in 50 districts and selected line ministries and departments available;</p>	<p>OUTPUT INDICATOR 1.1: National disaster response plan delineating the procedures, roles, and resources available with national stakeholders available for involvement of the federal government.</p> <p>OUTPUT INDICATOR 1.2: Four (4) provincial and three (3) disaster risk management plans delineating the hazards, vulnerabilities, risks, disaster risk management strategies and roles, and resources of provincial/regional stakeholders available;</p> <p>OUTPUT INDICATOR 1.3: Disaster risk management plans of 50 highly vulnerable districts/municipalities delineating the hazards, vulnerabilities, risks, disaster risk management strategies and roles, and resources of local stakeholders available.</p> <p>OUTPUT INDICATOR 1.4: Disaster risk management plans of 10 federal and 30 provincial ministries and departments delineating the hazards, vulnerabilities, risks related to sector, disaster risk management strategies and resources and time frame of implementation available;</p>	<ol style="list-style-type: none"> 1. Prepare draft National Disaster Response Plan 2. Organize stakeholders consultation on NDRP 3. Finalize NDRP based upon stakeholder inputs; 4. Draft provincial/regional DRM plans; 5. Organize stakeholder consultations on the draft provincial/regional plans; 6. Finalize plans based upon stakeholder inputs and feedback; 7. Publish & disseminate national, provincial plans; 8. District level stakeholder meetings on drafting DRM plans in 50 districts; 9. Draft district/municipal DRM plans based upon inputs from stakeholder meetings; 10. Seek feedback from stakeholders on draft plans through meetings, discussions; 11. Finalize plans, Publish & disseminate widely; 12. Meeting with federal ministries on drafting of ministerial disaster risk management plans; 13. 4 provincial level meetings with ministries on drafting of the ministerial DRM plans; 14. Prepare drafts of the ministerial DRM plans 15. Seek feedback of the concerned ministries and NDMA on the ministerial plans 16. Finalize the plans based upon feedback and publish and disseminate for public information; 	<p>NDMA, PDMAs, Regional Disaster Management Authorities, Federal and provincial line ministries, District Disaster Management Authorities</p>	<p>Total Output Cost = \$0.198 m Staff Work Load Project Manager 8% Planning and Emergency Preparedness Coordinator 50 % DRR Expert 10 % Information Expert 10 %</p>

Intended Outputs	Output Targets for the Year	Indicative Activities	Responsible Parties	Inputs
<p>Output 7: Local institutions for DRR established at village, neighbourhood and town levels, and they are able to implement small structural mitigation schemes.</p>	<p>INDICATOR 1.1: DRM Curriculum for training of UC members, CBOs, CCBs developed through needs assessment with stakeholder available; 500 CCBs/CBOs are established at district/municipal level for community risk assessment, devising strategies of DRR and small scale mitigation schemes 7500 community members, UC, CBO and CCB members trained on based concepts of disaster risk management and aspects of disaster response; e.g. medical first aid, evacuation, search and rescue; INDICATOR 1.2: Disaster Risk Management Plans of 500 highly vulnerabilities communities delineating hazards, risks, vulnerabilities, disaster risk management strategies, local resources and roles of local organizations, institutions available; INDICATOR 1.1: 2000 mitigation schemes covering aspects of safer shelter, small scale infrastructure, embankments, community level early warning systems, livelihood diversification and strengthening, environmental rehabilitation (forestation, mangrove plantation, range-land restoration) implemented INDICATOR 1.1: 200 schemes on school preparedness implemented in primary and secondary schools in highly vulnerable regions.</p>	<ol style="list-style-type: none"> 1. Identify and strengthen existing CBOs, CCBs and form new CBOs/CCBs for disaster risk management where needed; 2. Develop training curriculum for UC, CBOs, CCBs on disaster risk management 3. Train Union Council members, CBOs and CCBs on DRM 4. Conduct community level risk assessments in 500 communities 5. Develop disaster risk management plans in 500 communities 6. Implement community awareness and mobilization activities in 500 communities 7. Implement 2000 mitigation schemes in 500 highly vulnerable communities 8. Implement 200 school preparedness schemes in primary and secondary schools in vulnerable areas 	<p>Regional-DMAs, Provincial DMAs, DDIMAs, NGOs, UCs, CBOs, CCBs,</p>	<p>Total Output Cost = \$ 7.1 m Staff Work Load Project Manager 15% Training and Education Coordinator: 30 % Trainer: 30 % Planning and Emergency Preparedness Coordinator: 20 % DRR Expert 10 % Community and Local Level Programming Expert : 50 %</p>

Intended Outputs	Output Targets for the Year	Indicative Activities	Responsible Parties	Inputs
<p>Output 8: Technical capacities of the PMD and other warning agencies enhanced through expansion of flood, drought and cyclone monitoring networks and training.</p>	<p>OUTPUT INDICATOR 1.1: Tropical warning centre established at the Pakistan Meteorological Department 30 members of the PMD oriented about cyclone warning system</p> <p>OUTPUT INDICATOR 1.2: Flood Forecasting and Warning System established in NWFP and Balochistan provinces 30 staff members of PMD oriented about flood forecasting and warning system in NWFP and Balochistan</p> <p>OUTPUT INDICATOR 1.3: Stakeholder committees and networks established at national, provincial and local levels on early warning for multiple natural hazards; e.g. floods, droughts, GLOF, cyclones etc; 240 personnel from federal and provincial line ministries, technical departments, NGOs, media and UN agencies oriented about effective early warning systems</p>	<ol style="list-style-type: none"> 1. National and provincial multi-hazard warning system, workshops on improving warning for flood, droughts and cyclone hazards through identifying issues and roles and responsibilities; 2. Formation of stakeholder committees and networks at national and provincial levels on early warning for floods, droughts, GLOF and cyclones 3. Purchase equipment for cyclone warning centre; 4. Purchase equipment of the FFWC in NWFP 5. Train the staff of FFWC/PMD 6. Purchase and install weather radars in Quetta and Pishi (Gwadar) 7. Train PMD staff in Balochistan on flood forecasting and warning 8. Acquire equipment for the TSWC 9. Train the TSWC and PMD staff on cyclone warning 	<p>PMD</p>	<p>Total Output Cost = \$ 6.8 m Staff Work Load Project Manager 5% Planning and Emergency Preparedness Coordinator: 10 % DRR Expert 10 % Information Expert 15 %</p>

Intended Outputs	Output Targets	Indicative Activities	Responsible Parties	Inputs
<p>Output 9: Technical and management capacities of the Ministry of Health, Red Crescent, APPNA Sehat and Edhi Foundation increased for effective warning of epidemics and provision of health services to disaster and disease victims.</p>	<p>OUTPUT INDICATOR 1.1: 630 Community Health Workers, Lead Health Workers, Red Crescent volunteers and staff of APPNA Sehat, Edhi Foundation. Foundation oriented about symptoms and identification of communicable diseases, in pre and post disaster scenarios</p> <p>OUTPUT INDICATOR 1.1: # of telephone lines, mobile phones and satellite facilities and sets distributed to health workers, red crescent volunteers, and staff of APPNA Sehat, Edhi Foundation.</p> <p>OUTPUT INDICATOR 1.1: Multi-stakeholder committees and networks on sharing of information and decision making regarding communicable disease established at local, provincial and national levels</p>	<ol style="list-style-type: none"> 1. Develop curriculum for training of volunteers and staff of Ministry of Health, Red Crescent, APPNA Sehat, Edhi Foundation and other agencies on disease surveillance and reporting; 2. Establish SOPs and institutional arrangements on disease/epidemic early warning system 3. Training of community health workers, lead health workers, Red Crescent volunteers and staff of APPNA Sehat, Edhi Foundation about identification of communicable disease spread in pre and post disaster situations 4. Provision of communication equipment; e.g. telephone lines, mobile phones and satellite facilities to CHWs, red crescent volunteers, and staff of APPNA, Edhi Foundation 5. Training courses for CHWs, LHWs, Red Crescent Volunteers and APPNA Sehat, Edhi Foundation; 6. Stakeholder workshops at national, provincial and local levels to improve mechanisms for disease surveillance; 	<p>Ministry of Health, APPNA, Red Crescent Society of Pakistan WHO</p>	<p>Total Output Cost = \$ 0.670 m Staff Work Load Project Manager 2% DRR Expert 5 %</p>

Intended Outputs	Output Targets for the Year	Indicative Activities	Responsible Parties	Inputs
<p>Output 10: At least ten federal and provincial ministries integrated disaster risk reduction concepts into their sectoral policies, planning and programming.</p>	<p>OUTPUT INDICATOR 1.1: Technical Guidelines available on integrating disaster risk management considerations into agriculture, livestock, education, health, water resources, shelter, infrastructure, environment, industry, ports and shipping, which are developed with participation of stakeholders;</p> <p>OUTPUT INDICATOR 1.2: Curriculum for training of federal and provincial ministries on incorporating disaster risk assessment and vulnerability reduction into program development and implementation available;</p> <p>450 officials of federal and provincial governments trained for integrating disaster risk assessment and vulnerability reduction into program planning and implementation</p> <p>OUTPUT INDICATOR 1.3: 10 pilot schemes implemented by federal and provincial ministries on integrating DRM into development</p> <p>12 case studies available on lessons learnt and integrating DRM into sectoral development;</p>	<ol style="list-style-type: none"> 1. National workshop on drafting of sectoral guidelines for mainstreaming DRR/DRM 2. Inputs on drafting of sectoral guidelines 3. Training curriculum development for ministries on integrating Disaster risk assessment and risk reduction into program planning and implementation 4. Courses for federal and provincial line ministries 5. Implement pilot schemes on mainstreaming DRR 6. Workshops on lessons learnt from pilot implementation 7. Production of case studies on lessons learnt from pilot implementation 	<p>NDMA, National Planning Commission, Federal and Provincial line ministries</p>	<p>Total Output Cost = \$ 2.25 m Staff Work Load Project Manager 15% Mainstreaming Expert 100 % Training and Education Coordinator: 10 % Trainer: 10 % DRR Expert 5 % Community and Local level Programming Expert: 25 %</p>

Intended Outputs	Outputs Targets for the Year	Indicative Activities	Responsible parties	Inputs
<p>Output 11: A system for effective emergency response established and functional including the EOCs, SAR teams, SOPs and assessment and training methodologies supported with a National Disaster Management Fund</p>	<p>OUTPUT INDICATOR 1.1 Technical equipment for establishment of Data Centre, Call Centre & Data Link Centre for national system.</p> <p>OUTPUT INDICATOR 1.2 NEOC office established with staff in place and equipment and vehicles acquired;</p> <p>4 PEOCs and 3 REOCs offices established with staff in place and equipment and vehicles acquired.</p> <p>50 District and Municipal EOCs offices established with staff in place and equipment acquired.</p> <p>OUTPUT INDICATOR 1.3 90 staff of NEOC and PEOCs trained on management of emergency operations and running of EOCs;</p> <p>200 staff of DEOCs trained on management of emergency operations and running of EOCs;</p> <p>OUTPUT INDICATOR 1.4 3 federal and 6 provincial/regional SAR teams established as per INSARAG guidelines;</p> <p>336 personnel of 3 federal SAR teams trained as per INSARAG standards;</p> <p>676 personnel of 6 provincial/regional</p>	<ol style="list-style-type: none"> 1. Technical equipment for NEOC and PEOC 2. Develop SOPs for federal and provincial disaster response 3. Acquire staff, vehicles, equipment for Federal and Provincial EOCs 4. Train the staff of Federal and Provincial EOCs 5. Purchase equipment for Federal and Provincial SAR teams 6. Train the Federal and Provincial SAR teams 7. Develop post disaster damage, loss and needs assessment methodology 8. Conduct 10 drills at federal and provincial levels on emergency response to earthquakes, floods and industrial hazards; 9. Develop training curriculum for district level EOC training 10. Conduct 10 drills at district and city level on emergency response to earthquakes, floods and industrial disasters; 11. Form District Emergency Operations centres in 50 districts; 12. Train the District Emergency Operations Centre staff 13. Form district level SAR teams 14. Train district SAR teams 15. Purchase equipment for district SAR 	<p>NDMA, PDMAs, DDMAs, Municipal governments, fire services, civil defence</p>	<p>Total Output Cost = \$ 20.2 m Staff Work Load Project Manager 8% Training and Education Coordinator: 5 % Trainer: 5 % Planning and Emergency Preparedness Coordinator: 20 % DRR Expert 5 % Information Expert 25 % Community and Local level Programming Expert 25 %</p>

	<p>SAR teams trained as per INSARAG standards;</p> <p>OUTPUT INDICATOR 1.5</p> <p>A post disaster damage, loss and needs assessment methodology agreed by all stakeholders (GO, NGO, UN, Donors) available;</p> <p>OUTPUT INDICATOR 1.6</p> <p>Standard Operating Procedures (SOPs) for the involvement of national and provincial stakeholders (GO, NGO, UN) available for organizing emergency response by federal government;</p> <p>OUTPUT INDICATOR 1.7</p> <p>At least 30 drills conducted at federal, provincial and local levels on emergency response to earthquake, floods and industrial disasters;</p> <p>OUTPUT INDICATOR 1.8</p> <p>Upgrading of 4 Civil Defence Academies at Federal and provincial level.</p> <p>OUTPUT INDICATOR 1.9</p> <p>Establishment of Disaster Management Fund (Year 1)</p>	<p>teams</p> <p>16. Upgradation of four Civil Defence Academies</p> <p>17. Technical Equipment for NEOC and PEOC</p> <p>18. Establishment of Disaster Management Fund</p>	
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Intended Outputs	Output Targets	Indicative Activities	Responsible Parties	Inputs
<p>Output 12: Institutional mechanisms established at national, provincial and district levels for effective post disaster recovery management.</p>	<p>OUTPUT INDICATOR 1.1 Curriculum for training of staff of ERRA, federal ministries and departments and local government officials about recovery program design and implementation available;</p> <p>OUTPUT INDICATOR 1.2 100 recovery program managers from ERRA, federal and provincial ministries and local authorities trained on recovery needs assessment, program design and implementation;</p> <p>OUTPUT INDICATOR 1.3A booklet and video on lesson learnt on earthquake recovery available for use of national, provincial and local recovery managers available;</p> <p>200 provincial/regional and district personnel oriented through workshops on lessons learnt from Earthquake recovery</p>	<ol style="list-style-type: none"> 1. Training needs assessment 2. Training curriculum development on recovery programme design and implementation 3. Training of recovery program managers from ERRA and other stakeholders 4. District, regional/provincial and national workshops on lessons learnt from Earthquake recovery 5. Production of a booklet and Video on lessons learnt from Earthquake Recovery 	<p>ERRA and NDMA, Federal ministries/ departments</p>	<p>Total Output12 Cost = \$.088 m</p> <p>Staff Work Load</p> <p>Project Manager 3%</p> <p>Training and Education Coordinator: 5 %</p> <p>Trainer 5 %</p> <p>DRR Expert: 5 %</p>

Annual Work Plan Budget Sheet

Year 2007

Expected Output and Indicators including Annual Targets	Planned Activities List all activities including M&E to be undertaken during the year towards stated CP outputs	TIMEFRAME				Responsible Party	Planned Budget		
		Q1	Q2	Q3	Q4		Source of Funds	Budget Description	Amount in \$
Output 1: Disaster Management Authorities established and functional at National and District levels in about 50 Districts Output 3: Decision making tools to set priorities and develop policies and programs available in print digitized and database forms on spatial distribution of natural hazards, disasters and vulnerable area	Support to Formation of DDMA's / MDMA's ✓					NDMA	Donor to be Identified	Develop DDMA, MDMA	240,000
	Hire Risk Assessment Expert Primary research and stakeholder consultation on hazard / vulnerability mapping					NDMA	UNDP	Staff	32,000
Output 5: Disaster risk management education incorporated into the syllabus of training and educational institutions of civil servants, media, armed forces, and modules available for training of district and municipal officials, politicians and bureaucrat Output 6: Disaster response plan of NDMA and Disaster Risk Management Plans of PDMA's, DDMA's in 50 districts and selected line ministries and departments available;	Training of NDMA, PDMA staff ✓					NDMA	UNDP	Trainings	5,000
	National Disaster Response Plan Publishing and disseminate the National Plan ✓					NDMA	UNDP	Develop Plan	20,000
						NDMA	UNDP	Publishing	8,000
	District disaster risk management plans ✓					NDMA	UNDP	Plans	15,000

<p>Output 7: Local institutions for DRR established at village, neighborhood and town levels, institutions able to implement small structural mitigation schemes.</p>	<p>Stakeholder Consultations conducted in Quetta, Gwadar, Rawalpindi, Badin, and Thatta districts on local level programming</p>			UNDP	Consultation	15,000
	<p>Conduct risk assessment in the five districts (200 communities)</p>			UNDP	Risk Assessment	50,000
	<p>DRR in Muzaffarabad & Mansehra Municipalities</p>			(Cost Sharing)	DRR Project established	152,000
<p>Output 8: Technical capacities of the PMD and other Warning Agencies enhanced through expansion of flood, drought and cyclone monitoring networks and training.</p>	<p>Stakeholder workshops to strengthen institutional arrangements for early warning</p>			Donor to be Identified	Workshops	8,000
<p>Output 10: At least eight federal and provincial ministries integrated disaster risk management into their sectoral policies, planning and programming.</p>	<p>Workshops to draft the sectoral guidelines (with participation of federal/provincial ministries) (8 Workshops) Inputs on drafting of sectoral guidelines on mainstreaming by hiring 3 consultant</p>			UNDP	Workshops	6,250
<p>Output 11: A system for effective emergency response including the EOCs, SAR teams, SOPs and assessment and training methodologies</p>	<p>National Disaster Management Fund Management of Data Centre Training of National & Provincial EOC Staff Common Assessment Methodology Standard Operating Procedures (SOPs) Equipment for 3 Federal SAR Teams Training of 3 Federal SAR Teams</p>			Donor to be Identified UNDP Donor to be identified Donor to be Identified Donor to be Identified Donor to be Identified Donor to be Identified & SIDA Donor to be Identified & SIDA	Fund Data Centre Training Assessments SOPs Equipment Training	5,000,000 6,316 20,000 24,000 60,000 3,000,000 600,000
						\$ 934,566

2008

MANAGEMENT ARRANGEMENTS

The project will be executed by the National Disaster Management Authority by taking into consideration 1) the gradual build-up of NDMA's structures and capacity, and 2) the One UN joint programme that is due to be formulated by the end of 2007. The period between the signing of project document and end of 2007 will focus on supporting the set-up of NDMA and related systems with immediate priority activities. The work plan and budget for 2007 is attached to this Project Document and will be activated after the signature of the Project Document.¹ Thereafter, work plans will be examined and approved by the Project Steering Committee on an annual basis.

During 2007, payments to the project will be carried out by means of direct payments by UNDP. A micro-assessment of NDMA's capacity will be carried out during 2007 in conjunction with the One UN joint programming exercise that will recommend financial management arrangements beyond 2007. Until the decisions based on the micro-assessment recommendations are finalised by UNDP in consultation with EAD, the project will continue to operate under the financial arrangements initiated in 2007.

As part of the UN Reform process in Pakistan DRM has been selected as one of the thematic areas of focus. A Thematic Working Group is currently working on development of a joint programme by following the government priorities identified in the National Disaster Risk Management Framework (NDRMF). Consultations would be taking place with NDMA and other stakeholders for finalization of UN Joint Programme on DRM and based on an agreement by all parties concerned. The Project Document would be revised to reflect the joint programme.

A Project Steering Committee (PSC) will be established at the national level to review and decide on policy and substantive issues including changes, if any, in programme strategy, contents and focus. The PSC will hold meetings at the beginning of the project and then annually and ad hoc on a needs basis thereafter. Chairman NDMA will be the Chair of the Project Steering Committee. The quorum for the Project Steering Committee is six members including NDMA, EAD and UNDP. Project Manager will serve as the Secretary. Members of the Project Steering Committee will include following.

- Economic Affairs Division (EAD)
- Planning Commission (PC)
- Ministry of Food, Agriculture and Livestock
- Ministry of Defence
- Ministry of Education
- Ministry of Health
- Ministry of Housing and Works
- Ministry of Interior
- Ministry of Social Welfare and Special Education
- Ministry of Water and Power
- Federal Flood Commission (FFC)
- Pakistan Atomic Energy Regulatory Authority (PAEC)
- Pakistan Meteorological Department (PMD)

¹ Key project personnel to be recruited at the beginning of the project and expected to commit longer than the period of the first work plan have been included for a period of one year.

- OXFAM
- National NGO to be determined
- UNDP
- One other UN agency (to be determined)
- National Project Director
- Project Manager, National Capacity Building for Disaster Risk Management

Project Coordination Committees will be formed at the Provincial, State and Regional levels in all the four provinces, AJK, FATA and NA. The PCCs will be chaired by the Provincial Additional Chief Secretaries of the Planning and Development sector. However, the DG PDMA's will serve as secretaries to the PCCs. PCCs would review progress twice in a year and will provide strategic inputs regarding the program implementation for mobilization of additional resources if needed. Other members of the PCC would include Secretaries of Education, Health, Agriculture, Housing and Works, Industries, Transport and Local Government.

District Disaster Management Authorities (DDMAs) will also perform the function of District Implementation Committees. They will be responsible for identification and facilitation of the implementation of district level disaster risk reduction measures. They will also be responsible for monitoring of the progress and quality of project inputs.

As per PCOM rules, a National Project Director (NPD) nominated within NDMA will be responsible for the management of the project under the overall guidance of NDMA and in accordance to work plans and budgets approved by the PSC. A National Project Manager will be hired under the project for the day-to-day management under the supervision of the NPD. The National Project Manager will have extensive national and international level experience in disaster risk management practice.

In this program document cost estimate for the essential minimum staff required to implement the national priorities has been given. However other Technical Staff requirements will be identified and staff would be hired during the implementation on need basis.

Monitoring and Evaluation

The project will be subject to Monitoring & Evaluation in accordance with PCOM procedures, including audits. A mid-term evaluation and final evaluation will be carried out in conjunction with the One UN joint programme.

Visibility

The project will publicize the activities of the program, donors support and the government initiatives. Project will undertake specific visibility actions to sensitize the citizen's of donor governments about the role being played by their governments in promoting sustainable development and poverty reduction in Pakistan. In this regard the project will produce specific literature which will be circulated to relevant embassies, international organizations and to donor country media. Project staff will participate in appropriate international forums to highlight the contributions of donor countries for disaster risk reduction.

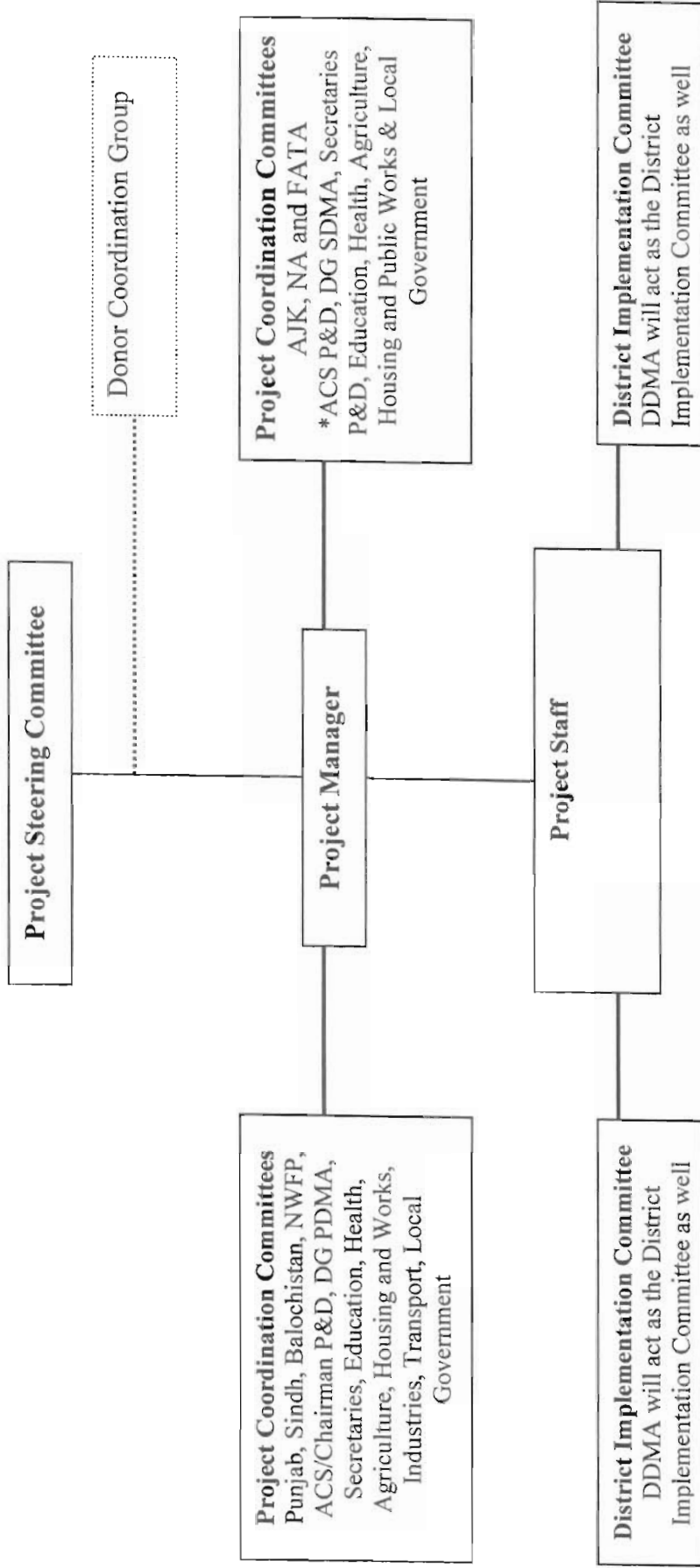
Resource Mobilization Strategy

To begin with UNDP would be mobilizing resources in support of implementation of activities identified in this project and of immediate interest to donors in light of already carried out discussions. Later, as part of the One UN Joint Programme, a UN joint strategy would be employed to generate resources. Initially UNDP will allocate an indicative 2.5 million US Dollar over five years from its core resources that will be approved on an annual basis according to PSC approved work plans and budgets with the exception of the budget for the 2007 and work plan attached to this project document. Additional resources will be sought through UNDP's Bureau for Crisis Prevention and Recovery for key activities that includes working with selected federal ministries on mainstreaming disaster risk management into development practice, facilitating disaster risk management planning, training, education and awareness raising and implementation of local and community level disaster risk reduction programmes in selected high risk districts and cities.

This project document provides the framework of interventions that could be supported by international donors. The international donors may allocate resources directly (in parallel) to the partner government agencies or may channel resources through the UN System. In the case of cost sharing contributions through UNDP, a General Management Services fee of 7% will be charged as per standard procedures in-force.

NDMA is already in touch with different donors for mobilization of resources in support of various disaster risk management initiatives under the National Disaster Risk Management Framework. These include World Bank, SIDA, SDC, DFID, JICA, AusAID, DIPECHO, and ADPC etc.

Project Management Flow Chart



* Secretary FATA & Secretary P&D in case of FATA & Northern Areas.

** Structure in case of Tribal Agencies would be under the umbrella of Political Agents.

LEGAL CONTEXT

The legal context for UNDP-assisted programmes and projects in Pakistan is established by two major agreements: 1) the Convention on the Privileges and Immunities of the United Nations, given effect by Act XXXVII of 1948 of the Pakistan Constituent Assembly (Legislative) and assented to 16 June, 1948; and 2) the agreement between the Government of the Islamic Republic of Pakistan and the United Nations Development Programme concerning assistance under the Special Fund Sector of the United Nations Development Programme, signed by the parties on 25th February 1960.

This Project Document shall be the instrument (therein referred to as a Plan of Operation) envisaged in article 1, paragraph 2, of the agreement between the Government of the Islamic Republic of Pakistan and the United Nations Development Programme concerning assistance under the Special Fund Sector of the United Nations Development Programme.

UNDP-assisted programmes and projects for Pakistan are planned and executed in accordance with the global UNDP Financial Rules and Regulations and the Project Cycle Operations Manual for Pakistan.

The following types of revisions may be made to this project document with the signature of the UNDP resident representative only, provided he or she is assured that the other signatories of the project document have no objections to the proposed changes:

- (a) Revisions in, or addition of, any of the annexes of the project document;
- (b) Revisions which do not involve significant changes in the immediate objectives, outputs or activities of a project, but are caused by the rearrangement of inputs already agreed to or by cost increases due to inflation.
- (c) Mandatory annual revisions which rephrase the delivery of agreed project inputs or increased expert or other costs due to inflation or take into account agency expenditure flexibility.

This project document shall be the instrument envisaged in the Supplemental Provisions to the Project Document, which are available on file.

Annexure I

Work Plan

WORKPLAN 2007

ACTIVITIES	3rd Quarter	4th Quarter
Output 1: DIM Authorities Established at national, provincial and district levels		
Develop Rules of Business of PDMA's		
Develop Rules of Business of Provincial Disaster Management Funds		
Develop TORs of the PDMA staff		
Develop PC-1s of the PDMA's for year 2008-2009 budget allocations		
District Disaster Management Authorities in four high priority districts formed (Quetta, Gwadar, Badin and Thata)		
Output 3: Decision making tools to formulate policy and programs developed and available in print, digitized and database forms on spatial distribution of natural hazards, disasters and vulnerable areas (national risk assessment)		
Formation of national risk assessment committee		
Training of national risk assessment committee		
Hire consultancy firm to conduct hazard/vulnerability mapping		
Stakeholder consultations on risk assessment and primary research		
Data-gathering and collation		
Output 5: Disaster risk management education incorporated into the syllabus of training and educational institutions of civil servants, media, armed forces, and modules available for training of district and municipal officials, politicians and bureaucrats		
Develop curriculum for training of NDMA/PDMA staff on disaster risk management		
Train the NDMA, PDMA's staff in DRM		
Output 6: Disaster response plan of NDMA and DRM plans of PDMA's, DDMA's in 5 districts and selected line ministries and departments available;		
Formulate National Disaster Response Plan (NDRP) through consultations (including publishing and dissemination)		
Prepare the Provincial Disaster Risk Management Plans through consultations (including publishing and dissemination)		
Initiate the formulation of plans or upgrading of existing plans of five high priority districts (Quetta, Gwadar, Rawalpindi, Thatta, Badin)		
Output 7: Local institutions for DRR established and strengthened at village, neighbourhood and town levels, which are able to implement small structural mitigation schemes.		
Stakeholder consultations conducted in Quetta, Gwadar, Rawalpindi, Badin and Thatta districts on local level programming		
Conduct risk assessment in the five districts (200 communities)		
Output 8: Technical capacities of the Pakistan Meteorological Department and other warning agencies enhanced through expansion of flood, drought and cyclone monitoring networks and training.		
National and provincial multi-hazard warning system workshops on improving warning for flood, drought and cyclone hazards		
Formulation of stakeholder committees and networks at national and provincial levels on EWS for floods, droughts, cyclone, GLOF, landslides		
Output 10: At least ten federal and provincial ministries integrated disaster risk reduction into their sectoral policy, planning and programming.		
National workshop on mainstreaming disaster risk management into line ministries		
Formation of Ministerial Working Groups on Integrating DRM into sectoral development programming for five priority ministries (Ministries of Housing and Works, Water and Power, Food, Agriculture, Livestock, Planning and Development, Industries, production and special initiatives)		
Draft sectoral guidelines for 5 priority ministries		
Output 11: A system for effective emergency response established, comprising upon Emergency Operations Centres, Search and Rescue Teams, SOPs, common assessment and training methodologies		
Develop concept paper of NEOC		
Purchase equipment for NEOC		
Train the staff of NEOCs		
Purchase equipment for 3 Federal SAR teams		
Train 3 Federal SAR teams in Islamabad, Karachi and Lahore		
Develop SOPs for federal and provincial disaster response		
Support implementation of the PEER programme		

INDICATIVE WORKPLAN 2008

ACTIVITIES	1st Quarter	2nd Quarter	3rd Quarter	4th Quarter
<p>Output 1: DR Authorities Established at national, provincial and districts Support to establishment and strengthening of disaster authorities in 15 districts Establish National Institute of Disaster Management (NIDM)</p>				
<p>Output 2: Strategies to implement building codes, land use plans, and risk insurance schemes developed through full participation of stakeholders, and available for public information. Review and report of existing building codes Consult with relevant agencies on implementation and updating of building codes Develop a Policy and Code of Practice for earthquake, flood, drought, cyclones, tsunamis, landslides, avalanches, forest fires, and other natural hazards Review existing insurance schemes with a view to provision of insurance services for disaster risk mitigation Consult with stakeholders to develop strategies for insurance sector involvement in disaster risk management Draft an approach and plan for insurance policies for disaster risk reduction Output 3: Decision making tools to set priorities, develop policy and programs available in printed, digitized and database forms on spatial distribution of natural hazards, disasters and vulnerable areas Produce analytical reports, maps and print version of vulnerability atlas Digitize the print and electronic version of Vulnerability Atlas to benefit stakeholders Produce electronic hazard maps for earthquakes, floods, droughts, landslides, cyclones, tsunamis, climate risk, GLOF including vulnerability analysis Output 4: Updated analysis on the impact of climate change on disasters and its gaps in the south available for better disaster risk reduction, particularly for flood, drought and landslides mitigation. Engage relevant government agencies and consultants for the study (form a committee for analysis) Review existing literature on climate change impact on sea level rise Scientific observation data analysis regarding climate change and its impact on glaciers/ice caps including field visits Produce the report and disseminate to stakeholders</p>				
<p>Output 5: Disaster risk management education incorporated into the syllabus of training and educational institutions of civil servants, media, armed forces, and modules available for training of district and municipal officials, politicians and bureaucrats Develop curriculum for NDMA, PDMA officials on different aspects of disaster risk management Develop curriculum for training media personnel Train national and provincial media on disaster risk management Review and development of educational curriculum for civil servants academies and the NIDS Review and development of educational curriculum for armed forces training institutions Conduct training courses for district and municipal DW Authorities Train the faculty of civil services academy, NIDS and armed forces training institutes Output 6: Disaster response plan of NDMA and DRM plans of PDMA, ODMA in 10 districts and selected the ministries and departments available. Develop Disaster risk management plans of the federal/provincial ministries Complete the draft DRM plans of the first group of five districts, selected in year 2007 Develop disaster risk management plans of second group of 15 highly vulnerable districts Output 7: Local institutions for DRR established and strengthened at village, neighbourhood and town level, which are able to implement small structural mitigation schemes. Identify, strengthen existing or new CDOs, CDOs for disaster risk management in five districts Train Union Council members, CDOs and CDOs on DRR in 5 districts Conduct community level risk assessments in 5 districts Develop community disaster risk management plans in 5 districts Implement 1000 mitigation activities in 200 highly vulnerable communities in 5 districts Output 8: Technical capabilities of the Pakistan Meteorological Department and other warning agencies enhanced through application of flood, drought and epidemic monitoring networks and training. National and provincial multi-hazard warning system workshops to improve warning for flood, drought and cyclone hazards</p>				
<p>Output 9: Technical and management capacities of the Ministry of Health, and Customs, WHO, APPSA, AHA and EHR Foundation increased for effective warning of epidemics and provision of health services to disaster victims Establisher workshops to improve mechanism for disaster surveillance Conduct training for paramedics on various aspects of emergency aid and Upgrade communications technology and equipment for better detection and quick reporting of communicable disease Output 10: At least ten federal and provincial ministries integrated disaster risk reduction into their sectoral policy, planning and programming. Formation of second batch of Ministerial Working Groups on Integrating DRR into sectoral development programming for five priority ministries (Ministry of Communication, Education, Health, Environment and Local Government and Rural Development) Draft sectoral guidelines on integrating DRR into sectoral policy and programming for second batch of five ministries Develop curriculum for training of local government officials on integrating disaster risk reduction into program development and implementation Train federal and provincial ministry officials on integrating disaster risk assessment and vulnerability reduction into program development and implementation Output 11: A system for effective emergency response established, comprising upon Emergency Operations Centres, Search and Rescue Teams, SOPs, common assessment and training methodologies. Prepare concept paper of Provincial EOCs Purchase equipment for EOCs Train the staff of EOCs National and Provincial workshop on development of the standard operating procedure Develop post disaster assessment methodology for common assessments by all stakeholders Develop curriculum for training of district level EOC staff</p>				

INDICATIVE WORKPLAN 2009

ACTIVITIES	1st Quarter	2nd Quarter	3rd Quarter	4th Quarter
Output 1: DM Authorities Established at national, provincial, and districts Support to establishment and strengthening of 25 DDMMAs				
Output 5: Disaster risk management education incorporated into the syllabus of training and educational institutions of civil servants, media, armed forces, and modules available for training of district and municipal officials, politicians and bureaucrats Review and development of curriculum of certificate and diploma courses for master and graduation students Train the university and college faculty Produce awareness materials for orientation of national and provincial level politicians, bureaucrats Conduct training for DDMM/MDMA officials				
Output 6: Disaster response plan of NDMA and DRM plans of PDMMAs, DDMMAs in 25 districts and selected line ministries and departments available. Prepare DRM plans of the third group of 25 vulnerable districts Prepare the DRM plans of second group of five federal/provincial ministries				
Output 7: Local institutions for DRR established and strengthened at village, neighbourhood and town levels, which are able to implement small structural mitigation schemes. Train Union Council members, CBOs and CCBS on DRM in 25 districts (1000 communities) Conduct community level risk assessments in 25 districts (1000 communities) Develop disaster risk management plans in 25 districts (1000 communities) Implement 1000 disaster mitigation schemes in highly vulnerable communities in 25 districts				
Output 8: Technical capacities of the Pakistan Meteorological Department and other warning agencies enhanced through expansion of flood, drought and cyclone monitoring networks and training. Purchase equipment of the FFWS in NWFP Training of the staff of FFWS/PMD Installation of equipment of FFWS Acquire equipment for the TSWC Train the TSWC and PMD staff on cyclone warning Installation of equipment of the TSWC				
Output 9: Technical and management capacities of the Ministry of Health, Red Crescent, WHO, APPNA Sehat and Edhi Foundation increased for effective warning of epidemics and provision of health services to disaster victims Train community health workers, lady health workers, Red Crescent volunteers and staff of APPNA Sehat and Edhi Foundation about identification of communicable disease spread in pre and post disaster situations Provide communication equipment, e.g. telephone lines, mobile phones and satellite facilities to CHWs, red crescent volunteers, and staff of APPNA				
Output 10: At least ten federal and provincial ministries integrated disaster risk reduction into their sectoral policy, planning and programming. Implement pilot schemes on integrating DRM into development sectors under the supervision of Ministerial Working Groups				
Output 11: A system for effective emergency response established, comprising upon Emergency Operations Centres, Search and Rescue Teams, SOPs, common assessment and training methodologies 10 drills conducted at federal and provincial levels on emergency response to earthquakes, floods and industrial hazards				
Output 12: Institutional mechanisms established at national, provincial and district levels for effective post disaster recovery management. Conduct workshops on lessons learnt from earthquake and flood recovery Develop training curriculum for recovery program managers				

INDICATIVE WORKPLAN 2010				
ACTIVITIES	1st Quarter	2nd Quarter	3rd Quarter	4th Quarter
Output 1: DM Authorities Established at national, provincial and districts Support to establishment and strengthening of 5 DDIMAs/DDIMAs				
Output 3: Decision making tools to set priorities, develop policy and programs available in printed digitized and database forms on spatial distribution of natural hazards, disasters and vulnerable areas				
Digitization of the vulnerability atlas for 50 districts and cities located in high risk areas with micro-zonation				
Output 5: Disaster risk management education incorporated into the syllabus of training and educational institutions of civil servants, media, armed forces, and modules available for training of district and municipal officials, politicians and bureaucrats				
Adaptation/approval of the curriculum by the Ministry of the Education				
Output 6: Disaster response plan of NDMA and DRM plans of PDIMAs, DDIMAs in 25 districts and selected line ministries and departments available;				
Draft DRM plans in the remaining 5 districts				
Output 7: Local institutions for DRR established and strengthened at village, neighbourhood and town levels, which are able to implement small structural mitigation schemes.				
Train UC members, CBOs, CCBs on DRM in 20 districts (800 communities)				
Conduct community level risk assessments in 20 districts (800 communities)				
Develop community disaster risk management plans in 20 districts (800 communities)				
Implement disaster mitigation schemes at community and local level in 20 districts (800 communities)				
Implement 100 school preparedness schemes in primary and secondary schools in vulnerable areas				
Output 8: Technical and management capacities of the Ministry of Health, Red Crescent, WHO, APPNA Sehat and Edhi Foundation increased for effective warning of epidemics and provision of health services to disaster victims				
Purchase and install weather radars in Quetta and Panni (Gawadar)				
Train PMD staff in Balochistan on flood forecasting and warning				
Output 10: At least ten federal and provincial ministries integrated disaster risk reduction into their sectoral policy, planning and programming.				
Implement pilot schemes on integrating DRM into development sectors under the supervision of Ministerial Working Groups				
Stakeholder workshops on lessons learnt from pilot scheme implementation				
Output 11: A system for effective emergency response established, comprising upon Emergency Operations Centres, Search and Rescue Teams, SOPs, common assessment and training methodologies				
Form District Emergency Operations centers in 20 districts				
Training of the District Emergency Operations Center staff for 20				
Conduct district and city level drills on emergency response to earthquakes, floods and industrial disasters in about 10 districts/cities				
Upgrade four Civil Defence training academies				
Equipment and training for district SAR teams/EOCs				
Output 12: Institutional mechanisms established at national, provincial and district levels for effective post disaster recovery management.				
Train recovery program managers from ERRA and other stakeholders				

INDICATIVE WORKPLAN 2011

Activities	1st Quarter	2nd Quarter	3rd Quarter	4th Quarter
Output 5: Disaster risk management education incorporated into the syllabus of training and educational institutions of civil servants, media, armed forces, and modules available for training of district and municipal officials, politicians and bureaucrats				
Offering of certificate and diploma courses in selected universities and colleges				
Output 7: Local institutions for DRR established and strengthened at village, neighbourhood and town levels, which are able to implement small structural mitigation schemes.				
Implement 100 school preparedness schemes in primary and secondary schools in vulnerable areas				
Output 10: At least ten federal and provincial ministries integrated disaster risk reduction into their sectoral policy, planning and programming.				
Prepare case studies on lessons learnt from implementation of pilot projects on integrating DRM into development				
Output 11: A system for effective emergency response established, comprising upon Emergency Operations Centres, Search and Rescue Teams, SOPs, common assessment and training methodologies				
Equipment for 6 provincial/regional SAR teams				
Train 6 provincial/regional SAR teams				
Form District Emergency Operations centers in another 30 districts				
Train the District Emergency Operations Center staff in the new 30 districts				
Form district level SAR teams				
Train the district SAR teams				
Conduct district level drills in about 10 districts				
Output 12: Institutional mechanisms established at national, provincial and district levels for effective post disaster recovery management.				
Produce video and booklet on lessons learnt from earthquake recovery				

Annexure II

Budget

Consolidated Output Wise Budget

Sr.No	Item	Year wise break up in US \$					
		Total Amount	Year 1	Year 2	Year 3	Year 4	Year 5
1	Output 1	3,400,000	240,000	1,720,000	1,200,000	240,000	-
2	Output 2	160,000	-	160,000	-	-	-
3	Output 3	3,434,588	97,000	1,937,588	-	1,400,000	-
4	Output 4	22,400	-	22,400	-	-	-
5	Output 5	970,000	10,000	611,000	249,000	100,000	-
6	Output 6	198,000	43,000	55,000	85,000	15,000	-
7	Output 7	7,155,000	222,000	1,546,000	2,622,000	2,315,000	450,000
8	Output 8	6,809,999	8,000	12,000	2,053,999	4,736,000	-
9	Output 9	670,000	-	345,000	325,000	-	-
10	Output 10	2,260,000	33,750	556,250	1,010,000	630,000	30,000
11	Output 11	20,240,690	8,710,316	2,043,474	30,000	3,127,615	6,329,285
12	Output 12	88,000	-	-	40,000	24,000	24,000
13	Programme Management Unit Cost	1,060,306	251,802	413,452	270,052	114,000	11,000
	Total	46,468,983	9,615,868	9,422,164	7,885,051	12,701,615	6,844,285

Indicative Donor Wise Budget

Breakup of Indicative Consolidated Donor Contributions							
Sr.No	Donor	Total Amount	Year 1	Year 2	Year 3	Year 4	Year 5
1	UNDP	2,521,590	259,422	1,515,311	564,494	165,369	16,995
	UNDP Cost Sharing	760,000	152,000	456,000	152,000	-	-
2	Indicative World Bank Support	3,996,588	65,000	3,931,588	-	-	-
3	Indicative SIDA Support	1,800,000	1,800,000	-	-	-	-
4	Donor to be Identified	37,368,299	7,152,000	3,591,400	7,218,999	12,572,615	6,833,285
	Total	46,446,477	9,428,422	9,494,299	7,935,493	12,737,984	6,850,280

UNDP Budget

Annex III. Indicative Budget for the Programme	Expenses	Unit	# of Units	Unit Rate	Funding Partner	Cost (US \$)					
						Total Cost	2007 (Sep to Dec)	2008	2009	2010	2011
1. Human Resources											
1.1 Salaries (gross amounts, local staff)											
1.1.1 Technical, Coordination & Mgmt											
Project Manager (1) **		Per month	40	6,000	BCPR	240,000	24,000	72,000	72,000	72,000	
Training and Education Coordinator (1)		Per month	16	3,000	UNDP	48,000	12,000	36,000	36,000		
Legal & Institutional Expert (1)		Per month	17	2,000	UNDP	34,000		24,000	10,000		
Planning and Emergency Preparedness Coordinator (1)		Per month	18	2,500	UNDP	45,000		30,000	15,000		
Information Expert (1)		Per month	16	1,800	UNDP	28,800	7,200	21,600			
Disaster Reduction Expert (1)		Per month	22	1,800	UNDP	39,600	7,200	21,600	10,800		
Monitoring & Evaluation Expert (1)		Per month	23	3,000	UNDP	69,000	12,000	36,000	21,000		
Community & Local Level Programming Expert (1)		Per month	36	2,500	UNDP	90,000		30,000	30,000	30,000	
Programme Associate (1)		Per month	24	1,800	UNDP	43,200		21,600	21,600		
Administrative Associate (1)		Per month	28	1,500	UNDP	42,000	6,000	18,000	18,000		
Drivers (2)		Per month	28	850	UNDP	23,800	3,400	10,200	10,200		
1.2 Per diems for missions/travel		Per diem	48	350	UNDP	16,800		8,400	8,400		
1.2.1 Local staff assigned to the Programme)		Per diem	72	1,000	UNDP	72,000	12,000	36,000	24,000		
1.2.2 Seminar/conference participants		Per diem	20	1,000	UNDP	20,000	1,000	5,000	5,000	4,000	
Sub-total						812,200	84,800	370,400	246,000	107,000	4,000
2. Equipment and supplies											
2.1 Purchase of vehicles		Per vehicle	2	23,000	UNDP	46,000		46,000			
2.2 Furniture, computer equipment		Lumpsum	11	2,000	UNDP	22,000	10,000	12,000			
Sub-total						68,000	10,000	58,000			
3. Local office/Programme costs											
3.1 Vehicle operation & maint (2 Vehicles x 36 Months)		Per month	36	834	UNDP	30,024		10,008	10,008	10,008	
3.2 Office rental		Per Month	36	834	UNDP	30,024		10,008	10,008	10,008	
3.3 Consumables - office supplies		Per Month	36	418	UNDP	15,048	1,500	5,016	5,016	3,516	
3.4 Other services (tel/fax, electricity/heating, maintenance, reporting)		Lumpsum	36	825	UNDP	30,060	2,000	10,020	10,020	8,020	
Sub-total						105,156	3,500	35,052	35,052	31,552	
4. Other costs, services											
4.1 Auditing costs		Lumpsum			UNDP	20,000	5,000	5,000	5,000	5,000	
4.2 Evaluation costs		Lumpsum			UNDP	25,000		15,000			10,000
4.3 Staff insurance		Lumpsum			UNDP	12,000	1,500	3,000	3,000	2,000	2,500
Sub-total						57,000	6,500	8,000	23,000	7,000	12,500
5. Activity Costs											
5.1 Decision making tools (Activity 3)						32,000	8,000	24,000			
5.2 Evaluation, Training, Awareness (Activity 3)						248,000	43,000	89,000	149,000		
5.3 Disaster Risk Management Planning (Activity 6)						198,000	43,000	55,000	85,000	15,000	
5.4 Local and community level programming (Activity 7)						580,000	70,000	520,000			
5.5 Mainstreaming Disaster Risk Management into Ministries programmes (Activity 10)						400,000	33,750	356,250	10,000		
5.6 Emergency Response System						15,780	6,316	9,474			
Sub-total						1,483,780	171,066	1,063,724	244,000	15,000	16,500
6. Total Costs						2,628,146	275,866	1,625,176	648,052	160,552	16,800
7. Less PM Salary paid by BCPR for Year 1						2,448,146	251,866	1,471,176	548,052	160,552	16,500
8. Remaining amount after deduction of PM Salary						180,000	24,000	154,000	100,000	0	1,300
9. Implementation Support Service charge (SS 3%)						54,600	7,560	46,440	30,600	4,817	495
10. Total Cost (commitments for other project activities)						2,521,590	259,422	1,515,311	564,494	165,369	16,995

This is the minimum staff that would be required to implement the project. However additional staff would be identified & hired on need basis during the course of implementation and with the approval of EAD.

** PM Salary directly funded from Geneva BCPR for 1 Year

Detailed Budget for Output 1

Outputs	Key activities	Details of units	Unit Cost	Total Unit	Activity Target					Budget In (\$)								
					Year 1	Year 2	Year 3	Year 4	Year 5	Year 1	Year 2	Year 3	Year 4	Year 5				
Output 1: Disaster Management Authorities established and functional at National, Provincial/Regional and District levels in about 50 districts.	Equipment for NIDM Staff		700,000	1	0	1	0	0	0	0	0	700,000	0	0	0	0	0	0
	Support to Formation of PDMC's PDMA's		10,000	5	1	2	2	0	0	0	0	50,000	10,000	20,000	20,000	0	0	0
	Support to Formation of DDMA's / MDMA's		48,000	50	5	15	25	5	0	0	0	2,400,000	240,000	1,200,000	1,200,000	240,000	0	0
	Sub-total				67	6	19	27	5	0	0	2,400,000	240,000	1,200,000	1,200,000	240,000	0	0

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UNDP

Adopted

Output Part 1

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Detailed Budget for Output 2

Outputs	Key activities	Details of Units	Unit Cost	\$	Total Unit	Activity Target					Budget in (\$)								
						Year 1	Year 2	Year 3	Year 4	Year 5	Partner	Amount	Year1	Year2	Year3	Year4	Year5		
Output 2: Analysis on Seismology Financing Strategy and Mechanisms for Implementation of building codes available. -- 06 land use plans for high risk cities and districts available	Review and report of existing building codes National Workshop on Building Code implementation		10,000		1	0	1	0	0	0	0	10,000							
	Drafting of land use plans for selected cities; e.g. Quetta, Kafechi, Muzafarabad, Sialkot, Lahore, Islamabad	Cities	5,000		2	0	2	0	0	0	0	10,000							
	Workshops on development of landuse plans Review of existing insurance schemes with regards to provision of insurance services for disaster risk reduction	Work shops	10,000		6	0	6	0	0	0	0	60,000							
	Consultation with stakeholders to develop strategies for insurance sector involvement in disaster risk management		5,000		6	0	6	0	0	0	0	30,000							
	Report on approaches and plan for insurance policies for disaster risk reduction		25,000		1	0	1	0	0	0	0	25,000							
				15,000		1	0	1	0	0	0	15,000							
				10,000		1	0	1	0	0	0	10,000							
	Sub-total					18	0	18	0	0	0	0	160,000						

Detailed Budget for Output 3

Outputs	Key activities	Details of Units	Unit Cost \$	Total Unit	Activity Target					Budget in (\$)													
					Year 1	Year 2	Year 3	Year 4	Year 5	Partner	Amount	Year 1	Year 2	Year 3	Year 4	Year 6							
Output 3: Decision making tools to set priorities and develop policies and programs available in print, digitized and database forms on spatial distribution of natural hazards, disasters and vulnerable area	Part-1																						
	Hire Risk Assessment Expert	Staff	8,000	4	1	3	0	0	0	0	0	UNDP	32,000	8,000	24,000	-	-	-	-	-	-		
	Production of analytical reports on Hazard and Vulnerability Mapping	Districts	3,732	134	0	134	0	0	0	0	0	World Bank	500,088	-	500,088	-	-	-	-	-	-	-	
	Primary research and stakeholder consultation on hazard/vulnerability mapping	Cities & Districts	1,300	50	50	0	0	0	0	0	0	World Bank	65,000	65,000	-	-	-	-	-	-	-	-	-
	Production of the Hazard Vulnerability Atlas	Copies	475	500	0	500	0	0	0	0	0	World Bank	237,500	-	237,500	-	-	-	-	-	-	-	-
	Part-2																						
	Production of Electronic Hazard Maps (Earthquake, Drought, Flood, Landslide, Cyclone, Tsunami, Glacier Melt, Glef	Hazard Maps	150,000	8	0	8	0	0	0	0	0	World Bank	1,200,000	-	1,200,000	-	-	-	-	-	-	-	-
	Digitization of the HV Atlas	Cities & Districts	28,000	50	0	0	0	0	50	0	0	Donor to be Identified	1,400,000	-	-	-	1,400,000	-	-	-	-	-	-
	Sub-total				742	50	642	0	50	0	0		3,434,588	73,000	1,961,588	-	1,400,000	-	-	-	-	-	1,400,000

Detailed Budget for Output 4

Outputs	Key activities	Details of Units	Unit Cost \$	Total Unit	Activity Target					Partner	Amount	Budget in (\$)					
					Year 1	Year 2	Year 3	Year 4	Year 5			Year 1	Year 2	Year 3	Year 4	Year 5	
Output 4: Updated analysis on the impact of climate change on glaciers and ice caps in the North available for better disaster risk management particularly in the areas of flooding, droughts and landslides	Review of previous literature on climate change impact on ice caps/glaciers	Days	300	15	0	15	0	0	0	0	Donor to be Identified	4,500	-	-	-	-	-
	Scientific observation data analysis regarding climate change and its impact on glaciers/ice caps	Days	300	20	0	20	0	0	0	0	Donor to be Identified	6,000	-	-	-	-	-
	Travel (international/local)	Times	700	5	0	5					Donor to be Identified	3,500	-	-	-	-	-
	DSA	Days	120	50	0	50					Donor to be Identified	6,000	-	-	-	-	-
	Report writing	Days	300	8	0	8					Donor to be Identified	2,400	-	-	-	-	-
	Sub-total				98	0	98	0	0	0	0		22,400	0	0	0	0

Detailed Budget for Output 5

Outputs	Key activities	Details of Units	Unit Cost \$	Activity Target										Budget in (\$)				
				Total Unit	Year 1	Year 2	Year 3	Year 4	Year 5	Partner	Amount	Year 1	Year 2	Year 3	Year 4	Year 5		
					Year 1	Year 2	Year 3	Year 4	Year 5									
Output 5: Disaster risk management education incorporated into the syllabus of training and educational institutions of civil servants, media, armed forces, and modules available for training of district and municipal officials, politicians and bureaucrats	Develop Curriculum for NDMA, PDMA's and district, municipal authorities, and media	Courses	10,000	5	0	2	3	0	0	0	UNDP	50,000	10,000	20,000	30,000	-	-	
	Development of awareness materials for politicians, bureaucrats	Sets of Materials	10	1500	0	0	1500	0	0	0	UNDP	15,000	-	-	15,000	-	-	
	Training of NDMA, PDMA staff	Trainings	5,000	11	2	5	4	0	0	0	UNDP	55,000	10,000	25,000	20,000	-	-	
	Training of district, municipal DM authorities (40 Events)	Trainings	1,700	40	0	20	20	0	0	0	UNDP	68,000	-	34,000	34,000	-	-	
	Training of national and provincial media	Training	5,000	2	0	2	0	0	0	0	UNDP	10,000	-	10,000	-	-	-	
	Review of educational curriculum for civil services academies, NIMs and armed forces training institutions	Institutions	10,000	7	0	7	0	0	0	0	Donor to be identified	70,000	-	70,000	-	-	-	
	Development of educational curriculum for the above institutions	Courses for 7 institutions	50,000	7	0	7	0	0	0	0	Donor to be identified	350,000	-	350,000	-	-	-	
	Training of faculty of civil services academy, armed forces training institutes and NIMs	Training	10,200	10	0	10	0	0	0	0	Donor to be identified	102,000	-	102,000	-	-	-	
	Review and development of curriculum of certificate and diploma courses for masters and graduation students	Courses	50,000	4	0	0	2	2	0	0	Donor to be identified	200,000	-	-	100,000	100,000	-	
	Training of university and college faculty	Training	5,000	10	0	0	10	0	0	0	UNDP	50,000	-	-	50,000	-	-	
	Sub-total				1696	2	63	1539	2	0		970,000	10,000	611,000	249,000	100,000	100,000	

Detailed Budget for Output 6

Outputs	Key activities	Details of Units	Unit Cost \$	Total Unit	Activity Target					Partner	Amount	Budget in (\$)					
					Year 1	Year 2	Year 3	Year 4	Year 5			Year 1	Year 2	Year 3	Year 4	Year 5	
Output 6: Disaster response plan of NDMA and Disaster Risk Management Plans of PDMA's, DDMA's in 50 districts and selected line ministries and departments available.	National Disaster Response Plan		5,000	4	4	0	0	0	0	0	UNDP	20,000					
	Publish and disseminate the national plan	Copies of the plan	8	1000	1000	0	0	0	0	0	UNDP	8,000					
	Develop Provincial/regional on disaster risk management plans including publishing and dissemination **		17,500	1	1	0	0	0	0	0	Already being supported by UNDP	17,500					
	District disaster risk management plans	Meetings	3,000	50	5	15	25	5	0	0	UNDP	150,000	15,000	45,000	75,000	15,000	
Prepare DRM Ministerial Plans	Ministries	2,000	10	0	5	5	0	0	0	UNDP	20,000	-	10,000	10,000	-	-	
Sub-total				1065	1010	20	30	5	0			43,000	55,000	85,000	15,000	-	-

Detailed Budget for Output 7

Outputs	Key activities	Details of Units	Unit Cost \$	Total Unit	Activity Target						Budget In (\$)					
					Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Amount	Year1	Year2	Year3	Year 4	Year 6
Output 7: Local institutions for DRR established at village, neighbourhood and town levels, institutions able to implement small scale structural mitigation schemes.	Stakeholder Consultations conducted in Quito, Gecard, Batin and Tharda districts on local level programming		5,000	4	4	0	0	0	0	0	0	20,000	20,000	-	-	-
	Conduct risk assessment in the level districts (200 communities)		50,000	5	1	4	0	0	0	0	0	250,000	50,000	200,000	-	-
	Development of training and awareness materials for UC members, CBOs/CCBs, communities		300	100		100						30,000		30,000		
	Development of training and awareness materials for UC members, CBOs/CCBs, communities	Communities	300	400	0	100	200	100	0	0	0	120,000		30,000	60,000	30,000
	Trainings for UC members, CBOs/CCBs, communities	Districts	8,000	45		5	20	20				360,000		40,000	160,000	160,000
	Trainings for UC members, CBOs/CCBs, communities	Districts	8,000	5		5						40,000		40,000		
	Community risk assessment and risk management planning	Districts	50,000	45	0	5	25	15	0	0	0	2,250,000		250,000	1,250,000	750,000
	DRR in Muzaffarabad, Mansehra & Municipalities		76,000	10	2	6	2					760,000	152,000	456,000	152,000	
	Small scale mitigation schemes	Districts	50,000	45		5	20	20				2,250,000		250,000	1,000,000	1,000,000
	Small scale mitigation schemes	Districts	50,000	5		5						250,000		250,000		
School preparedness programmes	Schools	3,000	275	0	0	0	125	150			825,000				375,000	450,000
Sub-total			830	2	131	267	280	150			7,155,000	222,000	1,546,000	2,622,000	2,315,000	450,000

Detailed Budget for Output 8

Outputs	Key activities	Details of Units	Unit Cost \$	Total Unit	Activity Target					Partner	Amount	Budget In (\$)					
					Year 1	Year 2	Year 3	Year 4	Year 5			Year1	Year2	Year3	Year4	Year5	
Output 8: Technical capacities of the PMD and other warning agencies enhanced through expansion of flood, drought and cyclone monitoring networks and training.	Equipment for Flood Forecasting and Warning System in NWFP		1,120,000	1	0	0	1	0	0	0	Donor to be Identified	1,120,000	-	1,120,000	-	-	
	Training for staff of NWFP Flood Forecasting and Warning System		84,000	1	0	0	1	0	0	0	Donor to be Identified	84,000	-	84,000	-	-	
	Installation of equipment of Flood Forecasting and Warning System		100,000	1	0	0	1	0	0	0	Donor to be Identified	100,000	-	100,000	-	-	
	Stakeholder workshops to strengthen institutional arrangements for early warning	Workshops	4,000	5	2	3	0	0	0	0	Donor to be Identified	20,000	8,000	12,000	-	-	
	Machinery and Equipment for Tropical Warning Centre (expected from Donors)		316,666	1	0	0	1	0	0	0	Donor to be Identified	316,666	-	-	316,666	-	
	Training for Staff of Tropical Warning Centre (expected from Donors)		333,333	1	0	0	1	0	0	0	Donor to be Identified	333,333	-	-	333,333	-	
	Installation of equipment of the Tropical Warning Centre		100,000	1	0	0	1	0	0	0	Donor to be Identified	100,000	-	-	100,000	-	
	Equipment for 10 cm Quantitative Precipitation Measurement Doppler Weather Radar System at Pashl (Gwadar) and Quetta																
	Cost of Radar	Radars	2,235,000	2	0	0	0	2	0	0	Donor to be Identified	4,470,000	-	-	4,470,000	-	
	Cost of Networking	for 2 Centres	100,000	2	0	0	0	2	0	0	Donor to be Identified	200,000	-	-	200,000	-	
	Cost of Pre-installation charges	for 2 Centres	33,000	2	0	0	0	2	0	0	Donor to be Identified	66,000	-	-	66,000	-	
	Sub-total			17	2	3	6	6	0	0		6,809,999	8,000	12,000	2,063,999	4,736,000	-

Detailed Budget for Output 9

Outputs	Key activities	Details of Units	Unit Cost \$	Total Unit	Activity Target					Amount	Partner	Budget in (\$)				
					Year 1	Year 2	Year 3	Year 4	Year 5			Year 1	Year 2	Year 3	Year 4	Year 5
Output 9: Technical and management capacities of the Ministry of Health, Red Crescent, and APPNA Sehat increased for effective warning of epidemics to improve provision of health services to disaster and disease victims.	Stakeholder workshops to improve mechanisms for disease surveillance	Workshops	2,000	10	0	10	0	0	0	0	Donor to be identified	20,000	20,000	-	-	-
	Training of volunteers and staff of Ministry of Health, Red Crescent, APPNA Sehat, NGOs and other agencies on disease surveillance and reporting	Courses	3,000	50	0	25	25	0	0	0	Donor to be identified	150,000	75,000	75,000	-	-
	Improvement of communication infrastructure for better disease surveillance **		250,000	2	0	1	1	0	0	0	Donor to be identified	500,000	250,000	250,000	-	-
Sub-total				62	0	36	26	0	0	670,000		670,000	345,000	75,000	250,000	325,000

** Details to be finalized with MOH and cleared by EAD

Detailed Budget for Output 10

Outputs	Key activities	Details of Units	Unit Cost \$	Total Unit	Activity Target					Budget in (\$)								
					Year 1	Year 2	Year 3	Year 4	Year 5	Partner	Amount	Year 1	Year 2	Year 3	Year 4	Year 5		
Output 10: At least, eight federal & provincial ministries integrating disaster risk management into development sector policies, planning and programming.	Workshops to draft the sectoral guidelines (with participation of federal/provincial ministries) (8 Workshops) Inputs on drafting of sectoral guidelines on mainstreaming by hiring 3 consultant Training curriculum development for ministries on DRM Courses for federal and provincial line ministries Pilot schemes on mainstreaming Pilot schemes on mainstreaming Workshops on lessons learnt from pilot implementation Workshops on lessons learnt from pilot implementation Production of case studies on lessons learnt from pilot implementation	Workshops	1,250	12	7	5	0	0	0	0	UNDP	15,000	8,750	6,250	-	-	-	
		16 Months	6,250	16	4	12	0	0	0	0	UNDP	100,000	25,000	75,000	-	-	-	
		Courses	7,000	5	0	5	0	0	0	0	UNDP	35,000	-	35,000	-	-	-	
		Trainings	4,000	10	10	0	0	0	0	0	UNDP	40,000	-	40,000	-	-	-	
		Pilot Schemes	200,000	9	0	1	5	3	0	0	Donor to be identified	1,800,000	-	200,000	1,000,000	600,000	-	
		Pilot Schemes	200,000	1	1	1	0	0	0	0	UNDP	200,000	-	200,000	-	-	-	
		Workshops	10,000	3	0	0	0	3	0	0	Donor to be identified	30,000	-	-	30,000	-	-	
		Workshops	10,000	1	1	1	0	0	0	0	UNDP	10,000	-	-	10,000	-	-	
		Case Studies	3,000	10	0	0	0	0	0	10	Donor to be identified	30,000	-	-	-	-	30,000	
		Sub-total				67	11	34	6	6	10		2,260,000	33,750	656,260	1,010,000	630,000	30,000

Detailed Budget for Output 11

Outputs	Key activities	Details of Units	Unit Cost \$	Total Unit	Activity Target						Budget In (\$)														
					Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6									
Output 11: A system for effective emergency response including the EOCs, SAR teams, SOPs and assessment and training methodologies.	National Disaster Management Fund* System Implementation		5,000,000	1	1	0	0	0	0	0	0	0	0	0	0	5,000,000									
	National Emergency Operational System Management of Data Centre Equipment for Data Centre Province Equipment for Call Centre (Ind. V link) Headquarter		3,158 600,000 100,000 44,000 600,000	5 1 1 1 1	2	3	0	0	0	0	0	0	0	0	0	15,790 600,000 100,000 44,000 600,000	9,316 800,000 - - -								
	Equipment for DM SW SAT link Headquarter		100,000 100,000	1 1	0	1	0	0	0	0	0	0	0	0	0	100,000 100,000	- -								
	Equipment for Data Link Provincial Equipment EOC (HQ)		50,000 500,000	1 1	0	1	0	0	0	0	0	0	0	0	0	50,000 500,000	- -								
	Training of National and Provincial EOC staff - About 90 staff to be trained, 10 from each province/region, and 20 from national level (3 Courses)		20,000	3	1	2	0	0	0	0	0	0	0	0	0	80,000	20,000	40,000							
	Training of District/Municipal EOC staff (about 270 staff to be trained from 50 EOCs) National, Provincial, District Drills on training of EOCs Common Assessment Methodology (Including Workshops and Consultation Cost)		6,000 3,000 24,000	10 30 1	0	0	0	0	5	5	10	10	10	10	10	60,000 90,000 24,000	- - 24,000	-	-	-	-	-	30,000	30,000	30,000
	SOPs		12,000	5	5	0	0	0	0	0	0	0	0	0	0	60,000	60,000								
	Costs for District Emergency Operations Centre (DEOC) 20 Fire tenders for 20 highly vulnerable cities & districts with the clearance of EAD Equipment Costs for (DEOC)		196,428 11,333	20 50	0	0	0	0	10	10	20	30	30	30	30	3,928,550 565,650	- -	-	-	-	-	1,964,275	226,660	1,964,275	339,990
	District Disaster Management Fund**** Costs for SAR Teams		23,834	50	0	0	0	0	0	0	0	0	0	0	0	1,191,700	-	-	-	-	-	476,680	715,020		
	Equipment for 3 Federal SAR Teams		1,500,000	2	2	0	0	0	0	0	0	0	0	0	0	3,000,000	3,000,000								
	Training of 3 Federal SAR Teams		300,000	2	2	0	0	0	0	0	0	0	0	0	0	600,000	600,000								
	Equipment for Provincial/regional SAR Teams		400,000	6	6	0	0	0	0	0	0	0	0	0	0	2,400,000	-	-	-	-	-	-	-	2,400,000	
	Training of Provincial/regional SAR Teams		100,000	6	6	0	0	0	0	0	0	0	0	0	0	600,000	-	-	-	-	-	-	-	600,000	
	Upgrading of Civil Defence Academies		100,000	4	4	0	0	0	0	0	0	0	0	0	0	400,000	-	-	-	-	-	-	-	400,000	
	Training of District SAR Teams		5,000	50	0	0	0	0	0	0	0	0	0	0	0	250,000	-	-	-	-	-	-	-	250,000	
	Sub-total				262	14	12	10	89	147	89	147	147	147	147	20,240,690	8,710,316	2,043,474	30,000	3,127,616	6,329,285	6,329,285			

* National Disaster Management Fund is being established based upon lesson learnt in various countries including Japan, Bangladesh, India. This fund will be used for three main objectives: 1) Mitigation and Preparedness schemes by NDMA, 2) Organize emergency response in the wake of national catastrophe without having the wait, 3) Provide assistance to people immediate recovery and rehabilitation. In this regard National Disaster Management Commission has approved a fund from the Government budget. Under this project efforts will be made to raise another 5 Million dollars to contribute to the National Fund.
 ** Considering the fact that District Authorities in Pakistan have very little experience in disaster mitigation and preparedness. Therefore, One DOR Expert in each of the 50 vulnerable districts will be attached under the project. They will help in establishment of District Disaster Management Authorities, set up of District Emergency Operations Centers, and development of procedures and capacities for local level.
 *** Jeeps, preferably Suzuki jeeps will be given to the DDMA and the District Emergency Operations Centers (DEOCs). So that they could inform people about impending disasters, mobilize communities for disaster awareness, assess post-disaster situations by on-site visits and provide initial relief using their own vehicle.
 **** The District Disaster Management Fund will be managed by the DDMA and it will be used for disaster mitigation, community awareness and education, development of local warning systems and preparedness capacities, e.g. search and rescue and medical first aid. The DDMA's could also use the fund to provide emergency relief without having to wait for national support. Within the above framework the DDMA's will develop rules of business for the utilization and management of the district disaster management fund. Transparency will be ensured in the utilization of the fund DDMA will be accountable for appropriate utilization of the fund.

Detailed Budget for Output 12

Outputs	Key activities	Details of Units	Unit Cost \$	Total Unit	Activity Target					Partner	Amount	Budget in (\$)					
					Year 1	Year 2	Year 3	Year 4	Year 5			Year 1	Year 2	Year 3	Year 4	Year 5	
Output 12. Guidelines, curriculum and lessons learnt available for recovery managers on recovery needs assessment, program design and implementation on good practices in post disaster recovery	3 Workshops	3 Workshops	2,000	5	0	0	5	0	0	0	Donor to be identified	10,000	-	-	10,000	-	-
	1 Training on recovery programme design and implementation	1 Training on recovery programme design and implementation	30,000	1	0	0	1	0	0	0	Donor to be identified	30,000	-	-	30,000	-	-
	4 Training managers	4 Training Events	6,000	4	0	0	0	4	0	0	Donor to be identified	24,000	-	-	24,000	-	-
	2 Seis Recovery	2 Seis	12,000	2	0	0	0	0	2	0	Donor to be identified	24,000	-	-	-	-	24,000
Sub-total				7	0	0	1	4	2		88,000	-	-	40,000	24,000	24,000	

Indicative Equipment for National Institute for Disaster Management

(Output 1)

Sr. No	Item description	Quantity	Price in \$
1	Basic infrastructure including establishing a training hall		
1.1.	Desktop computers with necessary peripherals [preloaded with MS Office, windows and other standard software]	30	25,500
1.2	UPS	30	5400
1.3	Printers	11	2200
1.4	Fax	4	1600
1.5	Scanner	4	4000
1.6	Photocopier	2	5000
1.7	Digital sender	4	4000
	Subtotal		47,700
2	GIS Lab infrastructure		
2.1	GIS server (with 29" monitor for better view)	2	24000
2.2	Splitter	6	6000
2.3	Plotter/Scanner	4	20000
2.4	Printer	4	2000
2.5	Projector	4	4000
2.6	UPS/Inverter for power backup	8	4000
2.7	Internet connectivity (Router if required)	8	1600
2.8	Basic LAN infrastructure for network connectivity (Lan Structure cabling /Wifi)	5	10000
2.9	LAN Switches for connectivity	12	1200
	Subtotal		72,800

3.0	Software: ESRI Products for training purposes like		
3.1	Arc GIS	1	1500
3.2	Arc Map	1	1500
3.3	Arc IMS	1	1500
3.4	Arc SDE	1	1500
3.5	Arc object	1	1500
	Subtotal		7,500
4.0	Basic software required to run GIS application		
4.1	Windows Server 2003/2000 for GIS Server	1	500
4.2	Windows XP /Vista	1	500
4.3	MS office	1	500
4.4	Standard software (as per training requirement)	1	500
4.5	Shape files like state/district/block/GP boundaries, demographic map, thematic maps etc as per training requirement	1	5000
4.6	Technical manuals and books for reference	2	10000
	Subtotal		17,000
5.0	Emergency response equipments/Emergency Operations Centre training		
5.1	Satellite phone	10	10000
5.2	Wireless [VHF] handset	10	10000
5.3	HAM radio	10	15000
5.4	Marine warning radio	10	10000
	Subtotal		45,000
6.0	Search and Rescue Training		
6.1	Stretcher (All type)	10	8000
6.2	Fire extinguisher (all types)	40	80000
6.3	Blanket	80	8000
6.4	Lifebuoys	60	15000
6.5	Life jackets	60	18000
6.6	Bamboos	200	4000
6.7	Rescue ropes	60	12000
6.8	Gas cutters	20	50000
6.9	Claws	20	50000
6.10	FRC boat	10	50000
6.11	RIB (boat)	10	50000
6.12	PA Systems	10	25000
	Subtotal		370,000

7.0	First Aid training		
7.1	Gauze dressing 5 cm and 10 cm square in individual sterile packages	2000	10000
7.2	Rolls of gauzes bandages 5 and 8 cm in wide (sterile)	2000	10000
7.3	Adhesive bandages	2000	10000
7.4	Absorbent cotton roll (sterile)	3000	15000
7.5	Adhesive tape	3000	15000
7.6	Mild antiseptic solution	3000	15000
7.7	Scissors, tweezers safety pins	2000	20000
7.8	Lubricant jelly/ petroleum jelly	2000	20000
7.9	Laundered, ironed and folded sheets if cotton about 1 meter square for making slings and bandages	200	4000
7.10	Tongue depressor	200	4000
7.11	Airway	200	2000
7.12	Splints	200	4000
7.13	Thermometer	50	1000
7.14	Rubber catheter and tunicate	50	5000
7.15	Macintosh (rubber sheet)	50	5000
		Subtotal	140,000
	Grand Total		700,000

Annexure IV

Flood Forecasting and Warning System in NWFP and Balochistan

(Output 8)**INDICATIVE FLOOD FORECASTING AND WARNING SYSTEM IN NWFP**

1. Equipment (Description)	1,120,000
(1) Tara-Acua Satellite Receiver	516,666
(2) Master Control Station (Data Processing & Radio Equip)	250,000
(3) Water Level Gauging Stations (07 Sites)	53,336
(4) Automatic Weather Stations (09 Sites)	166,666
(i) Wind Direction & Wind Speed	
(ii) Tipping budget Rain Gauge 12"	
(iii) Temperature	
(iv) Humidity with Sun shield	
(v) Barometric Pressure	
(vi) Solar Radiation	
(vii) Solar Panel, charger & battery	
(viii) Data logger with software	
(ix) Snow Measuring Instrument	
(5) Test Instrument	8,333
(6) Spare Parts & Consumables	58,333
(7) Vehicle (2600 CC)	
(8) Back up Station for PMD Islamabad (computers, telemetry sensors, software, printers, networking etc.)	66,666
2. Installation of Equipment	100,000
(1) Installation Work	50,000
(2) Trial, Operation Guidance, Acceptance test	30,000
(3) Site Management & Security	20,000
3. Training of staff of NWFP Flood Forecasting and Warning System	84,000
GRAND TOTAL	1,304,000
	US \$: 1,304,000
	Million

(Output 8)

1. Indicative Support for Tropical Cyclone Warning Centre

Sr. No	Item	Costs in US \$
1	Machinery & Equipment for Tropical Warning Centre <i>(Please see details in Table 2)</i>	316,666
2	Training for staff of Tropical Warning Centre <i>(staff of the TWC will be trained internationally as well as at national level with the help of international technical agencies; e.g. World Meteorological Organization, NOAA in the US etc. This would include both short and long term courses)</i>	333,333
3	Installation of Equipment of the Tropical Warning Centre	100,000
	Total	749,999

2. Details of Equipment for the Cyclone Centre

Sr. No	Items	Quantity	Costs
1	Automatic Weather Station (AWS) with DCP	10	60,000
2	Software	1	8000
3	Mobile Radar	1	130000
4	Computer P-IV with all accessories	10	6000
5	Automatic Plotter	2	4400
6	Meteorological Test Equipment		60000
	(i) Hydrological Measurement Equipment		
	(ii) Tide Gauges Network	1	
7	Radio-Sonde with accessories including balloon for two years	2	30000
8	Digital Anemometer	2	15766
9	Fax Machine	2	500
10	Photo Copier	2	4000
	TOTAL COSTS		316,666

Annexure VI

Pilot Schemes on Mainstreaming of Disaster Risk Reduction

Indicative Pilot Schemes on Mainstreaming of Disaster Risk Reduction into development ministries

(Output 10)

Introduction

Huge economic and social losses are experienced by various development sectors due to natural disasters like earthquakes, floods, droughts, landslides, cyclones, tsunami, GLOF and others in Pakistan. For example the country suffered losses of USD 5.2 billion due to the earthquake of 2005, a damage of USD 6 billion in the 14 major flood events since 1947, and losses of USD 2.5 billion due to the drought of 1998-2002.

Since development decision makers lack awareness about potential disaster risks and the measures they could undertake to mitigate those risks, while implementing development schemes, therefore various sectoral schemes are planned and implemented in many hazard prone regions of the country without a consideration for disaster risk reduction.

In order to reduce these losses from disasters it is imperative that risk assessment is conducted at the designing stage of all sectoral development projects located in hazard prone areas, and that disaster risk reduction strategies are incorporated in implementation of development projects and schemes of various ministries.

Initially NMDA intends to work with the following 10 ministries on priority basis.

1. Ministry of Food, Agriculture, Livestock
2. Ministry of Communications
3. Ministry of Education
4. Ministry of Environment
5. Ministry of Health
6. Ministry of Housing and Works
7. Ministry of Industries
8. Ministry of Local Government and Rural Development
9. Ministry of Water and Power and Irrigation
10. Ministry of Planning and Development

In order to integrate disaster risk reduction into each of the above sectors, Sectoral Working Groups will be formed. These Groups will be comprised upon representatives of federal ministries, respective provincial ministries and district level departmental officials. NMDA and PDMA representatives will also be members of the Sectoral Working Groups. Officials of appropriate technical institutions would be members of the Sectoral Working Groups; e.g. Pakistan Meteorological Department, Federal Flood Commission, Geological Survey of Pakistan, National Agricultural Research Council (NARC), NESPAK, SUPARCO, WAPDA, National Institute of Oceanography, Arid Zone Research Institutes (AZRIs). Other sectoral experts may be made members of the Sectoral Working Group on as needed basis; e.g. socio-economic experts, structural engineers, climatologists etc. The details of the potential sectoral schemes are given below.

1. Ministry of Agriculture, Livestock and Food

Activity	Unit	Unit price	Total
1.1. Potential Schemes in agriculture sector			
1.1.1. Research on drought resilient crops	2	5000	10000
1.1.2. Research on flood resilient crops	2	5000	10000
1.1.3. Demonstration projects to introduce drought and flood resilient crops in selected districts to raise awareness of communities and officials (extension workers)	4	15000	60000
1.1.4. Training of extension workers on drought and flood resilient crops	4 training for 120 extension workers	10000	40000
Sub-Total			100,000
1.2. Schemes to promote better livestock management practices			
1.2.1. Awareness raising of local communities to promote better livestock management practices to avoid livestock losses in droughts: e.g. reduce the size of livestock, linking with export markets etc	4	10000	40000
1.2.2. Provision of better health services to reduce livestock morbidity and mortality, and thus promote small and health livestock management practices (support to extension workers- training, linking with communities- provision of medicines etc)	4	10000	40000
1.2.3. Development of fodder supply mechanisms to ensure livestock safety during drought years (this may include development of fodder storage capacity, or introduction of new fodder varieties etc)	2	10000	20000
Sub-Total			100,000
GRAND TOTAL			200,000

2. Ministry of Communications

Activity	Unit	Unit price	Total
2.1. Surveys to assess vulnerability of selected communication infrastructure of planned projects of the Ministry with regards to multiple hazards; e.g. earthquakes, floods, landslides, cyclones, GLOF	4	15000	60,000
2.1. Incorporate disaster mitigation measures in the actual construction/installation of vulnerable infrastructure schemes for demonstration and awareness raising of Ministry officials; e.g. telephone lines, radio and TV communications.	4	35000	140,000
GRAND TOTAL			200,000

3. Ministry of Industries, Production and Special Initiatives

Activity	Unit	Unit price	Total
1.1. Assess vulnerability of certain planned industrial projects of the Ministry in hazard prone areas against hazards like earthquakes, floods, cyclones, or landslides;	2	40000	80000
1.3. Demonstrate integration of hazard mitigation technologies in construction of selected vulnerable industrial projects; e.g. site selection, construction materials, construction design, contingency planning, awareness-raising of industry employers and employees	2	60000	120000
GRAND TOTAL			200,000

4. Ministry of Education

Activity	Unit	Unit price	Total
1.1. Assessment of vulnerability of schools (of various types) to different hazards in different parts of the country	30	1670	50000
1.2. Hazard resilient construction of schools vis-à-vis different natural hazards for demonstration and awareness (hazards may include; earthquakes, floods, cyclones, landslides)	7	15000	105000
1.3. Preparation of school disaster response plans	30	1000	30000
1.4. Develop monitoring system to ensure that hazard resilient construction is implemented in the construction of schools	7	2142	15000
GRAND TOTAL			200,000

5. Ministry of Environment

Activity	Unit	Unit price	Total
1.1. Assess environmental risks from industry and from natural hazards in selected areas	3	8000	24000
1.2. Demonstration implementation of projects to reduce risks to environmental resources (water bodies, swamps, coastal zones, watersheds) from natural and human induced hazards; mangrove remediation, forestation in the watersheds, coastal hazard management, controlling of industrial waste from falling the water-bodies etc;	3	50000	150000
1.3. Introduce a monitoring system to ensure that interventions are implemented to reduce risks to environmental resources from natural and human induced hazards	6	4000	24000
GRAND TOTAL			200,000

6. Ministry of Health

Activity	Unit	Unit price	Total
1.1. Assess vulnerabilities of the health infrastructure to natural hazards	6	8000	8000
1.2. Demonstration construction/retrofitting of a selected hospital with integration of disaster mitigation measures	1	78000	78000
1.3. Development of hospital contingency plans for hospitals located in hazard prone areas	6	5000	30000
1.4. Development of backup plans of hospitals to deal with mass casualty scenarios in the aftermath of disasters	6	9000	54000
1.5. Develop a monitoring system to ensure that hazard mitigation measures are integrated in the construction of health infrastructure in future	6	5000	30000
GRAND TOTAL			200,000

7. Ministry of Housing and Works

Activity	Unit	Unit price	Total
1.1. Strategies to ensure implementation of building codes in the construction of houses and public sector infrastructure	2 (urban, industrial sector)	7000	14000
1.2. Implementation of demonstration pilot schemes; e.g. construction of roads, bridges, buildings following the standards of hazard resiliency	6	28000	168000
1.3. Develop a monitoring system to ensure that hazard mitigation measures are integrated in the construction of public sector infrastructure at national and provincial levels	6	3000	18000
GRAND TOTAL			200000

8. Ministry of Local Government and Rural Development

Activity	Unit	Unit price	Total
1.1. Strategies to ensure implementation of building codes in the construction of local government infrastructure	6	5000	30000
1.2. Implement demonstration schemes; e.g. construction of government offices, basic health facilities, roads, bridges as per the hazard safety standards	6	25000	150000
1.3. Introduce a monitoring system to ensure that hazard mitigation measures are integrated in the construction of LGRD infrastructure in future	6	3333	20000
GRAND TOTAL			200,000

9. Ministry of Water and Power and Irrigation Sector

Activity	Unit	Unit price	Total
1.1. Assess vulnerability of water and power sector's infrastructure to natural hazards; dams, canals etc	4	15000	60000
1.2. Guidelines on integration of disaster mitigation measures in the construction of the infrastructure of water and power sector; e.g. dams, canals	2	65000	130000
1.3. Introduce a monitoring system to ensure that hazard mitigation measures are integrated in the construction of water and power sector's infrastructure	2	5000	10000
GRAND TOTAL			200,000

10. Planning and Development

Activity	Unit	Unit price	Total
1.1. Develop planning commission guidelines on incorporation of risk assessment in project identification, design, and planning stages;	1	10000	10000
1.2. Develop a monitoring and evaluation system to ensure that disaster mitigation measures are incorporated into the construction of infrastructure in the work of all ministries at provincial and national levels, as given above (orientation of national, provincial officials on monitoring and evaluation for hazard assessment and mitigation, establishment of a reporting system etc)	7	15000	105000
1.3. System to obtain and maintain data on public sector infrastructure in hazard prone areas in order to plan vulnerability reduction	7	12142	85000
GRAND TOTAL			200000

Annexure VII

Rescue Equipment for District Emergency Operations Centre

Annexure VIII

Equipment for National Emergency Operations Centre

(Output 11)

Indicative Equipment for National Emergency Operation System

1. IT Equipment for Data Centre for Province (for 6 sites)

Sr. #	Item Description	Qty	Price (In US\$)
1	Hardware		
1.1.	Servers – Specialized Heavy Duty 24x7 Machines (for six sites 2 at each place)	12	80,000.00
	Specification: Floor stand incl. 1 power supply module , sliding screen with lock, 2 fans; dual system board with 1x Xeon DP Dual Core processor, DDR RAM PC2-4200F/5300F ECC; iRMC onboard server management and graphics controller, 1xGbit Ethernet LAN onboard, Fast-IDE controller (for 1xDVD), SAS controller with 8 ports (IME included = RAID 1); SATA controller with 6 ports; mouse; Software: ServerStart package incl. ServerBooks CD, ServerSupport CD and ServerView CD.		
1.2	Backup Solution (Tape Library, SAN Switch) for DR site (FOR 100% BACKUP of Main Site) High-Availability-HDD-Frame 19", 3 high units, 5 * 146GB/15K HDD, 4Gbit Switch (Switched Backend) 2 Power Supplies, 1 high units SPS , 2 AC-Distributors, assembly material. Note: It is not recommended to use the first five harddisks for customer	1	20,000.00
1.3	Main Switches for 6 Sites only without Network Security Modules Catalyst 4500 Chassis (7-Slot), fan, no p/s, Red Sup Capable, Catalyst 4000 Supervisor II-Plus (IOS), 2GE, Console(RJ-45), Catalyst 4500 1300W AC Power Supply (Data and PoE)	6	446,482.00
1.4	Basic Access Devices (for six sites) Catalyst C2960 48 Ethernet 10/100 ports and two 10/100/1000TX uplinks, 1 RU fixed-configuration,	6	9000.00
1.5	Advanced Security Devices for LAN (for six sites) PIX 535 UR Appliance with Software, high availability, 3DES/AES encryption	6	30,000.00
1.6	Aggregation Modular 2 slot Routers 3825 w/AC PWR, 2GE, 1SFP, 2NME, 4HWIC, IP Base, 64F/256D 256BM SDRAM default memory for 3800	6	27,000.00
1.7	Active and Passive Components Cat 6 Information Outlet (RJ-45) 15 U local cabinet with 4 x fans 4 Pair Grey UTP Cat 6 Cat 6 48 Ports Patch Panel Patch Cord 9ft UTP Cat 6	86	19,600.00
2	Software		
2.1	Operating System Windows Svr Ent 2003 R2 English OLP NL	12	6,000.00
2.2	NMS for DR site only (1 site only) HP NNM 7.50 Media	1	5086.00
2.3	Operation & Maintenance for 03 years	1	30,900.00
2.4	Training	1	12,241.00
2.5	Services	1	12,241.00
3	Desktop		
3.1	Personal computers (Core2 Duo, 1GB RAM, 80 GB HDD, Monitor, Keyboard, Mouse)	1	833.00
GRAND TOTAL		USD	698,483.00

7. Equipment EOC (IT Equipment for Data Centre – Headquarter)

Sr. No	Item description	Quantity	Price in INR
1	Hardware		
1.1.	Servers for Headquarter Specification: Floorstand incl. 1 power supply module , sliding screen with lock, 2 fans; dual-systemboard with 1x Xeon DP Dual Core processor, DDR RAM PC2-4200F/5300F ECC; iRMC onboard server management and graphics controller, 1xGbit Ethernet LAN onboard, Fast-IDE controller (for 1xDVD), SAS controller with 8 ports (IME included = RAID 1); SATA controller with 6 ports; mouse; Software: ServerStart package incl. ServerBooks CD, ServerSupport CD and ServerView CD.	12	80,000.00
1.2	Backup Solution (Storage Area, Tape Library, SAN Switches) MIAN USAGE High-Availability-HDD-Frame 19", 3 hight units, 5 * 146GB/15K HDD, 4Gbit Switch (Switched Backend) 2 Power Supplies, 1 hight units SPS , 2 AC-Distributors, assembly material. Note: It is not recommended to use the first five harddisks for customer	1	20,000.00
1.3	Core Switch for main Site (in Head Quarter) with Network Security Modules Catalyst 6500 Enhanced 6-slot chassis, 12RU, no PS, no Fan Tray C6500 Supervisor 32 with 8 GigE uplinks and PFC3B Firewall Module Software 2.3 for 6500 and 7600, 2 free VFW PIX Device Manager for FW Module 2.3 for Catalyst 6500 IPSv5.0 for IDSM-2	1	226,482.00
1.4	Distribution Switches Layer -3 Catalyst C3750 48 Ethernet 10/100/1000 ports and , 1.5 RU fixed-configuration, LAN Base Image installed	2	1666.00
1.5	Firewalls ASA 5520 Appliance with SW, HA, 4GE+1FE, 3DES/AES	2	15,000.00
1.6	Core Routers 4 slots 256BM SDRAM default memory for 3800 1-Port RJ-48 Multiflex Trunk - G.703 3845 w/AC PWR, 2GE, 1SFP, 2NME, 4HWIC, IP Base, 64F/256D	2	18,333.00
1.7	Active and Passive Components	40	9,117.00
2.	Software		
2.1	Operating System Windows Svr Ent 2003 R2 English OLP NL Media Kit for Win 2K Ent Windows Svr Std 2003 R2 English OLP NL Media Kit for Win 2K Std Symantec Client Security 3.1 License + Gold Maintenance - 1 Year (Government Band)	12	3000.00
2.2	NMS (Central Deployment) HP NNM AE 250 Nd Pk 7.50 Win LTU HP NNM 7.50 Media HP NNM SE 7.50 Manuals English	1	5086.00
2.3	Operation & Maintenance for 03 years	1	15,000.00
2.4	Training	1	5,000.00
2.5	Services	1	5,000.00
3	Optional		
3.1	Personal computers (Core2 Duo, 1 GB RAM, 80 GB HDD, Graphics Card, Monitor, Keyboard, Mouse	1	833.00
GRAND	TOTAL	USD	405,517.00

Indicative Consolidated Summary IT Equipment National Emergency Operation System

Sr.	Item	Price (in \$)
1.	IT Equipment for Data Centre for Province System	698,483.00
2.	IT Equipment for Call Centre for Headquarter	100,000.00
3.	IT Equipment for Call Centre for Provincial System	44,000.00
4.	Disaster management SW setup for national system	602,000.00
5.	IT Equipment for Data Link Headquarter	75,000.00
6.	IT Equipment for Data Link Provincial	75,000.00
7.	IT Equipment EOC (Headquarter)	405,517.00
	GRAND TOTAL	2,000,000.00

Annexure IX

District Disaster Reduction Expert: Terms of Reference

District Disaster Reduction Expert

Indicative Terms of Reference

Duty Station:	District Headquarters
Reporting to:	National Project Manager
Duration of Appointment:	2 years
Expected Starting Date:	1 st August 2007
Project Title:	National Capacity Building for Disaster Risk Management

1. Background

The Crisis Prevention and Recovery Unit (CPRU) of the United Nations Development Programme (UNDP) is supporting the Government of Pakistan in establishing policy, legal and institutional arrangements for disaster risk reduction. The purpose of UNDP support is to develop and strengthen capacities of the Government of Pakistan at national, provincial and local levels to adopt strategies for reducing threat of disasters and minimizing the impact of disaster events upon communities.

The Government of Pakistan has established policy and institutional mechanisms at national, provincial and district levels. A National Disaster Management Ordinance has been issued by the President on 21st of December 2006. Under the Ordinance a National Disaster Management Commission (NDMA) and a National Disaster Management Authority (NDMA) has been established. The National Commission has notified the provincial, regional and state governments to established disaster management authorities at provincial and district levels.

In order to develop capacities of the newly established national provincial and district authorities, the UNDP is working closely with the National Disaster Management Authority. A ProDoc is being signed to support implementation of the National Disaster Risk Management Framework.

An important strategy of UNDP is to support the establishment of District Disaster Management Authorities (DDMA). As a first step this will be done in 50 highly vulnerable districts of Pakistan. Such districts will be identified in consultation with the Provincial Disaster Management Authorities, national NGOs, Pakistan Red Crescent Society and through an analysis of the historical data of disaster occurrence and their impact. The District Disaster Management Authorities will be overall responsible bodies for policy making and capacity development for disaster risk reduction. As per the National Disaster Management Ordinance the composition of the District Disaster Management Authority will be as following.

1. District Nazim as the Chairperson
2. District Coordination Officer (as the secretary, ex officio)
3. EDO Health
4. District Police Chief
5. Any others to be nominated by the district government

Under the overall management of the DDMA, District Emergency Operations Centers (DEOCs) will be established. The DEOCs will be the focal point for organizing emergency response at the district level in case of a disaster. The staff of the DEOC will be decided by the DDMA in due course.

4. **Education**

- Masters degree in social sciences or any development discipline related to disaster risk management; They may include degrees in disciplines like geology, seismology, meteorology, structural engineering, social work, urban planning etc.

5. **Experience:**

- At least 10 years of demonstrated experience in designing and /or managing development projects, preferably in disaster risk management including minimum of 2 years experience in designing and implementing training and awareness raising activities in the context of development projects or disaster risk management;
- Demonstrated track record in people management, and participatory leadership;
- Demonstrated experience in managing/implementing infrastructure related activities; e.g. construction, forestry etc
- Demonstrated experience in technical writing and research;
- Experience of working with government officials and with communities desirable;
- Experience of working with the UN system, preferred;
- Demonstrated experience in financial management of projects desired;

7. **Language requirements**

- Fluency in English and Urdu is essential. Ability to communicate in local language of the relevant district would be must desired.
