## **Pakistan**

## National progress report on the implementation of the Hyogo Framework for Action

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## Strategic goals 1

## Area 1

The more effective integration of disaster risk considerations into sustainable development policies, planning and programming at all levels, with a special emphasis on disaster prevention, mitigation, preparedness and vulnerability reduction.

## **Strategic Goal Statement:**

Realizing the importance of disaster risk reduction for sustainable social, economic and environmental development, the Government of Pakistan has put in place appropriate legal, policy, and institutional arrangements, and is implementing strategies and programmes to minimize risks and vulnerabilities. Accordingly, National Disaster Management Ordinance 2006/2007 was promulgated, the implementation of which would be ensured by the National Disaster Management Commission (NDMC).

The National Disaster Management Authority (NDMA) has been established as the focal agency for coordinating and facilitating the implementation of strategies and programmes on disaster risk reduction, response and recovery. Similarly, Disaster Management Authorities have been established at provincial regional and district levels. The NDMA is providing technical guidance to national and provincial stakeholders about formulation of plans, strategies and programmes for disaster risk management. The NDMA is also working on different programmes on capacity development of national, provincial and local stakeholders in collaboration with Provincial Disaster Management Authorities (PDMAs) and District Disaster Management Authorities (DDMAs).

National Disaster Risk Management Framework has been formulated to guide the work of entire system in the area of disaster risk management. It has been developed through wide consultations with stakeholders at local, provincial and national levels. The Framework envisions, "to achieve sustainable social, economic and environmental development in Pakistan through reducing risks and vulnerabilities, particularly those of the poor and marginalized groups, and by effectively responding to and recovering from disaster impact". Nine priority areas have been identified within this Framework to establish and strengthen policies, institutions and capacities over the next five years: These include:-

- i) Institutional and legal arrangements for DRM
- ii) Hazard and vulnerability assessment,
- iii) Training, education and awareness,
- iv) Disaster risk management planning,
- v) Community and local level programming,
- vi) Multi-hazard early warning system,
- vii) Mainstreaming disaster risk reduction into development
- viii) Emergency response system, and
- ix) Capacity development for post disaster recovery

In order to facilitate the integration of DRR into development planning and for capacity development, the NDMA has initiated a number of programs with support from World Bank, UNDP, SIDA, SDC, DFID and other donors. An important program in this regard is the National Capacity Building for Disaster Risk Management (NCBDRM), which is a five year programme encompassing a range of DRR initiatives. Under the NCBDRM, the NDMA has launched a special effort to work with five selected donors, Planning Commission of Pakistan and key federal ministries involved in large scale development programmes to develop pilot initiatives on DRR integration. The priority sectors include; Water and Power, Housing and Works, communications, Industries and Defense. Efforts are also underway for mainstreaming DRR in education curricula aimed at introducing in schools & colleges from academic year 2009. Likewise, the NDMA is striving to have DRR integrated in the curricula of the training

institutions imparting training to civil servants at induction as well as mid career levels.

## Area 2

The development and strengthening of institutions, mechanisms and capacities at all levels, in particular at the community level, that can systematically contribute to building resilience to hazards.

## **Strategic Goal Statement:**

Institutional arrangements have already been put in place at respective levels while key initiatives are underway to strengthen the established institutions. One of the key initiatives in this regard is the NCBDRM project which is aimed at strengthening of PDMAs and DDMAs. NDMA is also working for establishment of the National Institute of Disaster Management (NIDM), as the National Centre of Excellence for providing training, education and research services in the field of DRR.

NDMA's strategy to develop local and community level capacities is focused upon strengthening of DDMAs and implementation of local level mitigation programmes. In this regard, NDMA has launched three projects in 08 districts to implement community and local level mitigation programs on earthquakes, floods, cyclones and GLOF. These projects include community training, awareness raising, establishing local response teams and implementing preparedness and mitigation activities.

## Area 3

The systematic incorporation of risk reduction approaches into the design and implementation of emergency preparedness, response and recovery programmes in the reconstruction of affected communities.

## **Strategic Goal Statement:**

The Earthquake Reconstruction and Rehabilitation Authority (ERRA) has been assigned by the Government of Pakistan to implement the reconstruction programmes in the areas effected by Earthquake 2005. ERRA has integrated the principles of DRR into recovery and rehabilitation projects. The ERRA's programmes have been particularly successful in promoting earthquake safer construction in housing, education, health and land development sectors.

Piggybacking ERRA's efforts, the NDMA has launched an Earthquake Vulnerability Reduction and Preparedness Programme for Muzaffarabad and Mansehra Municipalities - Key activities include: Earthquake Risk Assessment (ERA) and formulation of EQ risk scenarios. Establishment of MDMC, Formulation of Earthquake Vulnerability Reduction Plans, EQ safer construction guide lines, Enhancement of Municipal Capacities in DRR. This project coordinates with ERRA reconstruction units in order to promote integration of DRR into ongoing recovery process. The project includes activities on earthquake risk mapping, mason training, community awareness and model retrofitting and reconstruction.

## **Priority for action 1**

Ensure that disaster risk reduction is a national and a local priority with a strong institutional basis for implementation.

## **Core indicator 1**

National policy and legal framework for disaster risk reduction exists with decentralised responsibilities and capacities at all levels.

## Level of Progress achieved:

3: Institutional commitment attained, but achievements are neither comprehensive nor substantial

## **Description:**

Achievements made with regard to Core Indicator 1 can be categorized at level three (3). The National Disaster Risk Management Framework (NDRMF), envisaging National Policies and Strategies, has been framed and put into operation as a national document. The Framework also provides guidelines and identifies the devolved responsibilities of the stakeholders. It emphasizes the institutional capacity building at federal, provincial and district levels. Accordingly, the National Disaster Management Commission (NDMC) as the apex policy making body at the federal level and NDMA as its executive arm, have been established. Likewise, Provincial/Regional Disaster Management Commissions (PDMCs), Authorities (PDMAs) and District Disaster Management Authorities (DDMAs) have been established at the Provincial/Regional and District levels.

While the NDMA is responsible to coordinate disaster management activities at the national level, responsibility to deal with disaster management activities at the provincial level and district level have been devolved to the Provincial/Regional Disaster Management Commissions and Authorities and District Disaster Management Authorities. The PDMCs and PDMAs will formulate and implement policies and plans as per needs of their respective provinces. However, the policies are required to be framed in synchronization with National Policies and Strategies. Under the National Framework, the District Disaster Management Authorities (DDMAs) will act as the linchpin of the whole system. The DDMAs, as first responders to any disaster, are empowered to deal whole spectrum of disaster management activities at the local level in coordination with local communities. The NDMA and PDMAs will provide technical and financial support to the DDMAs for the implementation of District Disaster Management Plans.

As the lead agency at the national level, the NDMA is required to monitor and implement National Policies and Strategies at respective levels. For this purpose, the NDMA is currently working on establishment of an information system on systematic data-gathering and analysis with regards to ensuring implementation of the policy and framework by Federal Ministries/Departments, and Provincial and District governments. In a year from now NDMA will be able to have the full fledge data gathering and analysis system in place.

## **Context & Constraints:**

Emergency response has remained a predominant approach in Pakistan to deal with disasters until recently. The Calamity Act of 1958, the national policy for disaster management prior to the passing of National Disaster Management Ordinance 2006/2007, was mainly concerned with emergency response. As a result, the Country has developed institutional practices and capacities that are predominantly based on Emergency Response Paradigm. Consequently, the establishing of appropriate policy, institutional and legal arrangements to deal with issues of risk and vulnerability was not given priority at higher levels. Therefore, Pakistan lacked such mechanisms and institutions.

Through a paradigm shift by promulgating the National Disaster Management Ordinance 2006, and formulation of National Disaster Risk Management Framework, emphasis has been laid on disaster risk reduction, rather than emergency response. However, the institutional mindset based upon the conventional emergency approach remains the main stumbling block in this paradigm shift to meet its logical end.

The second major challenge is the dependency syndrome of the local institutions and communities in dealing with local disasters. By tradition, the local institutions and communities always look up towards the Provincial and Federal Governments for disaster management interventions. As a result, the concept

of decentralization of responsibilities for disaster management down to local and community levels under the new disaster management system is being taken as a hard to chew concept.

The third major challenge is lack of awareness amongst the institutions and communities to take disaster risk reduction as an integral part of sustainable development. That means DRR will not be treated as a prioritized item by State institutions and communities. Availability of resources for implementation of DRR Policies and Strategies is crucial. However, lack of resources and rampant poverty makes it difficult for the Government to earmark substantial funds for DRR activities.

## **Core indicator 2**

Dedicated and adequate resources are available to implement disaster risk reduction plans and activities at all administrative levels

## Level of Progress achieved:

4: Substantial achievement attained but with recognized limitations in key aspects, such as financial resources and/ or operational capacities

## **Description:**

The progress in this area could be categorized as close to level four at the Federal level. Legal arrangements have been made under the National Disaster Management Ordinance 2006/2007, for the provision of dedicated resources for disaster management through establishment of National Disaster Management Fund (NDMF). Accordingly, the Federal Government has notified the establishment of NDMF. Besides, the Federal Government has provided substantial funds for the operationalisation of National Disaster Management Authority (NDMA). As envisaged under the National Framework, the NDMA also made arrangements for obtaining commitments for mobilization of resources worth 64 million USD from international donor agencies for implementation of National Policies and Strategies through development programmes in nine priority areas over the next five years.

However, at the Provincial levels the progress level could be marked as at level two, varying from province to province. Generally, there is lack of commitment and political will at the provincial level to take DRR as one of the prioritized items on the agenda of the Provincial Governments. Though under the Ordinance, the Provincial Governments are under legal obligation to establish dedicated Provincial Funds for DRR activities at the provincial level, but lack of resources, awareness and commitment hampers the performance of this legal obligation by the respective Provincial Governments.

## **Context & Constraints:**

Regional instability has adverse spill over effects on Country's Politico-Economic landscape. Political stability and economic viability in the country are some of the challenges that development practitioners face in implementing programmes and projects at national, provincial and district levels.

Over the past couple of years, Pakistan went through political upheavals, coupled with some other crisis e.g. flour crises, electricity shortage etc. These issues remain high on the agenda of the government and resultantly DRR has received lesser attention than it should have. As a result, scarce resources are being diverted to tackle the emergent issues coming out of the existing politico-economic milieu which leaves the Government with the challenge of lack of resources for implementing National Policies on Disaster Management within the desired timelines.

## **Core indicator 3**

Community Participation and decentralisation is ensured through the delegation of authority and resources to local levels

## Level of Progress achieved:

4: Substantial achievement attained but with recognized limitations in key aspects, such as financial resources and/ or operational capacities

## **Description:**

The progress level regarding this Core Indicator may be taken as four. Legal and institutional arrangements have been made to ensure community participation and decentralization through the delegation of authority and resources to local levels. As required under the National Disaster Management Ordinance 2006/2007, and National Disaster Risk Management Framework, the District Disaster Management Authorities (DDMAs), have been established in all districts and have been empowered to deal with whole spectrum of disaster management activities at the local levels. The DDMAs are required to frame policies and plans on disaster management relevant to local needs. However, these policies and plans are required to be framed in conformity with the National and Provincial Policies and Plans.

One of the primary functions of the DDMAs is to mobilize communities at the local levels for their active participation in the disaster management activities. Under the NDRMF, community and local level programme implementation is the center piece of the Disaster Risk Reduction Strategies. Not only the impact of disaster risks is essentially local, but response to such risks is to be generated locally in first place.

The local communities, local infrastructures and local economies are directly affected by disasters. At the same time local communities and authorities are first responders to any disaster situation. While appreciating the fore stated facts, Risk Reduction Programme are being implemented at local levels for capacity development of local officials, communities, civil society organizations and other stakeholders.

Utilization of resources and energies at this level generally have lasting impacts. NDMA has launched programs in 8 districts, where in collaboration with district governments, local institutions, volunteer networks and capacities are being developed. Additionally, NDMA is working with national and international NGOs to promote community level institutions and volunteerism.

## **Context & Constraints:**

The Government has already taken steps for devolution/decentralization of powers and resources for disaster management at the local levels through legal and institutional arrangements. The powers and roles of the provincial and local authorities have been well defined in the Ordinance and the Framework. Yet implementation of National Policies and Strategies at the local and community levels suffer from a variety of challenges.

The foremost challenge being the resource crunch emanating from prevailing politico-economic conditions in the whole Region. The District Governments have limited capacities to generate local resources to finance development schemes, including that of disaster management. They are solely dependent on budgetary allocation/grants from the Provincial Governments. On the other hand, the Provincial Governments are themselves faced with the challenge of huge budgetary deficits and finding it hard to spare enough resources for the District Governments for implementation of development schemes in the field of disaster management.

The second major challenge is deficiency of institutional capacities and expertise at the local level to implement the Policies and Plans in letter and spirit. The local departments personnel lack requisite professional know how, skills, equipment or resources to plan or respond to the impending challenges of disaster risks with a scientific approach.

Lack of awareness among local communities and local departments about the prerequisites of newly

introduced disaster management system is another challenge. By tradition, they have been dealing with disasters by using reactionary approaches with least concern about mitigation and prevention aspects of disaster management.

## **Core indicator 4**

A national multi sectoral platform for disaster risk reduction is functioning.

## Level of Progress achieved:

4: Substantial achievement attained but with recognized limitations in key aspects, such as financial resources and/ or operational capacities

## **Description:**

The progress level on this account may be taken at level four. The National Disaster Management Commission (NDMC) functioning under the leadership of the Prime Minister is a multi-sectoral platform represented by all relevant stakeholders in the public as well as the private sector and civil society. It is the supreme policy making body of the Government and is responsible to frame and implement Policies and Strategies in the field of disaster management.

Disaster Risk Management is a multi-sectoral, multi-disciplinary and time sensitive activity. National Disaster Management Authority (NDMA) being the executive arm of the NDMC, acts as the focal point and coordinating body to facilitate implementation of disaster risk management strategies. This necessitates NDMA to directly interact/ communicate with all stakeholders, including Ministries/Divisions, and Departments in relaxation of normal communication channel. All Government agencies required to participate in disaster risk management, ought to procure relevant items, stockpile them if necessary and supply them as directed by the NDMA for meeting any calamity or disaster.

Being an intricate and time sensitive activity, disaster risk management requires to be conducted as a one window operation through the NDMA. For this purpose and to institutionalize the operations, all stake-holders including government departments / agencies and armed forces will work through and form part of NDMA in all stages of Disaster Risk Management

#### **Context & Constraints:**

The continuity of policies at the national level vis-à-vis the current legal and institutional arrangements is the key to achieving national targets set by the NDMC to evolve a comprehensive disaster management system on scientific lines. The nascent system requires continued political support on account of provision of required resources and administrative backing on sustainable basis.

National Policies and Strategies require ownership by all the stake holders for their successful implementation. That is why the composition of the NDMC has been carefully designed to accommodate all the relevant segments of the society, including the Federal, Provincial and Regional Governments and the Civil Society. But the major challenge is to ensure that all the stakeholders remain on the same grid when it comes to implementation of policies and programmes. The Provincial and Regional Governments have to show political will and commitment in terms of allocation of resources for implementation of Policies and Plans at the respective levels.

## **Priority for action 2**

Identify, assess and monitor disaster risks and enhance early warning

## Core indicator 1

National and local risk assessments based on hazard data and vulnerability information are available and include risk assessments for key sectors.

## Level of Progress achieved:

3: Institutional commitment attained, but achievements are neither comprehensive nor substantial

## **Description:**

The progress on this account may be taken at level three. Institutional commitment has been attained through identification of National Hazard and Vulnerability Assessment as one of the priority areas in the National Disaster Risk Management Framework. Accordingly, the NDMA has launched the National Composite Risk Assessment Project.

The initiative is aimed at carrying out a comprehensive risk analysis and hazard mapping of Pakistan. The digitalized hazards maps will be integrated into the GIS system for accurate and timely decision making in the field of disaster management. The Project is a multi-sectoral exercise, encompassing geological, hydro-meteorological and technological hazards and a major part is expected to be completed by June 2009

Apart from the above major initiative taken by the NDMA, local level risk assessment exercises have been done by a number of stakeholders in small cities and districts; e.g. Earthquake Reconstructions and Rehabilitation Authority (ERRA), UNDP, FAO, Pakistan Space and Upper Atmosphere Research Commission (SUPARCO), Aga Khan Planning and Building Service (AKPBS) and OXFAM. The NDMA is in touch with these organizations to benefit from the local level assessment results.

## **Context & Constraints:**

The foremost challenge faced by the NDMA in carrying out National Risk Assessment is the non availability of local expertise and professionals which is further exacerbated by technological gap in the field. In the given scenario, scarce resources are consumed in procurement of profesional services from international market which adversely impacts the implementation of risk assessment initiative. Reliable data is a very important input in carrying out Risk analysis. This can be turned out as the weakest link in the ongoing risk assessment exercise. Data availability in Pakistan is far from desirable levels. It is scattered, most oftenly inaccessible and sometimes suffers from lack of reliability. In such a situation, collection of data and subsequent hazard analysis becomes a very intriguing job for the project implementers.

## **Core indicator 2**

Systems are in place to monitor, archive and disseminate data on key hazards and vulnerabilities

## Level of Progress achieved:

2: Some progress, but without systematic policy and/ or institutional commitment

## **Description:**

With regard to the systems of monitoring of hazards and archiving and dissemination of data on hazards and vulnerabilities, Pakistan can be ranked at level two. Although, Pakistan has a fairly reasonable system of collecting, archiving and disseminate data on hydro-meteorological hazards through the Pakistan Meteorological Department, WAPDA and Federal Flood Commission but the same needs to be streamlined to ensure timely dissemination of data/information to the communities. However, a national comprehensive system needs to be put in place to monitor, archive and disseminate data encompassing all hazards and supported by a comprehensive compatible IT infrastructure. The completion of the National Composite Risk Assessment Exercise alongwith development of compatible IT infrastructure, would allow Pakistan to develop a system for monitoring of hazards and efficient dissemination of data

for effective disaster management.

## **Context & Constraints:**

The major challenge being the lack of local capacities on account of expert human resources and application of modern technology to develop a comprehensive system for monitoring, archiving data and disseminating information down to the community level. The huge investment on account of time and resources is required to develop the compatible IT infrastructures and human resources. However, the resource scarcity being faced by the Government is a major stumbling block in implementing the national policies and strategies on this account.

## Core indicator 3

Early warning systems are in place for all major hazards, with outreach to communities.

## Level of Progress achieved:

3: Institutional commitment attained, but achievements are neither comprehensive nor substantial

## **Description:**

With regard to effective Early Warning Systems, Pakistan can be ranked at level three. Pakistan has good institutional capacities for monitoring and warning of flood hazards. Following floods of 1992, a comprehensive Indus Forecasting system was launched with the assistance of Asian Development Bank (ADB). It is an ongoing work executed by Federal Flood Commission (FFC). Flood Forecasting Division (FFD), Lahore which is part of Pakistan Meteorological Department (PMD), undertakes dissemination of flood early warning to national stakeholders through an institutionalized process that connects inputs down to vulnerable communities using multiple channels.

Accurate forecasts with regard to precipitation are disseminated by PMD one week in advance and progressively these are issued till one hour before occurrence.

Flood forecasting occurs through a four fold input system which includes:-

- Network of weather radars
- •Telemetric system which sends real time inputs on water flows
- •Satellite coverage which includes both indigenous capacity and through WMO network
- •Ground observation through PMD ground station deployed across the country
- •Among weather radars deployed across the country more significant are the Doppler radars that furnish quantified inputs and are deployed in Lahore, Sialkot and Mangla to cover the flood catchments region.
- •Water and Power Development Authority (WAPDA) has installed telemetry gauges along the rim of rivers in the catchments region and along some major rivers and it monitors water flows in these channels and provides real time information to FFD.
- •Provincial Irrigation Departments also monitor river flows in respective provinces and they also communicate inputs to FFD.

Indus Water Commission (IWC) receives flood information from India and its inputs also end up with FFD. FFD (PMD) in Lahore constitutes the nerve centre for flood early warning in the country. Warning is sent to over 100 end users which include disaster management agencies, provincial and affected district administrations, armed forces, FFC, WAPDA, Irrigation departments, maritime agencies and airspace users. However, NDMA provides early warning to key national stakeholders. Critical warnings are communicated verbally besides other channels to relevant stakeholders.

Early warning within districts to vulnerable communities is communicated through the following channels:-

- Revenue Department down to 'patwaris', who work in group of 3-4 villages.
- Police wireless network deployed in police stations across the district.
- Through the Forestry Department in forested districts
- Through mosque committees and other grass root organizations. However, experience shows that

vulnerable communities tend to keep each other informed courtesy the ever widening GSM network.

In order to further augment its existing EW capacities the Government of Pakistan has prepared a National Plan on Strengthening National Capacities for Multi-Hazard Early Warning and Response System and submitted it as part of Phase 1 in the Third Session of the Intergovernmental Coordination Group for the IOTWS, Bali, Indonesia (31 July to 2 August 2006). The cost of the first phase of the National Plan is estimated about US\$ 32 million. It includes nine essential components dealing with all major disasters generally experienced in Pakistan. This was subsequently revised to US\$ 8 million for IOTWS.

Among the eleven countries, Pakistan has requested for capacity building support from the Indian Ocean Consortium in the Third Session. Specifically, Pakistan has requested support for Power systems, central recording station, strengthening onshore / offshore sea-level network, up-gradation of warning capabilities of National Meteorological Service and establishment of specialised control centre at NDMA.

## **Context & Constraints:**

Pakistan needs consistent support from the international community for implementation of its National Plan for EW capacity building. As already mentioned above, the Government of Pakistan has prepared a National Plan on Strengthening National Capacities for Multi-Hazard Early Warning and Response System and submitted it as part of Phase 1 in the Third Session of the Intergovernmental Coordination Group for the IOTWS, Bali, Indonesia.

Under Phase II, the Consortium partners need to assist in the implementation of the national plan, as their existing programmes and resources allow, and further assist in fundraising efforts to support the implementation stage. Progress reviews will be conducted at the middle and end of year. Due to resource constraints and the tight time-frame of 4 months under Phase 1, the Consortium can only guarantee assistance to 10 requesting Governments. There is an urgent need to accelerate national efforts and better synchronise them with regional and global developments.

Pakistan was one of the first countries to submit the Plan. Increased efforts are needed from ISDR to mobilize necessary funding, the absence of which is causing serious delays in being prepared for meeting future challenges.

## **Core indicator 4**

National and local risk assessments take account of regional / trans boundary risks, with a view to regional cooperation on risk reduction.

## Level of Progress achieved:

2: Some progress, but without systematic policy and/ or institutional commitment

## **Description:**

With regard to the regional trans-boundary risk analysis, Pakistan can be ranked at level two. Institutional commitment has been attained as Pakistan has already entered into regional partnerships in the field of disaster risk reduction. It is one of the 27 member states of Asian Disaster Reduction Centre (ADRC). The Center works to build disaster resilient communities and to establish networks among countries through many programs, including personnel exchanges in this field. Through the ADRC forum, Pakistan is committed to share information and knowledge about disasters with the member states. It also contributes in Research at the ADRC through nomination of research scholars. Pakistan is also one of the 8 member states of SAARC Disaster Management Center (SDMC) which serves as the regional forum for the member countries for providing policy advice and facilitating capacity building services, including strategic learning, research, training, system development, expertise

promotion and exchange of information for effective disaster risk reduction and management. Being one of the member states, Pakistan is committed to the charter of the SDMC which calls for sharing of best practices and lessons learnt from disaster risk reduction efforts at national levels, developing and implementing regional programmes and projects for early warning, establishing regional system of exchange information on prevention, preparedness and management of natural disasters and a regional response mechanism dedicated to disaster preparedness, emergency relief and rehabilitation to ensure immediate response

## **Context & Constraints:**

The regional geopolitical situation does not allow free flow of information and sharing of data between countries in South Asia. Besides, South Asia being one of the less developed regions on account of technology and communication infrastructure, the arrangements for flow of information and early warnings are not at the desirable levels. Therefore, governments of the Region ought to take practical steps to ensure free flow of information and exchange of experiences on disaster management through mutually agreed mechanisms on disaster management. The member states of ADRC and SDMC are also required to take meaningful steps to implement regional strategies and policies as envisaged under the charters of the respective forums.

## **Priority for action 3**

Use knowledge, innovation and education to build a culture of safety and resilience at all levels

## **Core indicator 1**

Relevant information on disasters is available and accessible at all levels, to all stakeholders (through networks, development of information sharing systems etc)

## Level of Progress achieved:

3: Institutional commitment attained, but achievements are neither comprehensive nor substantial

## **Description:**

Pakistan can be ranked as level three. NDMA is fully committed to make information on disaster risks and risk management available to all stakeholders. A National Data Center is being established at the NDMA with a range of data and information encompassing all aspects of disasters. The data centre will be connected with National Emergency Operations (NEOC), the Provincial Emergency Operations Centre (PEOC), District Emergency Operations Centres, National and International Research Institutions on Disaster Management to ensure national and trans national flow of information on disasters.

Apart from the above, the NDMA maintains a website where all information related to National DRM Framework, National Disaster Management Ordinance, Training Manuals, Damage and Loss Assessment Reports, Guidelines on preparation of provincial and district level disaster risk management plans and other important documents/information are accessible.

## **Context & Constraints:**

Effective dissemination of information requires supportive IT infrastructure at all levels. The development of country wide IT infrastructure encompassing the rural areas, where majority of the most vulnerable population lives, requires huge allocation of resources. The existing resource crunch and lack of accessibility of the most vulnerable to the internet facility impedes the usage of IT as the most effective tool of information dissemination.

## Core indicator 2

School curricula, education material and relevant trainings include disaster risk reduction and recovery concepts and practices.

## Level of Progress achieved:

3: Institutional commitment attained, but achievements are neither comprehensive nor substantial

## **Description:**

For this Core Indicator, Pakistan can be ranked at level three. The Government is committed to integrate DRR education in the school, college and university curriculum. The NDMA in close coordination with the Ministry of Education is developing a comprehensive strategy to integrate DRR into education by year 2009. NDMA expects the process of curriculum development completed by end 2010.

The NDMA is working on integration of DRR education into the training academies of the civil servants of Pakistan; e.g. the National School of Public Policy (NSPP), the lead civil services training institution where majority of government servants entering into various sectors are trained at the entrance level as well as at mid-career stage. The integration of DRR education into the training modules of NSPP is expected to be completed by end 2009.

To raise awareness and train the civil servants, the NDMA has undertaken different programmes, some of which are mentioned as under:-

- A training program in DRR for in-service government officers at federal, provincial and district levels is under implementation.
- Training curriculum for training of district officials and communities have been prepared.
- Over 150 officers and civil society reps have been trained in the 09 districts affected by the 2005 earthquake. About 80 officials from federal level and from about 4 districts have been trained in basic concepts of DRM.
- A simulation on disaster response management conducted for the entrance level officers at the Civil Services Academy (CSA) of Pakistan. Training sessions on disaster risk management conducted for about 200 entrance levels officers at the CSA.

## **Context & Constraints:**

DRR in its modern form is relatively a new concept in Pakistan. Therefore, lack of awareness, being the major challenge, exists in Government Departments including the ones dealing with education. The lack of awareness coupled with lack of expertise in the relevant government departments impede implementation of National Plan and Strategy for integrating DRR into education curricula within the defined timelines as envisaged in the Framework. To overcome this problem, the NDMA intends to extend technical assistance to the Ministry of Education for development of required curricula.

## **Core indicator 3**

Research methods and tools for multi-risk assessments and cost benefit analysis are developed and strenghtened.

## Level of Progress achieved:

2: Some progress, but without systematic policy and/ or institutional commitment

## **Description:**

In this area, Pakistan can be ranked at level two. Pakistan has yet to go a long way to develop its own tools and research methods for multi-risk assessments and for cost benefit analysis. In terms of provisions of the Ordinance, the National Institute of Disaster Management (NIDM) is to be established as the national centre of excellence in the field of Disaster Management. The NIDM will provide state of the art facilities for planning and promoting training and research and developing core competencies in

the area of disaster management. It will also be responsible for documentation and development of national level information base relating to disaster management policies, prevention mechanisms and mitigation measures.

The Government has shown its commitment for the establishment of NIDM through allocation of land and funds. Basic infrastructure design and funds utilization plan have been finalized. The infrastructural development is planned to be undertaken with donors support for which commitment has been secured from JICA. Subject to the availability of funds the NIDM is expected to be fully established by year 2011. In addition University of Peshawar is developing a Masters Program on Disaster Risk Management. This would include training about risk assessment and research in this field.

## **Context & Constraints:**

As discussed earlier, the DRR ,being relatively a new concept in Pakistan, is yet to be institutionalized as a core subject in public as well as private research institutions. These institutions lack the knowledge, expert human resources and technical and scientific facilities to carry out objective research, aimed at developing and applying methodologies, studies and models to assess vulnerabilities and impacts of hazards, including the improvement of regional monitoring capacities and assessments.

Institutional commitment is due on the part of the public as well as private research institutions to treat DRR as one of the core research subjects through allocation of substantial resources and provision of research facilities. The Federal and Provincial Governments are also required to ensure adoption of DRR research as integral part of the institutional competencies in the research and educational institutions under their respective control.

## **Core indicator 4**

Countrywide public awareness strategy exists to stimulate a culture of disaster resilience, with outreach to urban and rural communities.

## Level of Progress achieved:

3: Institutional commitment attained, but achievements are neither comprehensive nor substantial

## **Description:**

Pakistan could be ranked at level three. NDMA is committed to organize systematic awareness country wide. It is currently working on a number of initiatives to develop a national awareness raising strategy. 8th October has been declared as the National Disaster Awareness Day by the Government, in commemoration of the October 2005 earthquake, which killed over 73,000 people. NDMA commemorates the 8th October as awareness day with a view to raise awareness of people and stakeholders. NDMA is planning to develop a range of media products for awareness raising, including talk shows, special supplementaries etc. Besides,in collaboration with the private sector, an annual Disaster Exhibition is held on rotation basis in cities and towns to stimulate public private partnerships in the field of DRR as well enhance public awareness.

Realizing the potential of radio as the most effective medium of mass communication, the NDMA is planning to engage FM Channels for raising mass awareness about DRR. For this purpose, a variety of programmes are currently receiving attention by the NDMA in collaboration with electronic media. The NDMA also plans to organize orientation sessions for media personnel to engage them in awareness raising activities.

## **Context & Constraints:**

Public Awareness plans and strategies are to be implemented by the public institutions. However, most of the institutions themselves suffer from lack of awareness about DRR. Thus the NDMA is facing a two

staged challenge. At the first stage it has to overcome the challenge of lack of awareness amongst the implementing partners through a comprehensive awareness raising programme for Government Institutions who will then be able to complement the efforts of the NDMA for implementing awareness raising programmes in the general public.

## **Priority for action 4**

Reduce the underlying risk factors

## **Core indicator 1**

Disaster risk reduction is an integral objective of environment related policies and plans, including for land use natural resource management and adaptation to climate change.

## **Level of Progress achieved:**

2: Some progress, but without systematic policy and/ or institutional commitment

## **Description:**

In this regard, Pakistan can be categorized at level two. The National Disaster Management Framework envisages integration of DRR into all sectoral policies and programmes, including that of environment. Under the Framework, the Ministry of Environment has been made responsible to ensure the following:-

- Incorporate Natural Disaster Risk Assessment in the Environmental Impact Assessment (EIA) guidelines;
- Develop technical capacities of the staff of ministry to undertake disaster risk assessment and disaster risk reduction activities in the environment sector;
- Undertake assessment of vulnerability of natural resources (forest, lakes, streams, mangroves, coral reefs, protected areas, coastal areas) to natural and human induced hazards;
- Implement programmes for conservation and rehabilitation of natural resources in order to reduce risks of natural hazards; e.g. reforestation, mangrove plantation, combating desertification, conservation of special natural resources:
- Allocate resources for implementation of programmes to conserve and rehabilitate the natural resource base, particularly in up-stream areas of the Indus River basin;
- Develop mechanisms for assessment of environmental losses and damages in the aftermath of disasters and their rehabilitation:

The NDMA is coordinating with the Ministry of Environment for implementation of DRR policies and strategies on environment as envisaged in the Framework.

Apart from the above, with the support of Indian Ocean Tsunami Warning System (IOTWS), sub-national assessments of environmental flashpoints developed in cooperation with national and international partners aim to draw attention to critical environmental concerns that affect risk and vulnerability to coastal hazards. The assessment of environmental flashpoints would be developed based on an instrument designed by United Nations Environment Programme (UNEP) and would include identification of critical parameters, data and information needs. The instrument will be adapted to national needs based on consultations with national authorities. The assessment will be carried out by trained national partners with technical support from UNEP.

## **Context & Constraints:**

As a prevalent phenomenon in the developing world, Environment Sector does not receive requisite degree of attention in the development policies of the Governments. The environmental protection policies and programmes have an integral element of risk reduction. Therefore, the increased allocation of resources for environmental sector complements the DRR policies as a consequential outcome.

However, the government constrained by scarcity of resources have not been able to allocate reasonable allocation of resources to pursue development policies in the environmental sector which has a direct adverse bearing on DRR policies and strategies.

## **Core indicator 2**

Social development policies and plans are being implemented to reduce the vulnerability of populations most at risk.

## Level of Progress achieved:

3: Institutional commitment attained, but achievements are neither comprehensive nor substantial

## **Description:**

The progress level on this account can be taken at level three. Institutional commitment has been attained through the National Disaster Management Framework wherein adoption of a risk sensitive approach in development planning and programming in all sectors has been incorporated as a national policy. Under this policy, NDMA in coordination with stakeholders will ensure that all development infrastructure in hazard-prone areas is built to higher standards of hazard resiliency; e.g. schools, hospitals, roads, bridges, dams and telecommunications infrastructure etc. This can ideally be done by incorporating risk and vulnerability assessment into project planning stage, and including vulnerability reduction measures in project implementation in case the proposed projects are found vulnerable to hazard risks.

As a crucial step in the right direction, a National Working Group comprising the NDMA, the Planning Commission of Pakistan, Ministry of Housing and Works, Ministry of Water and Power, Ministry of Industries and Special Initiatives and National Engineering Services Pakistan (Pvt) Limited (NESPAK) has been formed. The Group is working on devising strategies and modalities for the integration of DRR into development policies. It is planned that all future development projects including critical public infrastructure projects will be endorsed by the relevant approving authority only when such projects have the DRR element inherently built in their structural designs.

Likewise, the NDMA is coordinating with Ministry of Education to revise the curricula by incorporating the DRR as an integral part of syllabi while the Ministry of Environment has been tasked under the Framework to address the underlying risk factors in the implementation of environmental policies. In order to reduce the vulnerability of the impoverished groups on account of food security, a Task Force on Food Security, comprising of all key stakeholders including the NDMA, has been formed in the Planning Commission to address the underlying risk factors in food supply chain.

## **Context & Constraints:**

The new disaster management system introduced through the National Disaster Management Ordinance, 2006/2007, and National Disaster Risk Management Framework is at its nascent stage of implementation. The new system implies a paradigm shift from traditional emergency/relief oriented approach. The lack of awareness and capacities of the concerned stakeholders in implementation of DRR policies, based on the new paradigm, are the major challenges faced by the development practitioners.

The international donor agencies are contributing substantially in a number of development programmes involving large infrastructure development projects. The provision of donors' assistance may be made conditional to the incorporation of DRR element in the development projects.

## **Core indicator 3**

Economic and productive sectorial policies and plans have been implemented to reduce the vulnerability

## Level of Progress achieved:

3: Institutional commitment attained, but achievements are neither comprehensive nor substantial

## **Description:**

Progress achieved on this account may be taken at level three. Pakistan is overly an agrarian economy, with 65 % of its population living in rural areas and dependent on agricultural sources of livelihood. The agricultural sector contributes almost 35 % to the Country's GDP. Therefore, any adverse impact caused by a disaster on agriculture sector may lead to serious repercussions for the national economy as a whole. While appreciating the said fact, the National Framework has assigned the Ministry of Food, Agriculture and Livestock to integrate DRR element in its policies. Accordingly, the Ministry is required to allocate substantial funds for implementation of DRR activities in the hazard prone agricultural areas. The DRR activities ought to focus on vulnerability and risk analysis for food, agriculture and livestock sectors particularly in relation to floods, droughts, cyclones and locust attacks, developing early warning systems, promote contingency crop planning to deal with year to year climate variations and crop diversification, ensure sustainable livelihoods in areas of recurrent climate risks by promoting supplementary off- farm and non-farm activities.

In line with the Framework, the Federal Government has recently announced a comprehensive insurance cover to all crops. Under the crop insurance policy agricultural credits/loans will be offered for insured crops only. However, the implementation of the announced policy requires consistant support and committment from the government.

In order to safeguard industrial and productive activities from the impact of disasters, the Framework has assigned responsibility to the Ministry of Industries and Special Initiatives to develop and implement DRR programmes to ensure the continuity of Industrial activities in the event of disasters. The DRR measures to be taken by the Ministry includes developing guidelines for industrial sector to ensure safety of industry and its production processes in hazard-prone areas; incentives and disincentives for industry to promote application of disaster safety measures; Implement awareness raising programmes for industrial sector including Chambers of Commerce and Industry (CCI) on integrating disaster risk assessment and vulnerability reduction in project planning and implementation stages and developing safety codes for all industries to reduce risks of industrial and chemical hazards and to ensure vulnerability reduction from natural hazards;

The NDMA on its part is developing Guidelines for Industrial and Chemical Contingency Planning which are in the final stage of formulation and will be circulated to all stakeholders for implementation.

## **Context & Constraints:**

The major challenge is the lack of awareness about DRR and capacities of the relevant stakeholders to develop and implement policies to prevent economic and productive activities from the impact of disasters. The life lines i.e water, gas and electricity play a critical role in the continuity of economic and productive activities. The matter of concern is that most of the critical Life Line infrastructure developed over the years has been deficient of DRR element in its design thus rendering it vulnerable to future disasters. The revamping of the existing critical infrastructure, so important for the continuity of economic activities, requires a lot on account of time and resources. Therefore, a public private partnership has to be developed to evolve a strategy to generate enough resources to implement DRR practices and polices in the economic sectors to off set the impact of future disasters on the economic and productive activities.

## **Core indicator 4**

Planning and management of human settlements incorporate disaster risk reduction elements, including

## Level of Progress achieved:

3: Institutional commitment attained, but achievements are neither comprehensive nor substantial

## **Description:**

Pakistan is ranked at level three. In post earthquake (2005) scenario, the thinking is now emerging that Pakistan needs to promote land use planning and implementation of building codes for safer construction. Safer construction practices have been widely followed in the earthquake affected region as part of the reconstruction process. However, promotion and adoption of building codes in other vulnerable parts of the country remains a challenge and a priority agenda for NDMA.

NDMA is working on developing simplified version of the National Building Codes in Urdu language and to disseminate it widely for the benefit of general public including local masons, contractors, builders and other stakeholders. It believes that the simplified version of building codes would allow people to understand the safer construction requirements and adopt them. NDMA has also launched two small projects to promote safer construction in the cities of Mansehra, Muzafarabad and Quetta.

## **Context & Constraints:**

Population growth couple with rapid urbanization works in multiple ways to create and exacerbate vulnerabilities. The continuous uncontrolled increase in population and urbanization will push more people to move and live in hazard prone locations, thus increasing the ratio of vulnerable segments of the society with each passing year. The consistent increase in the vulnerable population due to uncontrolled growth may neutralize the DRR efforts in the long run hence may be taken as a major challenge in the implementation of DRR policies.

The second major challenge is the rampant poverty. The poor segments of the society do not have the financial capacity to build hazard resilient abodes as the observance of building codes entails additional cost of construction. The third major challenge is the lack of capacities of the local authorities to develop, update and enforce building codes in their respective areas.

To overcome the above challenges, vulnerable areas have to be identified in the first place through the national disaster risk assessment and hazard analysis exercise which is already under way. Once the exercise is completed, the Federal, Provincial and District Governments have to devise a strategy to discourage the general populace from inhabiting the vulnerable areas as a policy matter. Incentives may be offered by the Government in the shape of tax rebates etc to encourage people to observe building codes and adopt other hazard resistant measures such as retrofitting in their buildings.

## Core indicator 5

Disaster risk reduction measures are integrated into post disaster recovery and rehabilitation processes

## **Level of Progress achieved:**

4: Substantial achievement attained but with recognized limitations in key aspects, such as financial resources and/ or operational capacities

## **Description:**

In this regard, Pakistan can be ranked at level four (4). Disaster risk reduction measures have been integrated into post disaster recovery and rehabilitation processes in the earthquake affected areas. The Earthquake Reconstruction and Rehabilitation Authority. ERRA is mandated by the Government of Pakistan as the coordinating and implementing agency for reconstruction and rehabilitation of earthquake devastated areas in Azad Jammu & Kashmir and NWFP. The overall objective of the rural

housing reconstruction policy is to ensure that an estimated 400,000 houses that were destroyed or damaged will be built by using earthquake resistant building techniques through grant assistance from the Government to eligible households. The Reconstruction Framework developed by NDMA with the support of ADB and WB for post 2007 flood reconstruction also included disaster risk reduction as the key element for reconstruction and rehabilitation. However, the same remained unimplemented due capacity constraints of the provincial and local governments.

## **Context & Constraints:**

The major challenge on this account is the realization of theory into practice. In the earthquake affected areas the reconstruction and rehabilitation programmes and processes have been designed with DRR as an important element. However, at the implementation stage DRR aspect of these programmes and processes faced random neglect due to the financial incapacities of the end beneficiaries i.e the affectees. The affectees are reluctant to observe the building codes and refused to relocate from the vulnerable areas thus exacerbating the underlying risks in the reconstruction process.

## **Core indicator 6**

Procedures are in place to assess the disaster risk impacts of major development projects, especially infrastructure.

## Level of Progress achieved:

4: Substantial achievement attained but with recognized limitations in key aspects, such as financial resources and/ or operational capacities

## **Description:**

Pakistan can be ranked as level three viz this core indicator. As already discussed, the NDMA has launched a National Working Group to integrate DRR into all development projects. The Working Group will work on integration of disaster risk assessment into the project design and planning procedures for all federal ministries and departments, particularly with regards to physical infrastructure.

## **Context & Constraints:**

The major challenge on this account is the lack of awareness about the DRR amongst key stakeholders, including the Ministries and Departments involved in the development of critical public infrastructure. The second major challenge is their lack of capacities to integrate the DRR into their respective development policies and programmes.

To overcome the above challenges, the NDMA is planning to conduct a series of training workshops on DRR involving the personnel of key departments to raise awareness and sensitize about the prevalent DRR best practices. Besides a set of sectoral guidelines on mainstreaming DRR, and criteria on assessment of development projects from a risk reduction perspective will be developed for the use of development ministries and the Ministry of Planning and Development.

## **Priority for action 5**

Strengthen disaster preparedness for effective response at all levels

## **Core indicator 1**

Strong policy, technical and institutional capacities and mechanisms for disaster risk management, with a disaster risk reduction perspective are in place.

## Level of Progress achieved:

3: Institutional commitment attained, but achievements are neither comprehensive nor substantial

## **Description:**

With regards to this Indicator, Pakistan can be ranked at level three. The NDMA is currently working on a number of initiatives to develop disaster preparedness capacities. Few key initiatives include the following:-

- Development of the National Disaster Response Plan with Standard Operating Procedures for involvement of all departments and ministries and other stakeholders.
- Establishment/strengthening of the national and provincial Emergency Operations Centers
- Development of a Disaster Information Architecture for post disaster relief and response management
- Contingency planning for key hydro-meteorological hazards; e.g. floods, winter, cyclones in partnership with provincial and local governments
- Preparation of Provincial and District Disaster Risk Management Plans

In addition to the above, the NDMA is also implementing following two capacity building projects:-.

- Programme for Enhancement of Emergency Response (PEER):

PEER is working for capacity development of the Pakistan Army, Rescue 1122 (Punjab Government), Pakistan Red Crescent Society (PRCS) and Ministry of Health in the areas of search and rescue, medical first aid and hospital disaster preparedness. The PEER programme will develop a pool of about 240 national master trainers in the above subjects.

- Urban Search and Rescue Teams (USARS)

Three teams are being established at Karachi, Peshawar and Islamabad. These are international standard teams, which will be imparted training at par with international standards and equipped with state of the art Search and Rescue equipment.

As a part of its forward planning to meet emergency requirements of future disasters, the NDMA consolidated its arrangements for advance stockpiling of relief items at various locations across the Country. The pre-positioning of relief items enabled the NDMA to effect a timely response to different disasters, including the earthquake of Balochistan, 2008.

## **Context & Constraints:**

The NDMA at the federal level is pursuing several initiatives to enhance local institutional capacities for effective response. However, unless and until such programames are replicated across the country at the provincial and district levels as a part of respective DRR Plans, the expected out comes of the initiatives taken by the NDMA will not have the desirable effects.

## **Core indicator 2**

Disaster preparedness plans and contingency plans are in place at all administrative levels, and regular training drills and rehearsals are held to test and develop disaster response programmes.

## **Level of Progress achieved:**

4: Substantial achievement attained but with recognized limitations in key aspects, such as financial resources and/ or operational capacities

## **Description:**

Pakistan can be ranked at level four in this regard. The NDMA initiated an integrative contingency planning process for all hazards that can trigger humanitarian disasters or emergencies. These include hydrological, seismic and drought hazards, epidemics and pandemic emergencies by making it as a stakeholdersinclusive exercise.

The main objective of the contingency planning exercise (CP) aimed at achieve the following:-

- Yield integrated national response plans for anticipated hazards in the Country.
- Integrate all stakeholders that are likely to contribute in the disaster response for their inputs and ownership of the planning process.
- As a capacity building measure, intro
- duce contingency planning tool for effective disaster response at the national, provincial and district levels.
- Contingency planning process to yield inputs for an all-hazard national response plan.
- Vulnerable communities concerns to be factored in the planning process.

The following contingency plans have since been completed:

- a) Winter Contingency Plan
- b) Cyclone Contingency Plan (for Karachi City)
- c) Monsoon Contingency Plan
- d) Industrial & Chemical Accidents Contingency Plan

As per guidelines provided by the NDMA, the flood prone districts are in the process of preparing their respective contingency plans while some of them have already finalised.

The NDMA is in the process of developing a National Disaster Response Plan. The Plan will incorporate critical lessons learnt during relief and rehabilitation efforts done during the earthquake 2005 and floods occurred in the past year, specially the year 2007. A National Emergency Operation Centre (NEOC) is being set up at the NDMA to monitor and implement the disaster relief activities. On the same pattern, Provincial Emergency operations Centres (PEOCs) and District Emergency Operations Centres (DEOCs) will also be established and interlinked.

The NDMA has provided essential relief items to all the four provinces, Azad Jammu & Kashmir (AJ & K) and Northern Areas (NAs) which have been stockpiled at strategic places to meet future contingencies. These stockpiles are replenished frequently to maintain the local capacities at the desirable level round the year.

## **Context & Constraints:**

The new disaster management system introduced under the National Disaster Management Ordinance and NDRMF envisages devolved and decentralized responsibilities for disaster management. Emphasis has been laid for enhancement of local capacities to effect local response with a scientific approach. That is why the District Disaster Management Authority is taken as the lynchpin of the new disaster management system.

The major challenge is the lack of capacities at the local level to devise and implement contingency planning. The District Authorities neither have the expertise nor have the resources to carry out any of the DRR activities on their own. The lack of commitment by the Provincial Government on account of reasonable allocation of resources further exacerbates the already critical situation.

The Federal as well as Provincial Governments have to made greater commitments on account of allocation of resources for enhancing local capacities through human resource capacity building, provision of technical assistance for development of infrastructure and procurement of equipment and stockpiling of relief items.

## **Core indicator 3**

Financial reserves and contingency mechanisms are in place to support effective response and recovery

## Level of Progress achieved:

4: Substantial achievement attained but with recognized limitations in key aspects, such as financial resources and/ or operational capacities

## **Description:**

Pakistan can be ranked at level four with regards to this Core Indicator. Institutional commitment has been attained through the provision for the establishment of dedicated disaster management funds at the Federal and Provincial levels under the Ordinance. Accordingly, the National Disaster Management Fund has been established under the NDMA which will be used to meet the expenses of disaster management activities in the Country.

Under the Ordinance, all Government Departments are under legal obligation to dedicate their resources for disaster management activities as demanded by the NDMA in the event of a disaster. The Emergency Cell (ERC) of the Cabinet Division acts as the federal procurement agency for relief supplies and has dedicated funds and warehouses through out the Country for the purpose. The ERC also has a dedicated Aviation Squadron for rescue and relief operations..

## **Context & Constraints:**

Although the Federal Government has better arrangements at the federal level in terms of resources, planning and preparedness, capacities at the provincial and local levels are far from the desirable levels. The Provincial Governments are yet to show adequate commitment for provision of resources for DRR activities at the provincial level. Since the district authorities are dependent on provincial grants, therefore, capacities at the local level can not be enhanced until the Provincial Governments do not allocate reasonable funds for the purpose.

## **Core indicator 4**

Procedures are in place to exchange relevant information during hazard events and disasters, and to undertake post-event reviews

## Level of Progress achieved:

3: Institutional commitment attained, but achievements are neither comprehensive nor substantial

## **Description:**

Pakistan can be ranked at level three. The NDMA puts high priority on sharing of information and following a coordinated approach to disaster response. The NDMA coordinates the national response with the involvement of key government departments, UN, donors, NGOs etc. In addition the NDMA organizes regular media briefings to disseminating information on activities/initiatives taken with regard to disaster response. It coordinates with the UN system and NGOs through the system of Inter Agency Standing Committee (IASC) and Disaster Management Team (DMT) and Pakistan Humanitarian Forum. Cluster System under the UN system has been adopted by NDMA as a progressive way of dealing with disasters.

The lessons learnt from earthquake 2005 has been compiled in the form of a compendium and widely circulated amongst all stakeholders for future planning.

## **Context & Constraints:**

The major challenge in this regard is non availability of a centralized data about planning, policies and capacities of all stakeholders involved in disaster management activities. Despite concerted efforts by the NDMA the humanitarian community in Pakistan has failed to share information about its capacities in

disaster management. Most of the humanitarian organizations tend to pursue solo flights which lead to duplication of efforts and wastage of precious resources. In view of the same, a centralized data centre is required to be established to help share information about all disaster management activities and capacities available within the country, which can be tapped and utilized in the event of a disaster as part of national effort.

## **Drivers of Progress**

## a) Multi-hazard integrated approach to disaster risk reduction and development Levels of Reliance:

Partial/ some reliance: Full acknowledgement of the issue; strategy/ framework for action developed to address it; application still not fully implemented across policy and practice; complete buy in not achieved from key stakeholders.

Do studies/ reports/ atlases on multi-hazard analyses exist in the country/ for the sub region?: No

## Description (Please provide evidence of where, how and who):

The level of reliance be taken as partial. So far, no such studies, reports or atlases exist in Pakistan. However, the national risk assessment exercise, which is currently being undertaken, intends to produce a multi-hazard risk assessment. The NDMA believes in multi-hazard capacity development of the district governments and provincial governments. Therefore, its endeavors are aimed at building capacities of the District Disaster Management Authorities (DDMAs) from this angle. It recently held a conference of the District Coordination Officers to activate DDMAs and emphasized upon them the need for multi-hazard risk management. More and consistent efforts are needed for the capacity building of federal and provincial departments and district authorities to prepare them for multi-hazard scenarios.

## b) Gender perspectives on risk reduction and recovery adopted and institutionalized Levels of Reliance:

Partial/ some reliance: Full acknowledgement of the issue; strategy/ framework for action developed to address it; application still not fully implemented across policy and practice; complete buy in not achieved from key stakeholders.

## Description (Please provide evidence of where, how and who):

The reliance level on this account may be taken partial. Due acknowledgement has been given to this aspect because countries having experienced large disasters demonstrate that the cost of ignoring gender in disaster response, recovery and preparedness is tremendous. This results in overlooking the damages, needs and priorities of most vulnerable in times of disaster and worsens existing poverty and inequity. Lack of gender sensitive assessments and programming intensify the existing political, social and economic inequality. In-spite of devastation they cause, natural disasters provide opportunities for social and economic change. Keeping in view all theses aspects the NDMA will ensure that the gender power imbalances are removed in DRR and recovery programmes and processes. Steps will be taken to empower women as equal stakeholders to act as key resource, before, during and after disasters in reducing loss to lives, household economy and in reducing break-down of social safety-nets.

## c) Capacities for risk reduction and recovery identified and strengthened Levels of Reliance:

Partial/ some reliance: Full acknowledgement of the issue; strategy/ framework for action developed to address it; application still not fully implemented across policy and practice; complete buy in not

achieved from key stakeholders.

## Description (Please provide evidence of where, how and who):

The reliance level on this driver of progress may be taken as partial. The National Framework defines the capacities required by each government department at national, province and local levels for effective disaster risk reduction, response and recovery. The NDMA, in collaboration with the World Bank, DFID, SIDA, SDC and the UN system is implementing a number of programs to develop capacities in selected sectors and high risk districts. However, it is a long term effort. Capacities need to be developed sector by sector and district by district.

# d) Human security and social equity approaches integrated into disaster risk reduction and recovery activities

## Levels of Reliance:

Partial/ some reliance: Full acknowledgement of the issue; strategy/ framework for action developed to address it; application still not fully implemented across policy and practice; complete buy in not achieved from key stakeholders.

## Description (Please provide evidence of where, how and who):

The guiding principles in the National Framework put emphasis upon the most vulnerable as the high priority groups for disaster risk reduction and response efforts. The NDMA is contemplating to develop data-basis and profiles of the most vulnerable social groups, who would need urgent assistance in case of disasters. Once developed these data bases would allow much effective and timely response to those who need the most. The capacity building projects being undertaken in districts of Badin, Thatta, Kech, and Quetta, Mansehra, Muzafarabad and Gilgit also puts a premium on capacity development of the most vulnerable groups.

Social sector programs need to be launched with the ministries of social welfare, agriculture, health, education to reduce vulnerabilities of the most vulnerable groups. Capacities of the Ministry of Human Rights, Justice and Law needs to be developed so that it could monitor that the rights of most vulnerable are protected during, before and after disasters.

# e) Engagement and partnerships with non-governmental actors; civil society, private sector, amongst others, have been fostered at all levels

## Levels of Reliance:

Partial/ some reliance: Full acknowledgement of the issue; strategy/ framework for action developed to address it; application still not fully implemented across policy and practice; complete buy in not achieved from key stakeholders.

## Description (Please provide evidence of where, how and who):

Some reliance is being made on this driver of progress. The NDMA is already working to develop effective joint mechanisms for coordination and action by multiple stakeholders. Representation of civil society has been ensured in the Nationl Disaster Mangement Commission (NDMC) which is the apex policy making body in the field of disaster management. The Disaster Management Team (DMT) has been established for better cordination, engagements and partnerships between the government and the humanatrian community in the field of disaster management. The DMT is co-chaired by the NDMA and UNRC and is represented by all lead humanatarian organisations. Likewise, the non-governmental organisations are being engaged for close partnerships and joint initiatives in the field of DRR through the Pakistan Humanatarian Forum (PHF). The Disaster Management Exhibition is being organised as an annual feature in collaboration with the private sector, the event provides opprtunities to both public and private sector to foster public-private partnerships in the field of DRR. However, it needs to put more efforts in engaging with the private sector.

## f) Contextual Drivers of Progress

## Levels of Reliance:

Partial/ some reliance: Full acknowledgement of the issue; strategy/ framework for action developed to address it; application still not fully implemented across policy and practice; complete buy in not achieved from key stakeholders.

## Description (Please provide evidence of where, how and who):

In line with the HFA, the Government has already introduced a new disaster management system in the country through the promulgation of National Disaster Management Ordinance and formulation of National Disaster Risk Management Framework.

Under the new system, as envisaged under the Ordinance and the Framework, a paradigm shift has been affected from the conventional reactionary and relief oriented approach to mitigation and preparedness approach.

As required under the new system a comprehensive legal and institutional arrangement at the federal, provincial, districts and local levels has been provided for.

The importance given by the political leadership to the disaster management can be well judged by the fact that the NDMA has been set up in the Prime Minister's Secretariat and the disaster management activities are being implemented under the direct supervision of the highest executive office of the Country.

As required under the Ordinance and to ensure availability of dedicated funds for Disaster Management, the Government has established the National Disaster Management Fund under the NDMA to implement National Disaster Management Strategies and Polices.

While institutional and legal arrangements have already been put into place, the NDMA has already initiated a Composite Risk Assessment Project whereby detailed risk assessment and hazard mapping will be carried out. Thereafter, the digitalized hazard maps and data will be integrated into GIS system, currently under formation.

As required under the Ordinance and the Framework, the Provincial and Regional DRR Plans have been finalized and ready for implementation. The NDMA as per its mandate has provided technical assistance for preparing these plans.

As a crucial step toward raising public awareness, the NDMA has coordinated with Ministry of Education to ensure that disaster management becomes part of the Curricula by the academic session 2009. Likewise, to raise awareness among the civil servants efforts are in hand for the Curricula of National School of Public Policy (NSPP) being revised to incorporate disaster management.

Mainstreaming of DRR into development projects as envisaged under the framework is being given foremost priority by the NDMA. For this purpose, a Joint Working Group, comprising the NDMA, Planning Commission, Ministry of Housing and Works, Ministry of Water and Power, Ministry of Industries and Special Initiatives and NESPAK has been formed to workout strategies in this regard.

## **Future outlook**

## Area 1

The more effective integration of disaster risk considerations into sustainable development policies, planning and programming at all levels, with a special emphasis on disaster prevention, mitigation, preparedness and vulnerability reduction.

## **Overall Challenges:**

Political will and continuity in policies is key for the successful implementation of National Policies and Strategies on DRR. The major challenge for the development practitioners in the field of DRR would be to secure consistent support from the National Government to treat DRR as a prioritize item on the agenda list of its national priorities.

The second major challenge is the scarcity of resources for the implementation of short term as well as long term development programmes in the field of DRR, as envisaged under the National Framework. The Government is faced with a crunch situation emanating from regional as well as international politico-economic factors. The unstable economic situation leaves the Government with title fiscal space to spare reasonable funds for DRR programmes. Since the crisis situation is likely to continue for at least next couple of years, the pace of the implementation of DRR policies and strategies as envisaged under the Framework is likely to suffer.

The third major challenge is the lack of capacities on account of trained human resources and modern technology at all levels for planning and subsequent execution of DRR Policies and Programmes. The new disaster management system, envisages developed and decentralized responsibilities for disaster management. However, the Provincial Government has yet to show the desirable level of commitment, on account of allocation of resources and other administrative measures, to operationalize the institutional arrangements at the Provincial and District levels. The consistent failure of the Provincial Governments to keep pace with the initiatives taken by the NDMA at the Federal level may hamper the implementation of National Policies and Strategies under the Framework, within the desirable time frames.

Although a paradigm shift has been effected through adoption of prevention, mitigation and preparedness approach in place of traditional emergency and response oriented approach, the implementing partners at the Government and Community level suffer from lack of awareness about such unprecedented change. The Government Ministries/Departments have been practicing the traditional approach and their capacities developed over the decades are not compatible with the requirements of the new approach. This predicament is likely to have an advance impact on the performance of roles and responsibilities by the relevant Ministries/Departments and Institutions as envisaged under the Framework.

Availability of accurate and easily accessible data encompassing different aspects of disasters is key for objective decision making. However, no such data is currently available in a centralized and digitalized form. The NDMA is working on establishing a central data base, with the same objective, but unless and until such data is readily available for the decision makers, the policies and strategies on DRR may suffer from lack of accuracy and objectivity.

## **Future Outlook Statement:**

In line with the HFA commitments, the Government has already put in place legal and institutional arrangements, at the federal, provincial and district levels. The National Disaster Management Commission (NDMC) has been established as the apex policy making institution on DR, while National Disaster Management Authority (NDMA) has been operationlize as its executive arm. Likewise, Provincial/Regional Disaster Management Commissions (PDMAs) and District Management Authorities have been notified at the respective levels.

The National Disaster Risk Management Framework has been put into force with roles and responsibilities of relevant stakeholders, along with development programmes, in 09 identified priority areas.

The National Composite Risk Assessment exercise is likely to be completed by mid 2009 which will lead to the development of National Hazard Atlas of Pakistan, National Response Plan and establishment of National Emergency Operations Centre (NEOC).

The research/development and training capacities will be enhanced with establishment of National Institute of Disaster Management (NIDM). The Government has already allotted the requisite land in Islamabad and allocated funds for current financial year, for the preparation of project design of the Institute. The Institute will be a Centre of Excellence, catering to the domestic as well as regional training and research needs. If the pace of development work remains in line with the defined timeframes, the institute is expected to be operationalized by 2011.

The National Working Group on Mainstreaming DRR into the Development Policies, is expected to recommend the strategies and modalities for the integration of DR into Development policies and projects within a few months time. It is expected that by 2009, all development policies and programmes, will be designed with DR element inherently built in as a matter of policy.

The capacity building measures taken by the NDMA, to enhance local capacities in preparedness and response, will lead to the establishment of 03 Urban Search and Rescue teams. The training of the USAR teams is currently underway and it is expected that three state of the art teams will become functional very soon, subject to the resolution of administrative bottlenecks being faced by the project at the local levels.

As a key initiative to raise public awareness, the NDMA is coordinating with Ministry of Education to revise the curricula by incorporating DRR in National Syllabi. Likewise, the NDMA is working with the National School of Public Policy (NSPP) for the integration of DRR into the training modules of trainee civil servants. As the result of these initiatives, it is expected that by 2009 a revised curricula integrated with DRR subject will be introduced by 2009.

The on going programmes on developing and updating the Early Warning systems including the establishment of the Tsunami Early Warning System, in collaboration with Pakistan Metrological Department, PMD and WAPDA will lead to enhanced capacities on account of EWSs

Notwithstanding the above likely positive future developments, the analysis of hazard risks, vulnerabilities and dynamic pressures bring home a scenario of more people living in and around hazard-prone areas. New settlements would continue to spring-up with expanding population in hazard prone areas. This trend may worsen over the years since population of Pakistan is expected to be doubled in another 25-30 years. At the other end, the frequency, severity and intensity of certain hazards is on the rise; e.g. droughts, flooding, soil erosion and landslides, resulting from environmental degradation and climate change. From these scenarios it could be concluded that disasters in future would be more frequent and their social, economic and environmental impacts higher than before. Regions that previously were not prone to certain hazards (e.g. droughts, flooding), may experience them in future.

## Area 2

The development and strengthening of institutions, mechanisms and capacities at all levels, in particular at the community level, that can systematically contribute to building resilience to hazards.

## **Overall Challenges:**

Emergency response has remained a predominant approach in Pakistan to deal with disasters until recently. The Calamity Act of 1958, the national policy for disaster management prior to the passing of National Disaster Management Ordinance 2006, was mainly concerned with emergency response. As a result, the Country has developed institutional practices and capacities that are predominantly based on Emergency Response Paradigm. Consequently, the establishing of appropriate policy, institutional and legal arrangements to deal with issues of risk and vulnerability was not given priority at higher levels. Therefore, Pakistan lacked such mechanisms and institutions.

Through a paradigm shift by promulgating the National Disaster Management Ordinance 2006, and formulation of National Disaster Risk Management Framework, emphasis has been laid on disaster risk reduction, rather than emergency response. However, the institutional mindset based upon the conventional emergency approach remains the main stumbling block in this paradigm shift to meet its logical end.

The second major challenge is the dependency syndrome of the local institutions and communities in dealing with local disasters. By tradition, the local institutions and communities always look up towards the Provincial and Federal Governments for disaster management interventions. As a result, the concept of decentralization of responsibilities for disaster management down to local and community levels under the new disaster management system is being taken as a hard to chew concept.

The third major challenge is lack of awareness amongst the institutions and communities to take disaster risk reduction as an integral part of sustainable development. That means DRR will not be treated as a prioritized item by State institutions and communities. Availability of resources for implementation of DRR Policies and Strategies is crucial. However, lack of resources and rampant poverty makes it difficult for the Government to earmark substantial funds for DRR activities.

## **Future Outlook Statement:**

As mandated under the law the NDMA has devised a National Action Plan to implement key initiatives in the field of disaster management during the year 2009-2010. The Plan has been approved by the NDMC during its meeting held on 3rd January 2009 under the Chairmanship of the Prime minister. The Plan, which is under implementation, provides a road map for implementation of the priorities identified in the National Disaster Risk Management Framework through collaboration amongst multiple stakeholders in a coordinated fashion within defined timelines. If the implementation of the National Action Plan goes as per defined time lines, following milestones are likely to be achieved:

- i) Full operationalization of Disaster Management Authority in the four Provinces and in 50 high risk Districts.
- ii) Availability of substantial funds in National Disaster Management Fund for carrying out DRR activities.
- iii) Completion of National Risk Assessment and Hazard Atlas of Pakistan. Besides, Micro level risk assessments in 20 high risk Districts.
- iv) Integration of DRR into development planning of key selected Federal Ministries.
- v) Community Based structural and non structural mitigation intervention in 50 high risk Districts.
- vi) Development of human resources in DRR through training, knowledge enhancement and awareness raising of public, private sector stakeholders as well as communities.
- vii) Development and upgradation of early warning systems for earthquaks, flash floods, droughts, cyclones and tsunamis.
- viii) Establishment of 03 state of the art USAR teams in Karachi, Islamabad and NWFP.
- ix) Research Projects on climate change impacts and adaptation to climate change which special focus on GLOF, Flood and Drought mitigation.

## Area 3

The systematic incorporation of risk reduction approaches into the design and implementation of emergency preparedness, response and recovery programmes in the reconstruction of affected communities.

## **Overall Challenges:**

The major challenge on this account is the realization of theory into practice. In the earthquake affected areas of NWFP and Azad Jammu and Kashmir the reconstruction and rehabilitation programmes and processes have been designed with DRR as an important element. Likewise, the NDMA, in collaboration with UN HABITAT, has developed earthquake resilient housing designs for the earthquake effected areas of Balochistan. However, at the implementation stage DRR aspect of these programmes and processes faced random neglect due to the financial incapacities of the end beneficiaries i.e the affectees. The affectees are reluctant to observe the building codes/designs and refused to relocate from the vulnerable areas thus exacerbating the underlying risks in the reconstruction process. Besides, the emergency preparedness, response and recovery programmes can only be initiated and implemented through institutions with required capacities. However, due to scarcity of resources and non comittal attitude of provincial and local authorities the disaster management institutions are yet to be operationalized. As a result the DRR programmes at the local level in the reconstruction of affected communities could not be implemented as per defined standards.

## **Future Outlook Statement:**

The Earthquake Reconstruction and Rehabilitation Authority (ERRA) has been assigned by the Government of Pakistan to implement the reconstruction programmes in the areas effected by Earthquake 2005. ERRA has integrated the principles of DRR into recovery and rehabilitation projects. The ERRA's programmes have been particularly successful in promoting earthquake safer construction in housing, education, health and land development sectors. As the post disaster reconstruction programmes in the earthquake affected areas of NWFP and AJ&K are nearing completion, the local capacities on account of emergency preparedness, response and recovery to deal with future disasters has increased manyfolds. Due to the implementation of a range of DRR initiatives in these affected areas a culture of resilience to disasters has already taken its roots which can be reflected in safer constructions, community awareness about disasters and other DRR initiatives being taken by the local Governments and community based organizations. However, the sustenance of such initiatives is dependent upon consistant support by the local Government through allocation of dedicated resources and capacity building of local authorities in the field of DRR.