

Are We Disaster Ready?



National Conference

Mega Disasters of Pakistan:

Lessons Learnt – Way Forward

2011

Post Conference Report



Mega Disasters of Pakistan
Lessons learnt | Way forward



Pakistan Red Crescent Society
انجمن صلال احمر پاکستان

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I would also like to thank Keynote speakers for sharing their knowledge and expertise on the five thematic areas/working groups; "Monsoon Floods 2010" by Air Vice Marshal (R) Muhammad Ateeb Siddiqui, "IDP crisis 2008-2009" by Lieutenant General (R) Nadeem Ahmed, "Cyclones 2007-2010" by Mr Kanwar Waseem, "October 2005 Earthquake" by Lieutenant General (R) Farooq Ahmed Khan and "Unpredictable Internal Security Environment" by Dr. Rizwan Naseer.

I proffer my appreciation for all the guests who were present at the inaugural and concluding ceremony; diplomats, parliamentarians, UN agencies & members of the civil society, and delegates; OXFAM, USAID, FOCUS, Handicap International, Lions International, Bardasht, NDMA, ERRA, MPs, representatives of the defense forces and National NGOs who participated in the working groups for sharing their unique perspectives in managing mega disasters. I would also like to thank the moderators; Engr Mansoor Malik, Dr Rauf-I-Azam, Mr Azhar Hussain, Mr Anwer Ejaz, Mr Jamil Bhatti, Mr Waqas Mir and Mr Adnan Shah for steering discussions in a focused manner.

Special mention is made to the sponsors; International Federation of Red Cross and Red Crescent Societies (IFRC), International Committee of the Red Cross (ICRC), Turkish Red Crescent (TRC), Canadian Red Cross (CRC), Danish Red Cross (DRC), German Red Cross (GRC), Swiss Red Cross (SRC) and Telenor, for their support in making this conference a reality.

My commendations for the ICARUS team who successfully handled event management and intellectual partnership for this conference, including research, content development and report writing support.

Foreword



As the Chairperson of Pakistan Red Crescent Society, at the helm of one of the most active disaster preparedness and response organizations in the country, it is indeed an honor for me to successfully conclude the first ever conference on "Mega Disasters in Pakistan: Lessons Learnt - Way Forward", convened at the PRCS National Headquarters, in Islamabad, on the 17th and 18th of May, 2011. I believe that events such as the 2011 National Conference can help build information highways for two-way traffic of knowledge and experience accumulated in the wake of natural and man-made disasters. Therefore, sharing lessons learnt to make inroads into enhance disaster preparedness and response mechanisms has become imperative in the face of overwhelming reconstruction bills and staggering death tolls.

An apt platform for reflection, performance evaluation as well as mapping a way forward in the light of lessons learned, the Conference has facilitated participants to take stock of disaster management knowledge, experience, and mechanisms that can be replicated in the event of future catastrophes.

The Conference, comprising an inaugural ceremony, plenary discussions and a closing ceremony attracted over 500 participants from myriads of organizations including public and private sector entities, NGOs/INGOs, emergency management services, humanitarian aid organizations, donor agencies and development partners. Without an iota of doubt, I can say that the Conference has been successful in providing excellent opportunities for networking and information sharing of best practices across the disaster preparedness and response spectrum.

The outcomes of this Conference are now being published in the form of a report, and I am confident that our efforts will lay the groundwork and a solid foundation for the development of a comprehensive national disaster preparedness and response strategy. The contents of the document are not PRCS or Movement specific but are relevant for all organizations which are involved in humanitarian relief work and are dedicated towards "service to humanity"

Senator Nilofar Bakhtiar

Chairperson, Pakistan Red Crescent Society

LIST OF ACRONYMS

A

ADB	Asian Development Bank
AJ&K	Azad Jammu and Kashmir
ATM	Automated Teller Machine

C

CERT	Community Emergency Response Teams
CRC	Canadian Red Cross

D

DDMA	District Disaster Management Authority
DM	Disaster Management
DP	Disaster Preparedness
DRM	Disaster Risk Management
DRR	Disaster Risk Reduction
DRTs	Disaster Response Teams
DRC	Danish Red Cross

E

ES	Emergency Services
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F

FATA	Federally Administered Tribal Areas
FRC	Federal Relief Commission

G

GCISC	Global Change Impact Study Center
GRC	German Red Cross

I

ICRC	International Committee of the Red Cross
ID	Identity
IDP	Internally Displaced People
IFRC	International Federation of the Red Cross and Red Crescent Societies
INGO	International Non-governmental Organizations

K

KM	Knowledge Management
KPK	Khyber Pakhtunkhwa

M

M&E	Monitoring and Evaluation
MPs	Movement Partners

N

NADRA	National Database and Registration Authority
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NDM	Natural Disaster Management
NDMA	National Disaster Management Authority
NDMO	National Disaster Management Office
NFI	Non Food Items
NGO	Non-Governmental Organization
NHQ	National Headquarters

O

OCHA	Office for the Coordination of Humanitarian Affairs
ONS	Other National Societies

P

PDMA	Provincial Disaster Management Authority
PHRP	Pakistan Humanitarian Response Plan
PIPS	Pakistan Institute for Peace Studies
PMAS-AAU	Pir Mehr Ali Shah - Arid Agriculture University
PMD	Pakistan Meteorological Department's
PRCS	Pakistan Red Crescent Society

R

RBMS	Results Based Management System
RFL	Restoring Family Links

S

SOP	Standard Operating Procedures
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T

TRC	Turkish Red Crescent
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U

UN	United Nations
USAID	United States Agency for International Development
USD	United States Dollar

W

WatSan	Water and Sanitation
WFP	World Food Programme

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EXECUTIVE SUMMARY

The Pakistan Red Crescent Society has immersed itself in disaster preparedness and response activities since its inception on December 20, 1947. PRCS was established by virtue of 'The Pakistan Red Cross Order', issued by the founding father of the Nation, Muhammad Ali Jinnah, also the founding President of the Society. With mature institutional mechanisms, dedicated and skilled manpower, and a mandate that extends all over Pakistan, PRCS has assumed its rightful place as a frontline actor in the community of disaster management organizations. The Society is spearheading an on-going struggle to save lives in the face of natural and man made disasters.

In the wake of the October 8, 2005 earthquake, PRCS assumed a more prominent role at the vanguard of disaster response interventions. Over the years PRCS has evolved into a hybrid disaster response organization, boasting a unique combination of home-grown capacities and competencies that very few organizations can compete with. Following the catastrophic earthquake of October 2005, PRCS has responded to every mega catastrophe including the 2007 Cyclone Yemyin, the 2008 Ziarat Earthquake, the 2008-09 IDP Crisis, the 2010 Floods and disasters spawned by the country's volatile security environment. From fairly humble beginnings in the health sector it provided assistance to over 10 million people over the years, PRCS has come a long way in its efforts to improve the lives of those rendered vulnerable by circumstances, man-induced or natural.

In undertaking the tasks of relief and recovery in the wake of natural disasters; PRCS and its MPs, NGOs, INGOs, humanitarian organisations and governments at large, accumulate experiences that can be replicated to better manage disasters in the future. PRCS recognizes the importance of knowledge sharing to leverage the intellectual capacities of different actors for a more comprehensive and enhanced disaster preparedness and response strategy. To reflect on the efficacy of disaster response interventions in search of improvements, PRCS and its Movement Partners have always held lessons learnt conferences. In continuation with this all important requirement, the PRCS hosted a

National Conference titled "Mega Disasters of Pakistan: Lessons Learnt - Way Forward" on the 17th and 18th of May 2011, at the PRCS National Headquarters in Islamabad.

The structure and substance of the Conference was developed to facilitate the identification of lessons learnt and best practices in disaster management that can contribute to effective disaster preparedness and response. The Conference and its intellectual proceedings were also structured to establish a process of harmonizing national and international resources for a more coordinated, effective and efficient disaster response framework. In the face of overwhelming death tolls and reconstruction bills, we are compelled to identify lessons learnt and to analyze our response to each mega disaster, in order to chart a way forward; a roadmap to resilience. In keeping with its objectives and expected outcomes, the Conference covered five thematic areas of interest, including the 2010 Floods, the IDP Crisis 2008-2009, Cyclone Yemyin of 2007 and Phet of 2010, the October 2005 Earthquake and the unpredictable Internal Security Situation.

Plenary groups identified lessons learnt and roadmaps for the future which were articulated with regard to early warning systems; contingency planning; pre and post-disaster inter-agency and inter-sectoral coordination; search and rescue operations; damage, needs and capacity assessments; information management and knowledge sharing; relief to recovery transitory arrangements; resource mobilization; and monitoring and evaluation mechanisms. This document, therefore, is a comprehensive account of disaster-centred discussions, focusing specifically on lessons learnt and the way forward for managing mega disasters in Pakistan.

The overarching theme incorporated the challenges of all hazards, covering both disaster preparedness and response, and including all sectors of society, thus directing participants to develop a comprehensive roadmap for action. As such the Conference an integration of all these elements, attracted participants from public and private sector entities, NGOs/INGOs, emergency management services, researchers and development partners.

The leadership of PRCS, IFRC and ICRC addressed delegates of the conference during the inaugural and closing ceremonies. In their addresses to the audience, Chief Guests; Minister for Interior, Mr Rehman Malik and Governor Khyber Pakhtunkhwa, Barrister Masood Kausar endorsed Pakistan Red Crescent Society's initiative to roll out a blueprint for enhanced disaster preparedness and response following an interactive and consultative process involving key stakeholders. Learned speakers were invited to deliver keynote presentations on each of the five thematic areas. The keynote speakers included Lieutenant General (R) Farooq Ahmed Khan, Lieutenant General (R) Nadeem Ahmed, Dr. Rizwan Naseer, Air Vice Marshal (R) Muhammad Ateeb Siddiqui and Mr. Kanwar Waseem.

This report also gives a brief account of the awe inspiring exhibition, hosted by PRCS, featuring photographs of its disaster response interventions in Pakistan and, the interventions of its sister organizations and Movement Partners across the globe.

In the plenary sessions that followed the inaugural ceremony, thematic areas of interest, as presented by keynote speakers, provided anchor points for ensuing discussions. Delegates were split into 5 working groups, one for each thematic area. Keynote speakers led the delegates as Chairpersons for each plenary session. Each session was professionally moderated by subject experts who assumed the challenging task of keeping discussions on track.

Thematic Area; Monsoon Flood of 2010

The first working group session was on Monsoon Flood of 2010. This group comprised of over 40 delegates, some from the PRCS and sister organizations as well as, representatives of national and international disaster management and humanitarian aid organizations; government officials and retired officers of the armed forces; who convened to discuss the challenges of managing the devastation wrought by the Monsoon Floods of 2010. The group, led by AVM (R) Muhammad Ateeb Siddiqui and moderated by Mr Jamil

Bhatti traversed almost 8 hours worth of valuable discussions to identify lessons learnt in the context of the 2010 Floods and chart a way forward for enhanced disaster preparedness and response. Some notable Lessons learnt and Way forward are as follows:

Lessons Learnt

- » Pakistan's image deficit adversely impacted the appeal for funds.
- » Assistance was deployed in a responsive manner in KPK/FATA, most international humanitarian agencies struggled to bring their relief systems up to speed in Punjab, Sindh, and Balochistan.
- » The humanitarian response was slow in Sindh, Punjab, and Balochistan for two main reasons; access to certain areas was logistically impossible and most humanitarian organizations had no presence in Punjab and Sindh before the floods.
- » Pakistan Army has assets, mobility, means, organization and wherewithal, and can help provide national, district and local coordination infrastructure for NGOs, civil society and international support to 'plug in to'. However, humanitarian organizations are wary of collaborating with the armed forces although they eventually did work side by side.
- » The inter-relationships, interaction and coordination mechanism of Flood Management institutions with functional DRM structures are ambiguous, both at federal and provincial levels there are overlapping roles and responsibilities.
- » The partial implementation of already prepared national response and contingency plans, limitations of existing early warning arrangements down to community level affected disaster preparedness and emergency response.
- » Challenges in the implementation of the Watan card initiative included a lengthy grievance system, difficulties in targeting vulnerable communities and insufficient ATMs in more remote areas.
- » Relief operations were aimed at addressing beneficiary needs as a whole and not at segmented groups or communities with varying abilities to access relief goods (both physical and social).
- » Traditional structural flood mitigation mechanisms failed to reduce the

devastation caused by the 2010 Floods.

- » Some of the emergency response and relief interventions were designed and implemented without taking into account local customs and practices of affectees.

Way Forward

- ✓ » Pakistan needs to put in place a transparent mechanism to draw international financial aid from donor agencies and countries.
- » Establish hazard management capacities according to hazard vulnerability maps.
- ✓ » SOPs for the Armed Forces Coordination with NGO/INGOs should be developed and communicated.
- » All response agencies should have distinct roles to avoid duplication of the effort.
- » Dissemination of early warnings down to the community level needs to be enhanced.
- » Watan Cards mechanism should be replicated in future disasters.
- » Long term capacity building, knowledge management and education should be planned to develop a robust, integrated and interdisciplinary approach to flood management.
- » Communities also need to be trained and made better aware of disaster response and their role as first responders.
- ✓ » The Government needs to consider development of a national catastrophe risk financing strategy.
- ✓ » A central repository of all flood related data needs to be maintained.
- » Any new construction permitted in the flood plain should be flood proofed to reduce future damages.

Thematic Area; IDP Crises of 2008-2009

The second working group session was on IDP Crisis of 2008-2009. As a disaster of monumental proportions, the IDP Crises of 2008-2009 was the centre of discussion in a working group that comprised of as many as 30 delegates from the development sector, particularly disaster management organizations such as the Pakistan Red Crescent Society and UN agencies. In a compelling discourse, delegates identified glaring instances of oversight in relief operations implemented by development agencies and the government that could have been avoided. A roadmap was charted out to better manage internally displaced populations in the event of future disasters. The

session was chaired by Lt Gen (R) Nadeem and moderated by Mr Azhar Hussain. Some notable Lessons learnt and Way forward are as follows:

Lessons Learnt

- » Unmet funding needs plagued humanitarian aid organizations scrambling to alleviate the plight of the IDPs.
- » It turned out to be an excellent strategy that all internally displaced persons, of the 2008-09 crises were required to register themselves as IDPs. Having a criterion helped consistency of the effort.
- » The registration process was not without its drawbacks for instance verification procedures did not recognize many female-headed households (women in remote areas do not have NI Cards) which created confusion.
- » The IDP crisis spawned by military operations created a precarious security environment for all aid workers thereby operational costs (in terms of threat to life) for international organizations increased manifold and field work was thereby restricted.
- » The donations were made through clusters which meant it took more time for the money to reach implementing partners.
- » Lack of experience in handling IDPs meant that there was no uniformity in camp management.
- » Vulnerable groups were not supported by suitable staff members as this aspect was not planned well.
- » Appropriate camp locations were not selected in some cases resulting into inefficiency.
- » There was a failure to take into account the adverse psychological impact of the crisis on IDPs, who were forced to leave their homes and social network.
- » Incidents of the law and order situation getting out of hand due to ill planning in some camps, were noted.
- » Communication gaps existed amongst the govt agencies, NGOs, INGOs and international aid workers due to lack of a centralized information centre.
- » Coordination between field workers and district administration was poor.
- » Cash cards worked well as verified IDPs used them to buy necessary items.
- » Volunteers and staff did a tremendous job though there were instances of conflicts as there was lack of a stress management

policy for the volunteers/staff.

Way Forward

- » A unified information system should be developed through which authorities and partners can communicate.
- » Resource mapping exercise should be undertaken. Specific areas should be earmarked for camping sites in case of IDP situation in all major districts.
- » Documentation and reporting mechanism should be improved for IDP crises.
- » IDPs are dependent on donor agencies, this dependency can be reduced by engaging IDPs in economically productive activities.
- » Displaced women should be able to avail assistance and protection. Their specific needs must be met and assistance gaps addressed.
- » Displaced children should be shielded from the impact of displacement as much as possible, provided a child-friendly atmosphere and protected from trafficking and other exploitative activities.
- » A national disaster financing strategy needs to be developed.
- » An end-to-end registration procedure should be developed that facilitates those who do not have National Identity Cards or other identifying documentation.
- » Despite security situation, international aid agencies can continue to function through local implementing partners by training partners on IDP related issues.
- » Social protection guidelines need to be developed and enforced to safeguard the basic human rights and interests of IDPs in Pakistan.
- » The international community should be able to provide direct financial support to frontline agencies, and implementing partners to avoid delays.
- » International humanitarian standards need to be implemented in camps.
- » An inclusive decision making process should be established to solicit the input of the affected population.
- » An effective grievance redressal mechanism must be available to all IDPs.
- » Psychological counseling needs to be provided to IDPs.

Thematic Area; Cyclones 2007-2010

The third working group session was on Cyclones. A similar exercise was carried out to discuss the Lessons Learnt and Way Forward in the context of Cyclones, the salients of which form an integral part of this document. Chaired by Mr. Kanwar Waseem and moderated by Barrister Waqqas Mir & Mr Adnan Shah the extensive discussions around the theme led to the conclusion that cyclone Yemyin was an eye opener and compelled disaster management stakeholders to initiate a process of addressing cyclone related disasters. Notable Lessons learnt and Way forward are as follows:

Lessons Learnt

- » Cyclones tend to occur in May-June and then in late September / October and November, before or in the aftermath of flood season.
- » Cyclone Yemyin was a grossly mismanaged disaster which served as a learning experience to better manage Cyclone Phet.
- » Cyclone Phet was better managed than Cyclone Yemyin. Areas that still require improvements based on the Phet experience include early warning comprehension at the lowest rung, lack of timely evacuation decisions as well as miscalculated response measures.
- » The evacuation exercise was disorganized and lacked adequate and skilled manpower.
- » Operational coordination was lacking, M&E was nonexistent and gender needs were not properly addressed.
- » Widespread damage and loss of life occurs due to high winds preceding cyclones, thus requiring a comprehensive strategy for rehabilitation.
- » No integration of cyclone response plans in community development plans.
- » Absence of cyclone mitigation works or cyclone shelters in the vulnerable regions.
- » PDMA and DDMA should be involved in all planning processes of the City /districts, other than preparedness/response efforts.
- » Disaster Management is not a seasonal subject but a concept of building a culture of safety/resilient communities.

Way Forward

- » Improvements in early warning systems based on traditional norms and supported by simulation exercises.
- » Standard Operating Procedures and Protocols need to be developed for contingency planning along with training of stakeholders.
- » Resources should be channelized for early warnings and information dissemination.
- » The public should be provided with literature and made aware of various signals or mediums as part of early warning and evacuation.
- » Planned and secure evacuation areas should be identified and pre-marked.
- » Detailed study is required of disaster prone area's topology and infrastructure, along with hazard mapping and threat analysis.
- » Special consideration should be given to gender needs in planning DM strategy.
- » There should be a single operational plan of DDMA and PDMA.
- » Community involvement needs to be ensured by having a risk management committee.
- » Cyclone disaster management needs greater fund allocation.
- » Structural measures for mitigation of plan need to be implemented, such as mangrove plantations, building of water breakers etc.
- » NDM Act, 2010 envisages a National Task Force for managing and responding to natural disasters such as cyclones, these needs to be made operational.
- » A forum needs to be created for coordination between media, government and DM agencies.

Thematic Area; October 2005 Earthquake

Also forming a part of this report are the proceedings of the fourth working group comprising than 20 delegates, chaired by Lt Gen (R) Farooq Ahmed and moderated by Mr Anwar Ejaz discussed how best to prepare for earthquakes and manage the devastation wrought by them. The magnitude of the October 2005 Earthquake caught Pakistan unprepared. Some of the notable Lessons learnt and Way forward from this mega disaster, discussed at length during plenary

sessions are:

Lessons Learnt

- » In earthquakes early warnings are not very effective because of very short response time, which is in seconds.
- » There were no simulation exercises nor were appropriate actions to be taken in case of earthquakes, ever communicated to the masses.
- » Numerous Challenges were faced, as there were institutional vagaries, dysfunctional civil administration and lack of interagency coordination.
- » Handling mass casualties became a big issue and Catastrophes of this magnitude generally take place in extremely inhospitable terrains making rescue and relief efforts extremely tedious.
- » Any disaster of this magnitude results in IDP.
- » Dealing with vulnerable groups was a big challenge.
- » Breakdown in communication and destroyed road network made it impossible to react quickly.
- » It helped the rescue and relief operation a great deal as leadership role was given to only one organization; Federal Relief Commission (FRC).
- » No matter how prepared or equipped disaster management agencies are, disasters of this magnitude cannot be handled without international monetary and physical support.
- » Food and water shortage is one of the key considerations in disasters such as 2005 earthquake.
- » Media is an extremely powerful medium and coordination with media was initially weak and that caused panic in some cases.

Way Forward

- » Technology needs to be acquired for an effective early warning system for earthquakes.
- » Volunteerism should be encouraged and supported and if required necessary legislation should be enacted to protect their livelihood.
- » Disaster Management is a devolved subject, therefore provincial authorities right down to lowest level should invest in the capacity building.
- » Building codes need to be implemented to minimize damages.

- » Stockpiling is needed at all strategically identified areas for timely mobilization of resources.
- » Proper supply chain, delivery channels and mechanisms need to be developed.
- » Resource mapping of civil society organizations, INGOs and international aid organizations need to be done.
- » In case of mega disasters media should be embedded with the DM Team. They should be briefed on daily basis and made to realise that they are an essential partner.
- » A comprehensive mapping exercise should be undertaken for each major city facing dangers of earthquake in Pakistan. In the advent of a mega disaster IDPs is a sure thing so plans should be made to all vulnerable districts.
- » Orientation sessions should be conducted for international aid workers to orient them with local sensitivities to avoid confrontations and ill feelings.
- » For effective contingency planning, proper and reliable data about demography, infrastructure, geological information on hospitals, schools and population is needed.

Thematic Area; Unpredictable Internal Security Environment

The last working group elaborated on one of the most pressing themes relevant to our country in these troubled times i.e. our Unpredictable Internal Security Environment. This decade has seen the worst security crises in Pakistan's history, displacing millions of people and severely disrupting lives, livelihoods, and the provision of public services. This working group, led by Dr. Rizwan Naseer, Founder and Director General of Rescue 1122, and was moderated by Dr Rauf-I-Azam. The delegates divided unpredictable security into three broad classifications; terrorism, crime in general and road & workplace accidents. The conference participants were resolute in supporting the chairperson's proposition to enhance the emergency response capacity of all entities involved. Among other things the delegates of this working group discussed a way forward comprising three tiers; pre-emption; emergency response ability and execution; and post disaster strategies:

Lessons Learnt

- » Donor funding transfer mechanism uses
- time and this dependency means that the efficiency and effectiveness to handle a mega disaster is reactive rather than proactive.
- » Local communities are not trained to handle relief assistance, in a majority of cases, they cause more harm than benefit.
- » Not knowing how to prioritize the victims during rescue and relief effort has been a serious impediment.
- » A useful method before enacting any disaster response unit is to carry out a baseline study or atleast a pilot project.
- » To plan and implement a disaster response strategy, qualification procedures to determine magnitude of disasters on scales of; small, medium and large were found useful for developing resource engagement protocols.
- » A compendium of good practices developed by some Humanitarian/disaster management organizations saved time and resources for others.
- » Hazard mapping for risks, volunteer base as well as strategic stock piling of relief goods in disaster prone areas has been a neglected area.
- » Disaster management is a multiple entity operation and in some cases due to lack of role clarity and engagement protocols, performance suffered and efficiency was undermined.
- » Unpredictable security disasters in Pakistan do not attract enough funding from the government as well as the donors whereas; it is the most volatile area.

Way Forward

- » Government should enhance the capacity of organizations such as PRCS through enhanced budgetary provisions to improve their sustenance towards handling disasters.
- » Media house should appoint one disaster coordinator to liaise with humanitarian organizations for dissemination of correct information.
- » Hazard mapping for risks, volunteer base as well as strategic stock piling of relief goods should be done. Cluster mapping of emergencies for all major cities of Pakistan should be carried out.
- » A comprehensive compendium of disaster specific good practices should be developed and continually updated.
- » Results Based Management System (RBMS)

linking inputs with outputs should be developed to increase donor confidence.

- » A comprehensive disaster response strategy should be developed containing resource engagement protocols based on magnitude of disasters on scales of; small, medium and large.
- » Emergency services (ES) on the format of 1122 should be created with presence in all parts of the country.
- » Community Emergency Response Teams (CERT) should be established in all parts of the country.
- » Interior ministry should play an active role to facilitate international humanitarian organizations.
- » Managing unpredictable security disasters may be handled as an independent program and a swift funding campaign should be launched.
- » Disaster management bodies in Pakistan should consider and plan about special vulnerabilities and capacities of women with relation to disasters.
- » A one week disaster management course should be developed for schools, colleges and universities.
- » A baseline survey should be undertaken to prepare a risk mitigation and disaster preparedness plan for unpredictable security based on 5 years, 10 years and 15 year projections.

After two days of several insightful presentations and countless valuable exchanges, the PRCS National Conference, came to an end, although unrelenting efforts to make Pakistan a safer country continues. In perpetuating the message that "knowledge shared is knowledge squared", this conference has, without a doubt, fully lived up to the expectations of all stakeholders. PRCS reckoned here, an unparalleled opportunity to host a multi-dimensional knowledge sharing initiative wherein disaster management experts and practitioners from across Pakistan, shared their experiences with a view to disseminating lessons learned in the course of emergency relief and long-term recovery operations following mega disasters in Pakistan.

It is very encouraging to note that all general recommendations presented as a result of the conference and plenary sessions were unanimously endorsed by all delegates of the National Conference.

General Recommendations

1. Government should enhance the capacity of organizations such as PRCS through enhanced budgetary provisions to improve their sustenance towards handling disasters.
2. A baseline survey should be undertaken to prepare a risk mitigation and disaster preparedness plan for all five thematic areas discussed during the conference based on 5 years, 10 years and 15 year projections.
3. An endowment fund should be created for managing mega disasters in Pakistan.
4. Have in place a standardized and transparent mechanism, with built-in flexibility, to funnel international financial aid into the country, and ensure that funds are appropriated for humanitarian work, relief, reconstruction and rehabilitation as intended by the donor.
5. Process re-engineering should be undertaken in the existing SOPs to document processes and to facilitate the movement of international humanitarian aid workers and relief agencies in Pakistan without compromising on national security.
6. Build synergies and foster partnerships via an impartial central coordination cell.
7. Develop protocols and standard operating procedures for disaster response. Responsibilities of different stakeholders should be defined according to their capacity and jurisdiction.
8. A Vulnerability Atlas of Pakistan needs to be prepared which should be made available to any organization involved in disaster management in Pakistan free of cost.
9. Effective information management system should be incorporated using state-of-the-art technology.
10. A national level, robust Monitoring and Evaluation Cell should be established to assess disaster response and risk reduction activities assigned to or assumed by development partners, government agencies, NGOs/INGOs etc.
11. Capacity Building; Immediate and long term enhancement of disaster preparedness and response capacities in terms of skilled human resource and state-of-the-art equipment and supplies should be ensured.
12. Each district and subsequently each union council should conduct simulation exercises.

and drills to prevent disaster response systems from becoming dormant and ineffective.

13. Structural disaster mitigation interventions should be undertaken. Procedures, including a compliance code, should be developed and resources should be made readily available to build protective structures.
14. Community participation needs to be made an integral part of all disaster preparedness and response mechanisms to create ownership and guarantee effectiveness.
15. Gender concerns should to be taken into account while formulating disaster preparedness and response strategies so that the needs of each group i.e. men, women, children and senior citizens, can be adequately addressed.
16. Besides addressing the needs of senior citizens and children, amongst the most vulnerable in post-disaster situations, the special needs of persons with disabilities (PWDs) should also to be addressed with targeted social protection interventions.
17. In case of a disaster, media's role becomes even more important. Each media house should be encouraged to appoint one disaster coordinator to liaise with humanitarian organizations for dissemination of correct and updated information.
18. A disaster management institute should be created under NDMA with collaborations of International disaster management institutes.
19. Mega disasters of Pakistan, Lessons learnt – Way forward conference should be held yearly to benefit from experience and expertise of all stakeholders.
20. Enforce the Hyogo Framework for Action 2005-2015 by designing activities relevant to each of its five objectives, keeping in view Pakistan's hazard risk profile, government machinery, culture, education system, socio-economic infrastructure etc.
21. An International conference on the same subject should be held to deliberate on the outcomes of the national conference so that international community can be roped in to provide their experience and expertise on disaster management.



ICRC President Jakob Kellenberger during post Earthquake 2005 visit to Pakistan



IFRC President Tadateru Konoé during post floods 2010 visit to Pakistan

INTRODUCTION

National Conference May 17-18, 2011



The Pakistan Red Crescent Society was brought into existence on December 20, 1947 under the auspices of 'The Pakistan Red Cross Order', issued by the founding father and the first Governor General of the Nation, Muhammad Ali Jinnah who is also the founding President of the Society. From a single office in Karachi, the PRCS has grown into a huge organization with its National Headquarters (NHQ) in Islamabad, Provincial Branches in each of the five provinces, a State Branch in AJ&K, a Regional Branch in FATA, 89 District Branches, 40 Disaster Management (DM) Cells, a permanent staff of 1,200, a volunteer base of 220,000, 7 blood banks, several hospitals, 122 ambulances, 120 trained first aiders and 336 Disaster Response Teams (DRTs).

From humble beginnings in the health sector, over the years, PRCS has also developed expertise in Disaster Management /Disaster Risk Reduction; Logistics and Supply Chain Management; Community Based DRR and Health Programmes; Restoring Family Links (RFL); Emergency Preparedness and Response (First Aid); Water and Sanitation; Psycho-social Support; Gender Specific Social Protection, Mainstreaming and Empowerment; Fundraising; Internal and External Communications; and Monitoring, Evaluation and Reporting.

Whatever capacity and capability the PRCS has today would not have been possible

without the overwhelming technical, financial and material support it has received from the international Committee of the Red Cross (ICRC), the International Federation of the Red Cross and Red Crescent Societies (IFRC), the Turkish Red Crescent (TRC), and many Other National Societies (ONSs), collectively known 'The Movement' or 'Movement Partners' (MP).

Although the PRCS has been involved in disaster response activities since its inception it assumed a more prominent role at the vanguard of disaster response interventions during the October 8, 2005 Earthquake. Ever since, it has steadily and consistently grown in its capacity and capabilities. Following the catastrophic earthquake of October 2005, PRCS has responded to every mega disaster including the 2007 Cyclone Yemyin, the 2008 Ziarat Earthquake, the 2008-09 IDP crisis, the 2010 Floods and other disasters. Having provided assistance to over 10 million people over the years, today PRCS is considered amongst the leading humanitarian aid organizations of the country.

After every disaster to which the PRCS and its MPs have responded, lessons learnt conferences have always been held. In continuation with this all important requirement, the PRCS decided to host a National Conference titled "Mega Disasters of Pakistan: Lessons Learnt - Way Forward" on the 17th and 18th of May 2011, at the PRCS

National Headquarters in Islamabad. The express intent of this Conference was to take stock of and share knowledge, experience, expertise, mechanisms and models that can be replicated in the event of future disasters; in an effort to develop an all-embracing disaster preparedness and response strategy. In the face of overwhelming death tolls and reconstruction bills, we are compelled to identify lessons learnt and to analyze our response to each mega disaster, in order to chart a way forward; a roadmap to resilience.

The two-day conference was structured to promote good practice, share ongoing research and identify a way forward for the advancement of disaster preparedness and response in Pakistan. The expected outcome of the Conference was the development of a blue print for national action following all kinds of natural and manmade disasters.

OBJECTIVES

The main objectives of the Conference were:

1. To analyze lessons and best practices that can contribute to greater preparedness and response effectiveness to future large-scale disasters.
2. To establish the process of harmonization of National and International resources for

a more effective and efficient coordinated disaster response.

The overarching theme incorporated the challenges of all hazards, covering both disaster preparedness and response to include all sectors of society, thus culminating in a comprehensive roadmap for action. As such the Conference Programme; an integration of all these elements; was organized to attract a wide cross section of participants from public and private sector entities, NGOs/ INGOs, emergency management services, researchers and development partners. With keynote speakers and participants from a wide range of disciplines, as well as delegates of varying influence, the Conference provided excellent opportunities for networking, training and information sharing on best practices across the disaster preparedness and response spectrum.



STRUCTURE OF THE CONFERENCE

Inaugural Session (17th May, 2011)

Chief Guest's Address

The Federal Minister for Interior, H.E. Rehman Malik, graced the Inaugural Session as Chief Guest, where he addressed the audience. He lauded the Pakistan Red Crescent Society for its efforts to bring together disaster-specific development partners to share lessons learnt and develop recommendations for enhanced disaster preparedness and response.

In his compelling speech he urged all factions of society to multiply their efforts and strengthen their resolve to build a more resilient Pakistan in the face of natural and manmade disasters.

Addresses by Senior Executives of the PRCS, IFRC and ICRC

The Inaugural Session also included the following.

1. A Welcome Speech by Secretary General, Pakistan Red Crescent Society
2. An Address by Head of the Delegation, International Federation of Red Cross/Red

- Crescent Societies (IFRC)
3. An Address by Head of the Delegation, International Committee of Red Cross (ICRC)
4. An Inaugural Address by Chairperson, Pakistan Red Crescent Society (PRCS)

Keynote Presentations

In keeping with the Conference theme and to achieve the proposed objectives, the Conference was structured to include keynote presentations on each one of the following five thematic areas, by renowned disaster management thought leaders and practitioners, whose experience and expertise are unparalleled in Pakistan.

1. "Monsoon Floods 2010: PRCS and Movement Response. Was Climate Change Responsible?" by Air Vice Marshal (R) Muhammad Ateeb Siddiqui
2. "IDP crises 2008-2009: Are we prepared for the next crisis?" by Lieutenant General (R) Nadeem Ahmed
3. "Cyclones 2007-2010: Responses and Capabilities." by Mr Kanwar Waseem
4. "October 2005 Earthquake: Revisit Challenges and Future Responses." by



Press briefing by the Chief Guest Federal Minister for Interior Rehman Malik

Lieutenant General (R) Farooq Ahmed Khan

5. "Unpredictable Internal Security Environment: Response Capacity." by Dr. Rizwan Naseer

These presentations helped set the stage for the Conference, offering a context within which the ensuing plenary discussions were moderated.

Plenary / Working Group Discussions (17th and 18th May, 2011)

To be able to identify lessons learnt in the context of mega disasters and subsequently chart a way forward, participants were divided into 5 cross functional teams and assembled for plenary discussions; one for each of five thematic areas.

The proceedings were mediated to identify and analyze the effectiveness of Pakistan's response to the various disasters: the 2010 Floods, IDP Crisis 2008-2009, Cyclone Yemyin of 2007 and Phet of 2010, the October 2005 Earthquake and the deteriorating Internal Security Situation.

To extricate valuable lessons learnt in the course of relief and recovery operations with a view to recommending a blue print for action in the event of mega disasters in the future, the discussions in each working group were steered by professional moderators to traverse the following points:

1. Early Warning

- Efficiency of Early Warning System
- Effectiveness of Early Warning System
- How well equipped is the Early Warning System?
- Ability to forecast the onslaught of a disaster
- Ability to disseminate early warning information to concerned agencies and vulnerable populations

2. Contingency Planning

- Effectiveness of standard operating procedures
- Possibility of different scenarios including the worst case scenario developed as a base for contingency planning
- Humanitarian actors' response according to assigned roles and responsibilities

3. Coordination - Inter-agency & Inter-sectoral

- Pre-disaster
- During-disaster
- Post-disaster

4. Search and Rescue Operations

- Equipment
- Skilled HR
- Efficiency

5. Assessment of Damage, Needs and Capacity

- Immediate Needs Assessment
- Sectoral Assessment
- Recovery Needs Assessment

6. Overall Information Management, Sharing and Dissemination

- Information collection mechanism
- Information management
- Information dissemination
- Beneficiaries communication

7. Relief Operations

- Targeting beneficiaries
- Relief package quality
- Relief package quantity
- Relief package appropriateness (gender, culture & weather)
- Relief distribution mechanism

8. Relief to Recovery Transition

9. Resource Mobilization

- Communicating the magnitude of the disaster to the international community
- Host donor conferences and use other tools to secure funding
- Government action to open accounts with national/international banks and financial institutions
- Transparency mechanism to secure donor confidence for maximum aid and assistance

10. Monitoring and Evaluation

- Overall monitoring mechanism and frequency of M&E activities
- Robustness of M&E and reporting mechanisms for mid course corrections and adjustment



Monsoon Floods 2010; PRCs and Movement Response. Was Climate Change Responsible?

The 2010 floods, the worst in 80 years, began on July 22 in the province of Balochistan, affecting over 20 million people, approximately one-tenth of Pakistan's population. The swollen waters then poured across Khyber-Pakhtunkhwa before flowing south into Punjab and Sindh.

According to the National Disaster Management Authority (NDMA) the floods affected seventy-eight districts submerging an area of over 100,000 square kilometres. With nearly 2,946 injured, 1,980 people reported dead, 1.7 million homes destroyed, 10,000 schools washed away, 11,628 miles of roads and 936 bridges destroyed, and thousands of acres of crops and agricultural lands damaged for years to come, the devastation caused by the floods amounted to US \$ 9.7 billion. Even those who mustered courage and available resources to save people and salvage property despaired at the sight of the floods ruining just about every physical strand that knit the country together - roads, bridges, schools, health clinics, electricity and communications.

PRCS's Response to the 2010 Floods

The Pakistan Red Crescent Society distributed food to 4.18 million flood victims. For immediate relief, non-food items were provided to

1,463,084 people. Much-needed healthcare services were made available to 200,000 people in addition to psycho-social support for 21,837 people.

Approximately 72 million litres of clean water, 1 million water purification tablets and 9,600 water filters were provided by the Society's Water and Sanitation (WatSan) teams for the benefit of over 1.1 million individuals in the flood-stricken areas.

To address the sanitation needs of victims, over 1,300 latrines were constructed to contain the outbreak of disease. On the softer side, PRCs initiated a programme for Restoring Family Links, including an emergency phone service benefiting over 7,000 people.

National and International Responses

In the face of this catastrophic disaster, Pakistan appealed to international donors for help, having already provided twenty-one helicopters and 150 boats to assist affected people, according to NDMA. The United Nations appealed for \$460 million and launched its relief efforts to provide immediate help; food, shelter and clean water. The Pakistan Army and Navy deployed troops in affected areas, to help evacuate flood victims. By early August, more than 352,291 people

had been rescued. By November 2010, approximately \$1,792 million had been committed by countries and aid organizations in humanitarian support.

Even with support and aid pouring in from the world over, the recovery and reconstruction efforts have not been commensurate with the devastation, and the situation is not what it should have been, twelve months after the floods.

The prolonged period of the rains and consequent flooding clearly overwhelmed national, provincial and local disaster/flood management capacities, including the Federal Flood Commission. In addition, the partial implementation of already prepared national response and contingency plans, limitations of existing early warning systems affected the efficacy of the nation's response.

Affected communities lacked awareness and sensitization regarding disaster risk reduction and emergency response which further aggravated their plight. Among many others, these inadequacies have taught us lessons for the future.

After a detailed damage and needs assessment various programmes have been conceived and launched to rebuild lost infrastructure. So far, NDMA has approved 397 projects worth US \$ 1.9 billion, in the fields of agriculture, community restoration, coordination and support & education and food security.

For the approval and execution of projects, the government has put in place, effective monitoring and evaluation mechanisms. However, the incidence of greater natural calamities around the globe has shifted focus away from Pakistan as a result, ongoing flood reconstruction and economic recovery is under-funded and moving slowly.

A year on, thousands of displaced village residents still need assistance in rebuilding their homes and recovering their livelihoods. Thousands of victims are still living in camps. As of now 14,500 one-room homes and 26,000 transitional shelters have been built, to begin filling the need for shelter created by the destruction of 806,000 homes (5% of the need).

With little attention to resource-efficient designs or flood and earthquake proofing, the housing sector intervention is not sustainable. Major donor funding is tending to focus on hard infrastructure systems and this needs to be corrected. Cash grants have been disbursed to 1.4 million families to cover their immediate needs but very little has been done in the realm of sustainable interventions.

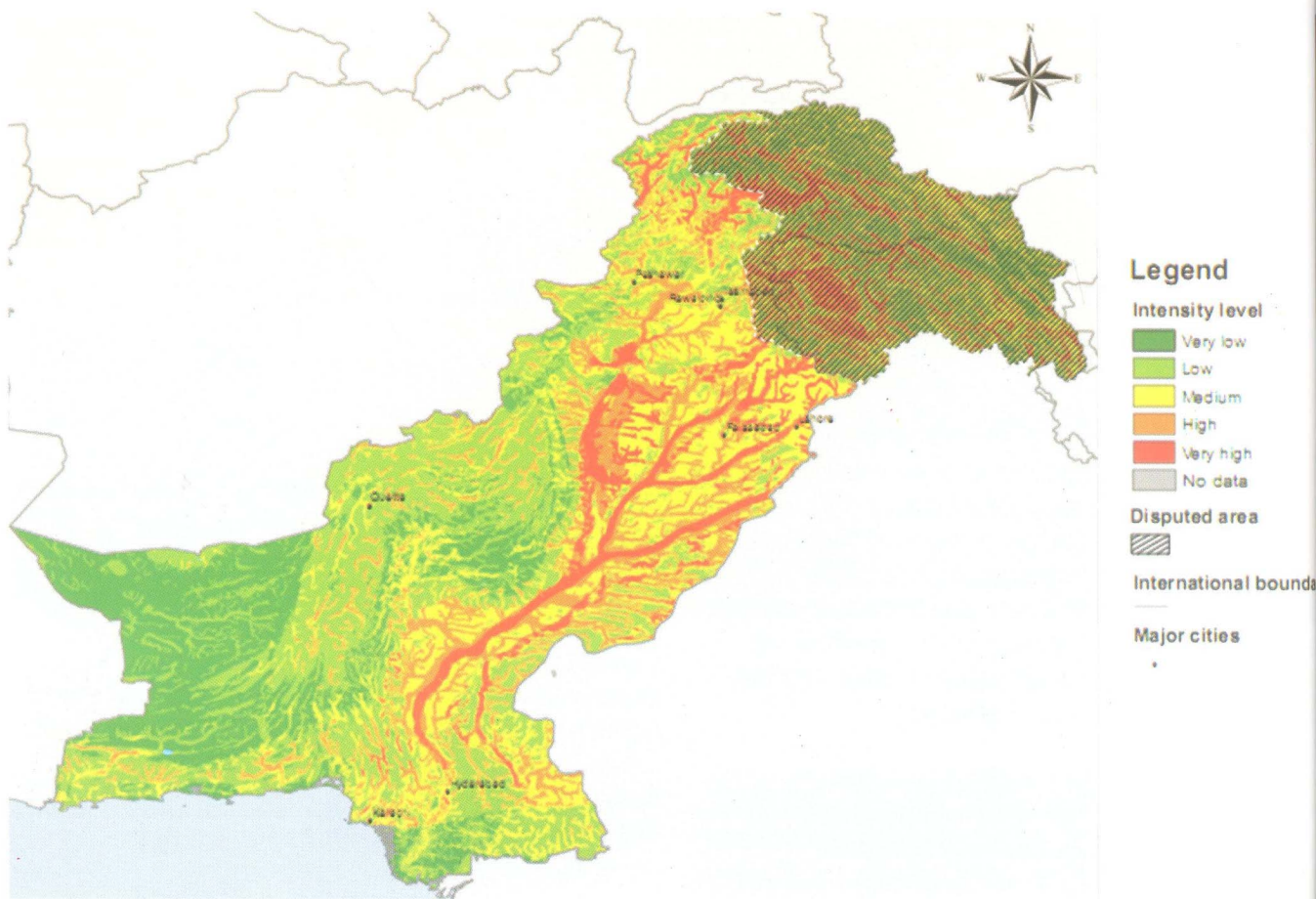
The 2010 Pakistan Floods and Climate Change

Pakistan's vulnerability to floods is a well known fact and this knowledge can be leveraged to mitigate damages, in terms of life and property, in the wake of devastating floods. Climate change is a critical factor behind changing rainfall patterns and the visible increase in precipitation during monsoon seasons in some parts of the country. Studies point towards the future incidence of heavy rainfall and floods during monsoon seasons over north-west Pakistan instead of north-east.

As a result, areas along the western rivers of the country (Indus and Kabul) will be more vulnerable to flood episodes similar to the one experienced during the summer of 2010. The Ministry of Environment, the coordinator, manager and custodian of work on climate change, is developing a climate change policy and action plan, based on recommendations of the Task Force on Climate Change.

The Global Change Impact Study Center (GCISC), a technical institution partnering with the Ministry of Environment, is responsible for scientific work in climatology and assessing the impact of climate change on agriculture and water resources. Perhaps the capacities of these organizations need to be beefed up to meet the challenges posed by changing weather patterns and their catastrophic consequences.

Pakistan's vulnerability to devastating monsoon floods is a known fact. The map on the next page identifies flood-prone areas in Pakistan, strengthening the case for a well-thought out flood preparedness plan and a longer term disaster risk reduction roadmap.



At the PRCS National Conference on Mega Disasters of Pakistan, a group of over 40 delegates, some from the PRCS and sister organizations including the German, Turkish and Swiss Red Cross and the International Federation of the Red Cross / Red Crescent Societies; as well as, representatives of other disaster management and humanitarian aid organizations including USAID and the UN; government officials and retired officers of the armed forces; all convened to discuss the challenges of managing the devastation wrought by the Monsoon Floods of 2010. The group traversed almost 8 hours worth of valuable discussions, moderated by Mr. Jamil Bhatti (CEO IDREAM/UNDP Consultant), to identify lessons learnt in the context of the 2010 Floods and chart a way forward for enhanced disaster preparedness and response. The outcomes of the discussion have been presented in some detail below.

Lessons Learnt

» Pakistan's image deficit adversely impacted the appeal for funds. The International Community was slow to react. In terms of institutional funding for international

humanitarian organizations, the bulk of emergency funds started to be available between the middle and end of August, almost a month after the start of the floods. It was observed that although assistance was deployed in a responsive manner in KPK/FATA, most international humanitarian agencies struggled to bring their relief systems up to speed in Punjab, Sindh, and Balochistan. When the floods hit, humanitarian organizations redirected the existing KPK/FATA programs towards an emergency response to people affected by the floods. Coordination between civilian and military authorities and the humanitarian system was facilitated through an up-and-running cluster system in Peshawar headed by UN agencies and chaired by PDMA agents. The humanitarian response was slow in Sindh, Punjab, and Balochistan for two main reasons; access to certain areas was logistically impossible and most humanitarian organizations had no presence in Punjab and Sindh before the floods.

» Pakistan Army has assets, mobility, means, organization and wherewithal, and can help provide national, district and local



AVM (R) Ateeb Siddiqui speaking on Floods as a Keynote speaker

coordination infrastructure for NGOs, civil society and international support to 'plug in to'. Most importantly, they can work in distant areas, hard-to-reach and perhaps 'insecure' regions. During the Floods 60,000 army troops were employed in Rescue and Relief Operations, and by August, they had rescued 800,000 people and set up over 100 Army Relief Camps across the country. As one of the main actors on the ground in the South, the Pakistani military took part in UN coordination platforms. However, humanitarian organizations are wary of collaborating with the armed forces although they eventually did work side by side.

There are multiple institutions involved in flood management and this created a lot of confusion besides making it impossible to hold organizations accountable for what went wrong. The inter-relationships, interaction and coordination mechanism of Flood Management institutions with functional DRM structures are ambiguous. Response agencies had different reporting lines both at federal and provincial levels and overlapping roles and responsibilities. The partial implementation of already prepared national response and

contingency plans, limitations of existing early warning arrangements down to community level affected disaster preparedness and emergency response. The Pakistan Meteorological Department's forecasts at different stages of the floods were reasonably accurate and timely. Flood forecasts issued by PMD were duly transmitted to the respective Government authorities and departments. However, there was a failure to disseminate early warnings down to the community level and the most vulnerable, remote villages and rural areas were caught unprepared by the devastating floods.

- » Cash transfer mechanism through Watan cards was a prominent feature of the 2010 Flood response which helped revitalize communities. Though it was difficult to monitor the actual usage of the funds by the affected populations, the Watan card was instrumental in providing short-term financial support at a crucial time. Challenges in the implementation of the Watan card initiative included a lengthy grievance system, difficulties in targeting vulnerable communities and insufficient ATMs in more remote areas.
- » Relief operations were aimed at addressing

beneficiary needs as a whole and not at segmented groups or communities with varying abilities to access relief goods (both physical and social).

- » Traditional structural flood mitigation mechanisms such as dams and reservoirs, dikes, levees and flood walls, channel alterations, high-flow diversions, land treatment, on-site detention shoreline protection, and special grasses failed to reduce the devastation caused by the 2010 Floods.
- » The unparalleled intensity and prolonged period of the rains and consequent flooding clearly overwhelmed national, provincial and local disaster/flood management capacities, particularly at the district level.
- » Lack of awareness and education at the community level affected communities as they lacked disaster preparedness awareness, sensitization and education regarding localized hazards and flood risk reduction, emergency preparedness and response functions.
- » Some of the emergency response and relief interventions in southern parts of the country were designed and implemented without taking into account local customs and practices and without the involvement of affectees.
- » The Government of Pakistan was unable to absorb the losses arising from the 2010 Floods and relied on ex-post donor funds to meet expenditures. Such an ex-post risk financing strategy proved to be insufficient, leaving an ex-post resource gap.

Way Forward

- » Pakistan needs to put in place a transparent mechanism to draw international financial aid from donor agencies and countries. In the long run Pakistan needs to build on its image and find its rightful place in the community of modern nations. Donor confidence in our national aid disbursement system should be reinforced by creating simple and transparent processes.
- » It is pertinent to establish hazard management capacities according to hazard vulnerability maps. Humanitarian systems that are up and running, even in remote areas, can be leveraged and redirected to assist disaster affectees when the need arises. Emergency response

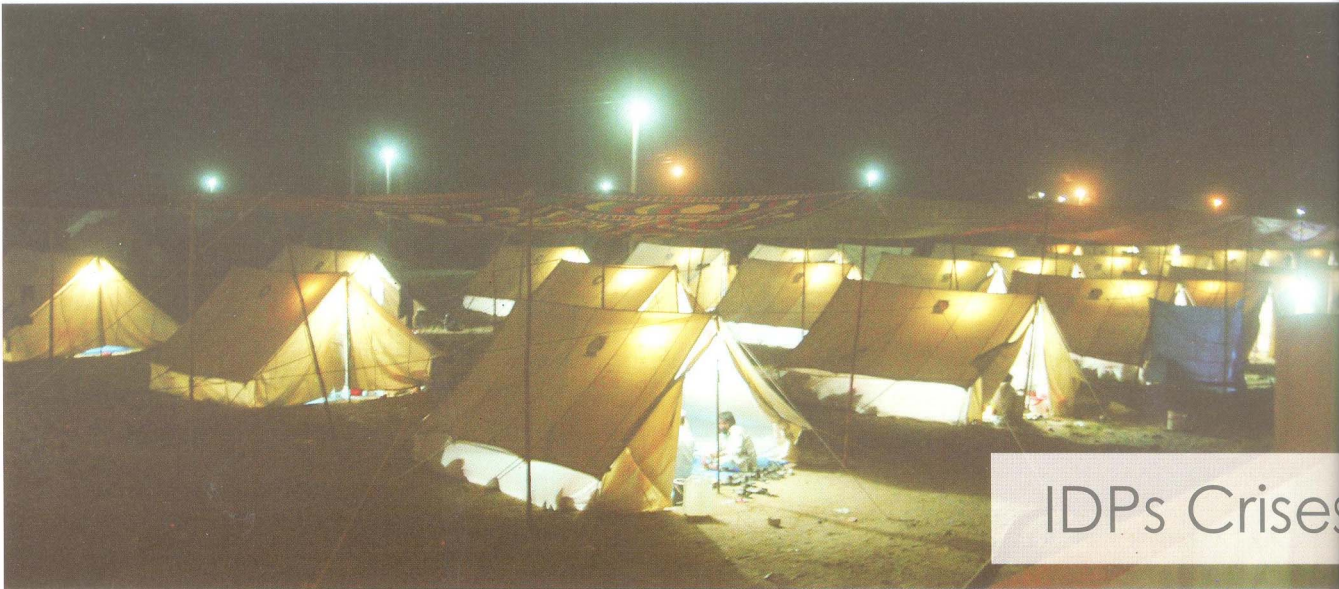
- and relief operations in FATA and KPK were effective compared to Punjab, Balochistan and Sindh where the presence of humanitarian actors and relief agencies was very thin. There is therefore a need to map hazards and deploy commensurate hazard management capacities across the country. Many would argue that disasters like the 2010 Floods do not occur often enough to justify the establishment of emergency, relief and recovery capacities in remote areas. However, when compared to the reconstruction bill left behind by the 2010 floods, the cost of such an initiative is only a small price to pay for a safer future.
- » SOPs for the Armed Forces Coordination with NGO/INGOs should be developed and communicated. The involvement of the Pakistan Army in rescue and relief operations after disasters should not be undermined. Some humanitarian organizations are wary of collaborating with the armed forces to be able to undertake relief operations. This tension should be addressed by developing standard operating procedures for the armed forces during times of disaster especially when it comes to working with NGOs, INGOs and international aid workers.
- » All response agencies should have distinct roles to avoid duplication of the effort. The key to flood preparedness planning is to have clarity and agreement on the roles and responsibilities of relevant stakeholders such as government line agencies, disaster management organizations, PRCS, Red Cross, voluntary groups as well as community members. Such an arrangement is possible by forming disaster management authorities and teams at various levels to agree on a set of standard operating procedures (SOP) and engagement protocols defining what actions to be taken before, during and after floods. Moreover, legislation (NDMA National Calamities Act, etc.) to govern disaster management operations needs to be revisited and harmonized. There should be one central reference document when it comes to national disaster management.
- » Dissemination of early warnings down to community level needs to be enhanced. Telecommunication coverage and the presence and use of different media should be studied to identify the best possible way to communicate early warnings to people.

in remote rural areas. There is a need to restore and enhance the meteorological observational network (both conventional and automatic), Hydrological and Monitoring Stations in flood affected areas. The flash flood forecasting system needs to be improved. Regional flood forecasting centers need to be established in KPK, Sindh and Balochistan provinces. Radar services need to be strengthened to give radar coverage to the whole country. The decentralization of hazard forecasting will facilitate the dissemination of information to remote rural populations.

- » Watan Cards was a successful model and should be replicated in future emergencies ensuring the inclusion of vulnerable groups, proper resourcing of the registration authority like NADRA, speedy grievance redressal system and accessible ATM machines.
- » Targeting vulnerable affectees should be a priority as beneficiaries differ in their needs and capacities, which have to be addressed.
- » Long term capacity building, knowledge management and education should be planned to develop a robust, integrated and interdisciplinary approach to flood management. Relevant research, training, education and capacity building need to be undertaken. These includes training government officials and NGOs on flood risk management and relevant new technologies, as well as producing technical experts and strengthening integrated flood risk management education via a curricula for Pakistani tertiary educational institutions, and partnerships with international universities and institutions. Besides long term plans, the capacities of flood management agencies need to be enhanced in the short run.
- » Communities also need to be trained and made better aware of disaster response and their role as first responders. Awareness campaigns should be conducted regularly to educate communities in modern emergency response practices. This involves public information dissemination, education, radio or television broadcasts, use of printed media, as well as, the establishment of information centres and networks that advocate community participation.
- » Locals affected by a disaster are better

equipped to propose effective solutions to their problems, using indigenous capacities, practices and knowledge of the local culture etc. Their input needs to be systematically solicited through participatory rehabilitation models not only in the later stages but right at the outset; during rescue, relief and early recovery. Among other things, local practices and transport mechanisms should be leveraged to benefit affectees during the relief phase, and beyond.

- » The Government needs to consider development of a national catastrophe risk financing strategy which could rely on reserves to finance frequent but not severe hazards; contingent credit facilities to finance the lower layers of risk; and, insurance or catastrophe bonds to finance the upper layer of risk. The strategy would also need to envisage steps towards development of a catastrophe insurance market.
- » A central repository of all flood related data needs to be maintained. From forecasts and damage assessments to reconstruction plans, all information should be readily available to primary stakeholders. There should be standardized methods of recording data so that there is consistency and uniformity for ready reference and easy comprehension.
- » Any new construction permitted in the flood plain should be flood proofed to reduce future damages. Building codes should be developed that minimize flood damages by ensuring that beneficial uses of buildings are located above the design flood elevation.

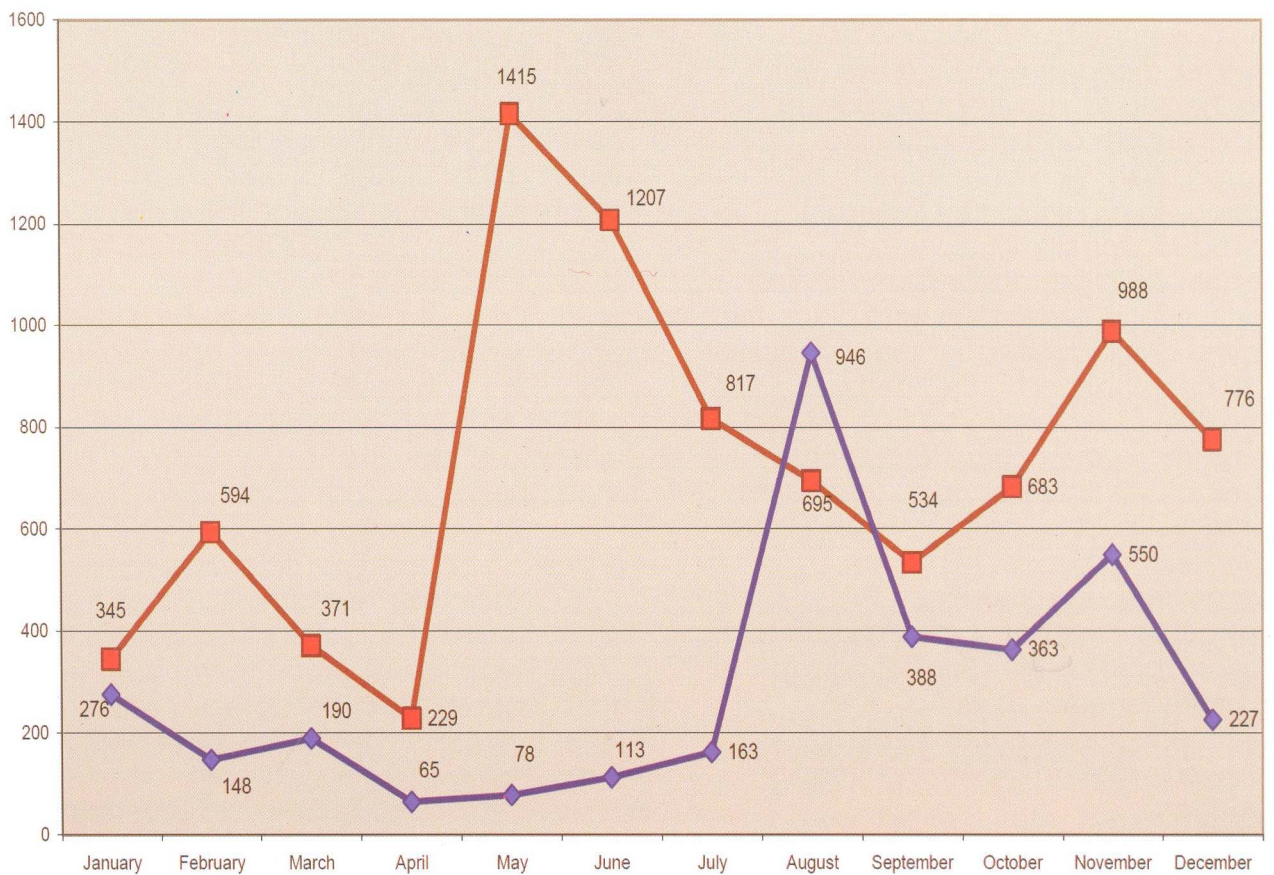


IDPs Crises 2008 – 2009; Are we Prepared for the Next Crisis?

Post 9/11 and worsening world affairs have triggered a gradual deterioration of the law and order situation in the region and the country as a whole. The volatile and delicate situation created by manmade disasters and natural disasters combined have resulted into internal migration of colossal proportions. Examples are floods, earthquakes, military offensives etc. Millions of people have become internally displaced during different times in last 10 years.

All these disasters have resulted in large numbers of people losing their lives and livelihoods in the midst of considerable damage to physical and social infrastructure. To understand the how much destruction such disasters cause the following graph illustrates the casualties as a result of military conflict in KPK and FATA between 2008 and 2009.

Casualties in the Conflict in KPK and FATA 2008-2009



An assessment of the socio-economic conditions of IDPs counted a total of 6.3 million food-insecure people, of which 1.3 are considered to fall into the severe category, putting their lives at risk. The total estimated cost of the damage caused to various sectors in KPK and FATA is given below:

- » Education: US \$38 million
- » Health: US \$10.36 million
- » Housing: Approximately 11,800 houses were completely destroyed and an equal number were damaged to various degrees, leaving behind a reconstruction bill of US \$ 82 million.
- » Damage to Physical Infrastructure including Energy, Transport and Water and Sanitation: US \$ 42 million
- » Agriculture Sector Losses: US \$ 692 million
- » Private Sector Losses: US \$ 11.50 million

Although the frequency and intensity of operations and subsequent backlashes in the region has subsided, the crisis is far from over. The humanitarian community scrambled to alleviate the sufferings of millions of internally displaced people in the country. Cash based assistance was extended by the Government of Pakistan and development partners, in the form of grants. By mid 2009, approximately US \$ 29 million had already been disbursed to over 145,000 families. In June, over 20,000 metric tonnes of food were distributed to IDPs. Besides emergency makeshift camps to accommodate IDPs, support was extended to hosting families, in addition to housing reconstruction projects. To prevent the outbreak of epidemics and meet the immediate healthcare needs of IDPs, humanitarian aid agencies responded by distributing purifying aqua tabs, and conducting anti malaria spraying operations and multiple vaccination campaigns. 180,000 children from South Waziristan were vaccinated against measles, and just over 50,000 received polio vaccinations. In the education sector, over 4,800 schools were occupied by IDPs across the hosting districts. As of October, PRCS did not have access to South Waziristan, but provided supplies to meet the needs of local doctors. The Pakistan Red Crescent Society in collaboration with other partners and MPs devised a rehabilitation plan to include construction of public buildings in the affected areas, livelihood support to

the victims and food packages to returning families.

PRCS deployed disaster response teams, trained volunteers and staff for the camp management, healthcare teams, water and sanitation groups and people working on its psychosocial support programme (PSP). By mid 2009, PRCS had provided assistance to 120,000 IDPs at its six tent villages in Dir, Malakand, Swabi and Risalpur. The figure rose to include 400,000 IDPs in nine camps. Thousands of returning IDPs were provided food packages. Rs. 700 million was allocated to support victim families for three months. Since August 2008 healthcare workers have treated 130,627 patients in all camps and people living in nearby communities. PRCS and ICRC engineers also laid water and sanitation pipelines to provide clean drinking water to IDPs. The PRCS also constructed 550 latrines and 181 showers rooms. Hygiene promotion programme was also devised to ensure that victims receive maximum benefit from the provision of services.

Myriads of humanitarian aid organizations mobilized human and financial resources to address the plight of thousands of internally displaced people as a result of the precarious security situation in KPK and FATA following military operations. The response was commendable and continuing reconstruction efforts also merit recognition. However, lessons learnt during the course of emergency response need to be collated and analysed to enhance our capacity, as a nation, to deal with humanitarian crises of this kind.

At the PRCS National Conference on Mega Disasters of Pakistan, a working group discussion was organized to identify valuable lessons learnt during the 2008-2009 IDP Crisis and to develop a plan to better manage Internally Displaced Persons as a consequence of natural and manmade disasters in the future. A group of over 30 delegates, from the Pakistan Red Crescent Society, the German and Turkish Red Cross and the International Federation of the Red Cross/Red Crescent Societies; as well as, representatives of NGOs/INGOs and humanitarian aid organizations; government officials and retired officers of the armed forces; all gathered to discuss the challenges posed by massive displacement of people as a consequence of military operations in some

parts of Pakistan. The session was mediated by Mr Azhar Hussain, an academician from Hamdard University, Islamabad. The outcomes of the discussion have been presented in some detail below:

Lessons Learnt

- » Unmet funding needs plagued humanitarian aid organizations scrambling to alleviate the plight of the IDPs. By mid-October, eight of the 11 clusters were funded to less than 50 per cent of their requirements under the Pakistan Humanitarian Response Plan (PHRP).
- » It turned out to be an excellent strategy that all internally displaced persons, of the 2008-09 crises were required to register themselves as IDPs. Having a criterion helped consistency of the effort. National Database and Registration Authority's database and its related technological capacity allowed the government to register eligible beneficiaries electronically. Leveraging existing information and technological capacity to provide relief in the wake of one of the largest man-induced IDP crises in Pakistan proved successful.
- » The registration process was not without its drawbacks. The verification procedures did not recognize many female-headed households (women in remote areas do not have NI Cards), while those who had lost their ID cards were unable to register to receive their food entitlements. In addition only those from areas deemed affected by the conflict were eligible to register as IDPs, creating a protection gap for other vulnerable groups.
- » The IDP crisis spawned by military operations created a precarious security environment thereby discouraging foreign nationals, working for international aid organizations, from traveling freely in the course of relief work. The operational cost (in terms of threat to life) for international organizations increased manifold and field work was thereby restricted. By November 2009, in South Waziristan, security restrictions meant that only local NGOs were granted non-objection certificates to provide humanitarian relief in DI Khan and Tank (OCHA, 19 October 2009). Activities of international agencies were limited by increasing security constraints outside conflict areas for instance after an attack on its headquarters in early October, the World Food Programme (WFP) briefly shut down its 32 food hubs across KPK.
- » The donations were made through clusters which meant it took more time for the money to reach implementing partners.
- » Lack of experience in handling IDPs meant



Lt. General (R) Nadeem Ahmed Former Chairman NDMA, Keynote speaker and Chairman discussion group IDP crises

that there was no uniformity in camp management. International humanitarian standards for camp management were not implemented and manpower was not trained to manage camps in a resource efficient and judicious manner.

- » Vulnerable groups were not supported by suitable staff members as this aspect was not planned well. Female-headed families and women even in camps were generally not approached separately through female staff either at the registration or assistance stage.
- » Not selecting appropriate camp locations meant some IDPs lacked clothing appropriate for the weather etc. Such glaring examples of oversight not only made the IDP crisis management more expensive but also less effective in terms of meeting the needs of the affectees.
- » There was a failure to take into account the adverse psychological impact of the crisis on IDPs, who were forced to leave their homes and social network. Medical assistance extended to affectees did not include psycho-social counseling for IDPs living in camps and host communities. This exacerbated their mental condition, making it very difficult for them to function normally away from their homes and subsequently return to their native areas.
- » Incidents of the law and order situation getting out of hand in some camps were noted due to ill planning.
- » Communication gaps existed amongst the govt. agencies, NGOs, INGOs and international aid workers due to not having a centralized information centre.
- » Coordination at the provincial level between government machinery and NGOs/INGOs was effective whereas, coordination between field workers and district administration was poor.
- » Cash cards worked successfully as verified IDPs received cash cards with which they could withdraw money and buy the items they needed the most.
- » In some conflict areas, the displaced population was encouraged to return to its original place of domicile in 2008 and 2009, even before the areas had sufficiently stabilized. In many cases, returning families were forced to flee their native areas more than once, after realizing that the security situation had not improved substantially. This factor resulted into

dissatisfaction of large number of IDPs.

- » Volunteers and staff did a tremendous job but yet there were instances of conflicts as there was no stress management policy for the volunteers/staff.
- » There were lack of livelihood rehabilitation programmes in camps and host communities.

Way Forward

- » It is pertinent to have a unified information system through which authorities and partners can communicate. This should be planned on a single format so that information can be controlled both qualitatively and quantitatively.
- » It is pertinent to have a unified information system through which authorities and partners can communicate. This should be planned on a single format so that information can be controlled both qualitatively and quantitatively.
- » Resource mapping exercise should be undertaken. Similarly during normal times specific areas should be earmarked for camping sites in case of IDP situation in all major districts. This information should be made available to all involved in disaster management.
- » Documentation and reporting mechanism should be improved so that post disasters, comprehensive reports can be compiled promptly with credible and valid information.
- » IDPs are dependent on donor agencies for basic necessities. This dependency can be replaced by engaging IDPs in economically productive activities that will help them become independent and also assist in their psycho-social rehabilitation.
- » Displaced women should be able to avail assistance and protection. Their specific needs must be met and assistance gaps addressed. Specific measures need to be taken to assist female-headed families. An enabling environment, including female staff, must be provided in camps to allow women to raise protection and assistance concerns. There is a pressing need to ensure that humanitarian action in Pakistan is more gender sensitive.
- » Displaced children should be shielded from the impact of displacement as much as possible, provided a child-friendly atmosphere and protected from trafficking



and other exploitative activities. Steps should be taken to assist children separated from their families and mechanisms provided to reunite them with their families. Child adoption and foster care regimes should be considered an imperative with hundreds of children being orphaned during the crisis.

- » A national disaster financing strategy needs to be developed to ensure that financial aid is readily available to manage disasters such as the IDP Crisis of 2008-2009.
- » Leveraging the existing National Identity Cards system run by the National Database and Registration Authority (NADRA) to provide relief in the wake of one of the largest man-induced IDP crises in Pakistan, proved successful. Humanitarian agencies are keen for the registration criterion to be changed from being area-based to needs-based. It is immaterial whether they are in camps or elsewhere, or whether they have been formally registered as internally displaced persons or not. An end-to-end registration procedure should be developed that facilitates those who do not have National Identity Cards or other identifying documentation.
- » Due to the precarious security situation, international aid agencies can continue to provide services through local implementing partners, for example training

partners on IDP protection, disease early warning systems and the identification of malnourished children etc. However, steps need to be taken by the government and security forces to make IDP camps safer places and secure the movement of aid workers and those deployed to undertake damage assessments, in conflict ridden areas.

- » Massive displacements of population should be pre-empted and prevented, mainly by early identification of threats, anticipation, continued assessment, close monitoring of risks and timely adoption of appropriate responses. In instances where displacement is unavoidable, efforts should be made to mitigate, as far as possible, the impact on the affected population. Effective measures must be taken to regularly assess vulnerabilities, manmade or natural, with a view to precluding displacement.
- » Social protection guidelines need to be developed and enforced to safeguard the basic human rights and interests of IDPs in Pakistan. Provisions must be made for individuals who have special needs and face additional vulnerabilities, because of their age, gender, religious belief, health conditions and physical and mental disabilities. A standardised protection handbook should be developed to identify the minimum entitlements relevant to

internally displaced persons that should be reflected in national laws and policies.

- » The cluster system caused unnecessary delays in the disbursement of funds. The international community should be able to provide direct financial support to frontline agencies, and implementing partners who are often best placed to carry out operations, on a more sustainable basis. Clusters ought not to be used as disbursement mechanisms for donor funding.
- » Affectees undergo various phases of displacement depending on the underlying cause of the crisis. IDPs should be assisted beyond immediate emergency response and relief operations. Their evolving and multiple needs should be assessed and catered to throughout the various phases of displacement.
- » International humanitarian standards i.e. those laid down in the SPHERE Project, need to be implemented in camps. There is a need to conduct orientation and training courses on Sphere Standards, the humanitarian charter and code of conduct.
- » Poor coordination between field workers and district administration necessitates the need to localize implementation and coordination of aid and assistance to ease administration and improve efficiency.
- » To better assess the needs of all segments of the affected population, statistics on internally displaced persons should be disaggregated by gender, age etc rather than being compiled in terms of number of families/households.
- » An inclusive decision making process should

be established to solicit the input of the affected population.

- » An effective grievance redressal mechanism must be available to all displaced individuals to register complaints.
- » Systematic psychological counseling needs to be provided to the affected population, both during and after a conflict-induced displacement and a natural disaster induced displacement. Psycho-social therapy should be an integral part of all healthcare interventions for IDPs in camps and host communities.
- » People from one community or village should be housed together in the same camp to allow them to maintain social bonds and community networks.
- » Livelihood rehabilitation activities should be organized in camps to reduce IDPs dependence on aid and make the transition back to an economically-independent and productive life smooth. Efforts must be made to revive economic prospects for the affected population returning to their hometowns in order to prevent recurrence of displacement. Inclusion of programmes for livelihood support, irrespective of gender, must be an integral component of the overall strategy. The needs of people with disabilities should also be addressed in the context of livelihood rehabilitation.
- » There is a need to promote empathy towards IDPs on a political and social level and to prevent ethnic tensions from undermining efforts to help the displaced.



Cyclones

Cyclone 2007 – 2010; Response and Capabilities.

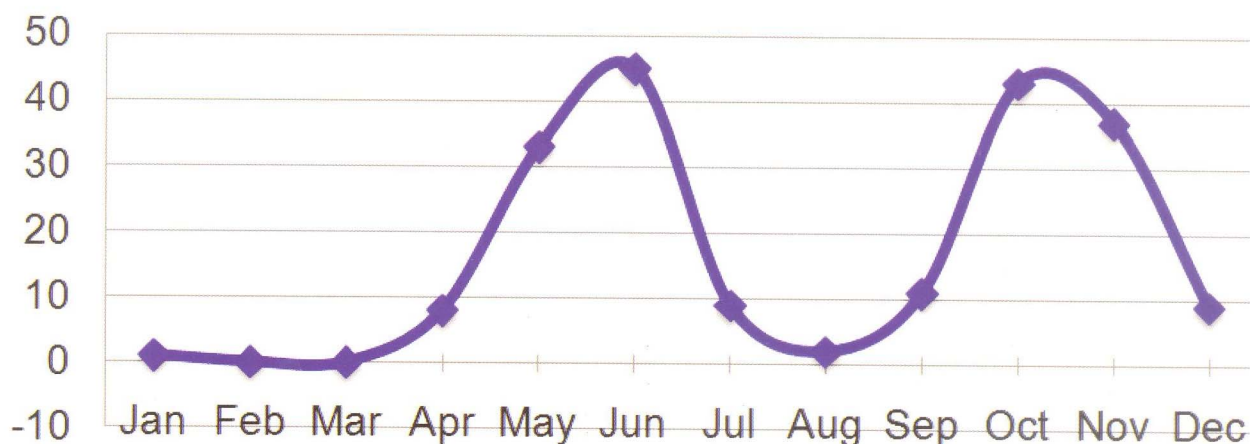
The word cyclone is derived from Greek language, meaning “Coiled Snake”. Tropical cyclones are among the most destructive natural phenomena. The impact from cyclones extends over a wide area, with strong winds and heavy rains. However, the greatest damage to life and property is not from the wind alone, but from secondary events such as storm surges, flooding, landslides and tornadoes.

Pakistan coastline is around 1000 km in length, and besides its strategic importance it is a major source of revenue and livelihood,

especially to local inhabitants. As a result of global environment change, Pakistan coastline in the recent years has become prone to frequent cyclone warnings. Over the years the frequency and magnitude of these cyclones has started to increase, with a few causing catastrophic damage. The winds preceding Cyclone Yemyin caused 142 deaths in Karachi and widespread damage to infrastructure. The cyclone of 1999 in Thatta and Badin districts wiped out 73 settlements and killed 202 people along with 11,000 cattle. Nearly 0.6 million people were affected.

Timeline of Recent Cyclones

Cyclone	Date	Remark
2A	1999	This cyclone is the strongest and most intense cyclone in the history of Pakistan. A category 3 hurricane, it killed 202 people.
Gonu	June 2007	Gonu is the strongest recorded cyclone in the Arabian Sea. It weakened after encountering dry air and cooler waters.
Yemyin	June 2007	Yemyin is the third deadliest cyclone in the history of Pakistan. It had a much wider imprint, spanning 26 districts of Balochistan and Sindh and affected 1.5 million people with around 730 deaths.
Phet	June 2010	High intensity Tropical Cyclone PHET hit the coastal areas of Oman on 4th June 2010 and then on 6th June 2010 it descended on Thatta, Badin and Bhanbor (Sindh). It was a near escape for the coastal areas of Karachi.



At the time of Yemyin the early warning system was not effective and government and relief agencies were not properly geared up to meet such eventuality. In the aftermath the rescue and relief operations were carried out in an ad-hoc manner, however the results were still satisfactory keeping in view the state of unpreparedness. Government, DMs and relief organizations rushed in to provide relief in terms of rescue, medical care and other supplies, which helped save lives.

Among other relief organizations, PRCS' intervention was in shape of providing 2640 families with non-food items along with 13000 food parcels. PRCS also strategically located six mobile health teams, treating approximately 14000 patients. Based on lesson learnt, during the Phet cyclone, PRCS deployed health teams including lady doctors besides provision of NFI in Gwadar and Pasni. Over 1000 affected families were provided relief.

Lessons Learnt

Cyclone Yemyin was an eye opener and compelled DMs to initiate the process of addressing cyclone related disasters. The factors that improved in case of Phet cyclone were a well advance early warning system, visualization of the intensity of disaster, improved interagency coordination, some level of information sharing and awareness created among the community.

The areas that still require improvements based on the Phet experience are highlighted as; lack of understanding of warning, lack of decision for evacuation, over or wrong estimations, evacuation was conducted by unorganized and less skilled staff, operational coordination

was lacking, M&E was nonexistent and gender needs were not properly addressed.

This working Group Session was moderated by Barrister Waqqas Mir and Mr. Adnan Shah (Development Sector Consultant), attended by over 20 delegates who deliberated and shared the following lessons learnt and proposed the way forward.

- » Cyclones tend to occur in May-June and then in late September / October and November, before or in the aftermath of flood season.
- » There are serious gaps in disseminating early warning to vulnerable communities.
- » Traditional early warning system needs to be improved.
- » Almost all coastal areas of Pakistan have unprotected settlements. The general structure of houses is very poor thus making it more vulnerable to disaster.
- » Ignorance of the local government of these unauthorized settlements, absence of Disaster Preparedness measures in the community's development programs and non-reliance on local capacities are acting as an agent to disaster and increasing vulnerability levels.
- » Poor often find themselves excluded from a place at the negotiating table, so their needs and livelihood constraints are not taken into consideration when policies are made.
- » Widespread damage and loss of life occurs due to high winds preceding cyclones, thus requiring a comprehensive strategy for rehabilitation.
- » Absence of cyclone mitigation works or cyclone shelters in the vulnerable regions.

- » No integration of cyclone response plans in community development plans.
- » The general perception regarding warning system is that it can only be established with huge amount of money and hi-tech communication equipment. Therefore promoting local / manual warning system needs to be promoted and this can only be achieved by establishing a sustainable "Local Warning System" through harvesting, extracting and processing natural resources of the Community with a stark choice of "Change or Die".
- » In the past, the DM efforts have been done in shape of relief only, without community participation, perhaps due to this, the expectancy and dependency factors may have led communities to become over-dependent on governmental assistance, thus eroding community self-reliance. Hence, dependency on "Self-Help" by using local resources is the first lesson of Cyclone Preparedness program.
- » To use the community development plan as a tool of disaster preparedness plan and making the people realize that "every development of the community ultimately leads to disaster preparedness".
- » Well functioning DDMA in all districts is the need of the day.
- » PDMA and DDMA should be involved in all planning processes of the City /districts, other than preparedness/response efforts.
- » Disaster Management is not a seasonal subject but a concept of building culture of safety/resilient communities.

Way Forward

Each passing cyclone has put pressure on the government and relief agencies to enhance their capabilities in terms of early warning, rescue, relief and rehabilitation. A concerted effort by all concerned can pave the way for designing and implementing a concrete emergency plan, which makes certain that everyone concerned is prepared for 'Before, During and After' a disaster.

- » Improvements in early warning systems based on traditional norms and supported by simulation exercises with special considerations to gender and cultural sensitivities needs to be ensured.
- » Standard Operating Procedures and

Protocols need to be developed for contingency planning along with training of stakeholders. All relevant disaster management agencies should be equipped with skilled personnel. DMAs, District Government personnel, volunteers and relief workers should be provided with defined roles & responsibilities and properly trained on SOPs.

- » All available resources should be channelized for early warnings and information dissemination, inclusive of personal contact, mosques, sirens, flags, media, sms etc.
- » The public should be provided with literature and made aware of various signals or mediums as part of early warning and evacuation.
- » Planned and secure evacuation areas should be identified and pre-marked. Road and market access should be considered.
- » Operations require sustainable security arrangements, which need to be made part of the SOPs.
- » Detailed study is required of disaster prone area's topology and infrastructure, along with hazard mapping and threat analysis, plan early warning, evacuation and relief.
- » DP stock needs to be calculated based on assessments of all threats or eventualities. Special consideration should be given to gender needs.
- » An advance data collection and



Mr Kanwar Waseem Secretary PRCS Sindh and a Keynote speaker on Cyclones

assessment methodology needs to be devised and implemented with minimum standards.

- » There should be a single operational plan of DDMA and PDMA regarding disaster, which should also include management of relief organizations or individuals. PDMA needs to be provided with a resource center for professional inputs.
- » A mechanism based on interagency coordination needs to be developed for information sharing, pre-warnings, operational planning and gap analysis.
- » Community involvement needs to be ensured by having a risk management committee and DRR should be made part of the community development plan.
- » Cyclone disaster management needs

more fund allocation. Corporate social responsibility should be tapped for devising mechanisms between public-private partnerships to cover shortfalls.

- » Structural measures for mitigation of plan need to be implemented, such as mangrove plantations, building of water breakers etc.
- » NDM Act, 2010 envisages a National Task Force for managing and responding to natural disasters such as cyclones, these needs to be made operational.
- » A forum needs to be created for coordination between government and the media.



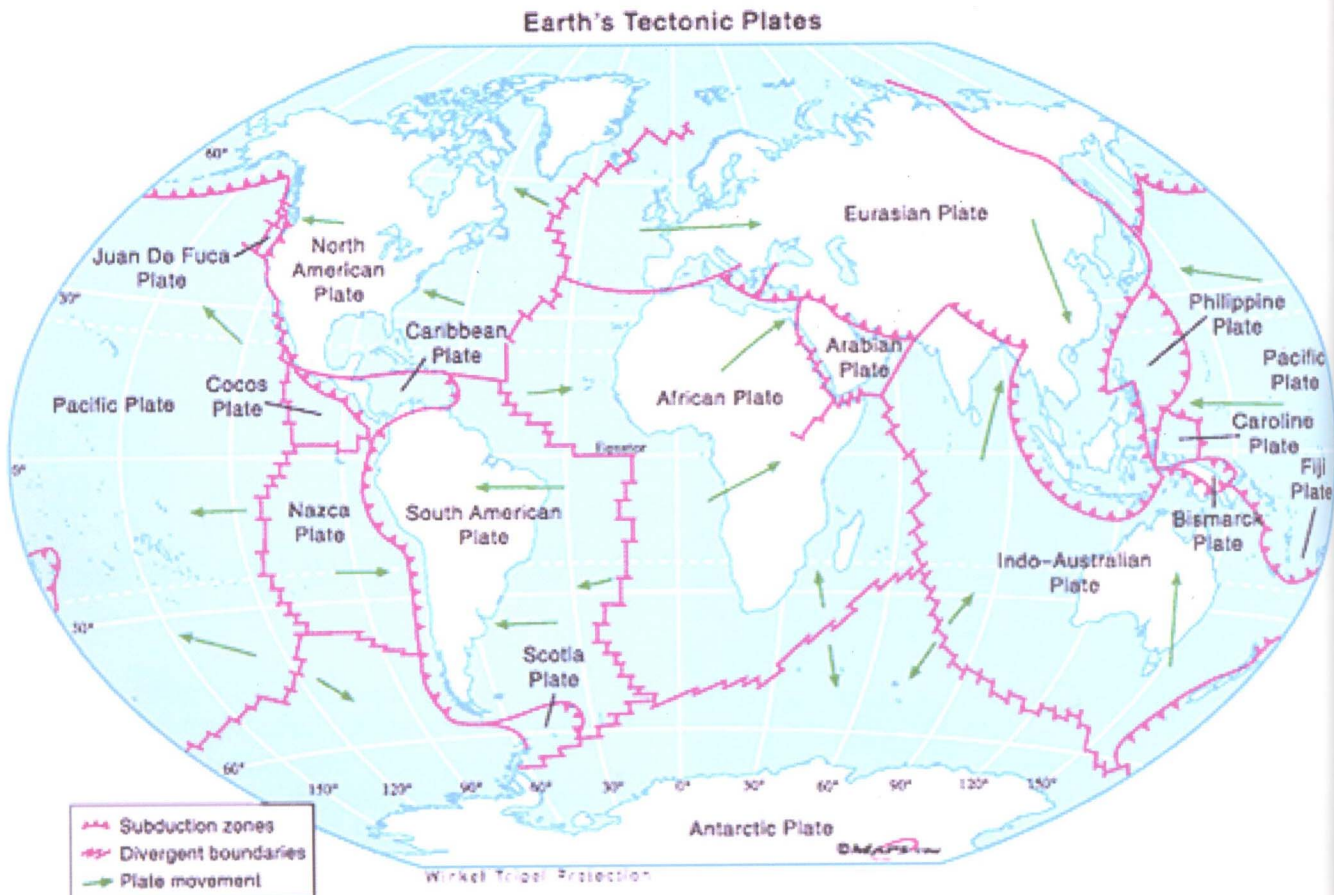
Various civil society organizations participated in the Q&A Session



Earthquakes

October 2005 Earthquake; Revisit Challenges and Future Responses

Before preparing future responses to handle earthquakes it is important to understand what an earthquake is. An earthquake occurs when two blocks of the earth slide past one another. The surface where they slide is called the fault or fault plane. The location below the earth's surface where the earthquake starts is called the hypocenter, and the location directly above it on the surface of the earth is called the epicenter.



It is still difficult to exactly predict the time or magnitude of an earthquake in advance. Though, there are ways to protect and prepare possible sites of earthquakes from severe damage, through the following processes; earthquake engineering, earthquake preparedness, household seismic safety, seismic retrofit (including special fasteners, materials, and techniques).

The Northern Areas and Chitral district in KPK, Kashmir including Muzaffarabad, and Quetta, Chaman, Sibi, Zhob, Khuzdar, Dalbandin, the Makran coast including Gwadar and Pasni in Balochistan are located in high or very high risk areas. Cities of Islamabad, Karachi and Peshawar are located on the edges of high-risk areas.

Date	Magnitude	Area	Casualties
28 Dec 1974	6.2	Hunza, Hazara & Swat	5,300 dead and 17,000 injured
8 Oct 2005	7.6	Muzaffarabad, AJK and some part of KPK	73,338 dead and 3.5 million homeless
29 Oct 2008	6.4	Ziarat	215 dead and 120,000 homeless
18 Jan 2011	7.2	Dalbandin	No human casualty except for two women who died of heart attack

In the wake of October 2005 Earthquake, due to its destructive magnitude Pakistan was caught unprepared. The death toll was over 73,338, injured were 1,28,309 and almost 30,000 sq foot area was affected. Major landslides and communication breakages hampered relief operations, thus creating one of the biggest humanitarian crises in the country. According to the World Bank estimates, around USD 3.5 billion were required for reconstruction and rehabilitation.

The response for rescue, relief, rehabilitation and reconstruction was articulated based on a 'Cluster Approach', which at the time was a new concept and never tested before. However, after the success of this approach, it is now being used as a model for global disaster management.

Pakistan mobilized all available government and private resources to deal with the crisis, however it lacked in specialized equipment and expertise, however international response was overwhelming. Over 40 countries covering every continent offered and provided assistance along with major multinational organizations and numerous international NGOs. The international assistance filled in the

gaps in terms of equipment and expertise.

2005 Earthquake, PRCS Intervention

- » Over 3.38 million people were the beneficiaries
- » Over 6.5 billion Rupees were spent to provide relief goods, medical assistance etc.
- » 189 relief trucks, including tents, medicines, blankets and food items
- » Sent 8 medical teams comprising of volunteers, doctors and paramedics.

The working group session, of more than 20 participants, comprising of PRCS, RCRC, I/NGOs and Governmental Agencies, moderated by Mr. Anwar Ejaz (Head of KM Punjab Group of Colleges/ADB Consultant), treaded on the following lessons learnt and brainstormed on the appropriate way forward.

Lessons Learnt

- » In earthquakes early warnings are not very effective because of very short response time, which is in seconds. Most earthquake prone areas in Pakistan have very difficult terrain; with inefficient communication system therefore early warning of any disaster is a challenge in these areas.
- » Early warning systems to detect earthquakes were nonexistent. Public awareness of the risks and measures to mitigate these, in case of mega disasters was never undertaken. No simulation exercises or appropriate actions to be taken in case of earthquakes were ever communicated to the masses.
- » Numerous Challenges were faced, as there was institutional vacuum, dysfunctional civil administration and lack of interagency coordination.
- » Handling mass casualties became a huge issue and catastrophes of this magnitude generally take place in extremely inhospitable terrains making the rescue and relief effort extremely difficult.
- » Any disaster of this magnitude results in IDPs. In this case it became an enormous undertaking, and realization to plan this aspect took time, which resulted in loss of life as well as hurt the confidence of the affectees.
- » Dealing with vulnerable groups is a big challenge in any eventuality but it was more cumbersome in case of earthquake 2005 as we were not trained to handle this aspect.
- » Breakdown in communication and destroyed road network made it impossible to react quickly. In the absence of an adequate national database that contains information about demographics, psychographics and behavioral information of the population hampered relief and rescue efforts.
- » It helped the rescue and relief operation as leadership role was given to one organization; Federal Relief Commission (FRC) which was given full mandate, political support and all other entities including the armed forces contingent were asked to work under the same umbrella.
- » No matter how prepared or equipped disaster management entities are, disasters of this magnitude cannot be handled without international monetary and physical support.
- » The Nation became united as during natural disasters it is easier to create a unified approach.
- » Food and water shortage is one of the key considerations in disasters such as 2005 earthquake.
- » Numerous types of social problems can



Lt. General (R) Farooq Ahmad Khan Former Chairman NDMA, Keynote speaker and Chairman discussion group Earthquakes

prop up after such mega disasters unless vulnerable groups are not looked after appropriately.

- » If health, food and shelter needs are ensured relatively closer to affected areas, affectees tend to stick to their local environment.
- » Media is an extremely powerful medium but coordination with media was initially weak and caused panic in some cases.

Way Forward

- » Technology needs to be acquired for an effective early warning system for earthquakes.
- » Government agencies should be having seismic surveys, data about fault lines & epicenters and identify earthquake prone areas and try to be ready for any disaster anytime.
- » Volunteerism should be encouraged and supported and if required necessary legislation should be enacted to protect livelihood.
- » Disaster Management is a devolved subject, therefore provincial authorities right down to lowest level should invest in the capacity building. NDMA should reinforce them.
- » Building codes need to be implemented to minimize the damages.
- » Keeping in view the situation of affected areas, the packaging and composition of relief goods should be ensured. Standards should exist for packaging needs for different situations.
- » Package weight and size should be reasonable enough so that delivery could be possible in difficult terrains.
- » Stockpiling is needed at all strategically identified areas for timely mobilization of resources.
- » Proper supply chain, delivery channels and mechanisms need to be developed.
- » Capacity of NGO and local organizations need to be enhanced for correct sectoral assessment.
- » To avoid duplication, assessment should be shared with all organizations through Disaster management system in vogue.
- » All civil society organizations through their respective forums should share the assessments with all respective stakeholders for better response. There should be a medium through which real-time information is accessible to all stakeholders.
- » Orientation sessions should be conducted for international aid workers to orient them with local sensitivities to avoid confrontations and ill feelings. A written code of conduct document would help their safety matters.
- » For effective contingency planning, proper and reliable data about demography, infrastructure, geological information, hospitals, schools and population is needed. Most of this data is available with different govt agencies including NADRA, it needs to collated and made available to relevant agencies through a central web portal maintained by NDMA.
- » Resource mapping of civil society organizations, INGOs and international aid organizations need to be done. Similarly INGOS and other agencies must share their capacities with national authorities for better coordination.
- » In case of mega disasters media should be embedded with the DM Team. They should be briefed on daily basis and made to realise that they are an essential partner.
- » In the advent of a mega disaster IDPs is a sure thing. A comprehensive mapping exercise should be undertaken for each major city facing danger of earthquake in Pakistan. Areas should be earmarked for creation of camps in peace time and this document should be updated biennially. This document should be made available to all disaster management entities for better coordinated effort.
- » The NDMA's role should be outlined clearly and disseminated regularly to the general population.
- » Good decisions are made on basis of quality of available information. Methods and processes should be derived that help in collection of valid, reliable and up-to-date Information.
- » Credibility plays the most important role in attracting local and international donors. Good governance and strict checks & balances are needed. Correct facts and figures need to be collected and disseminated to have confidence of donors. Multi-tier audits and M&E mechanism should exist in all organizations.

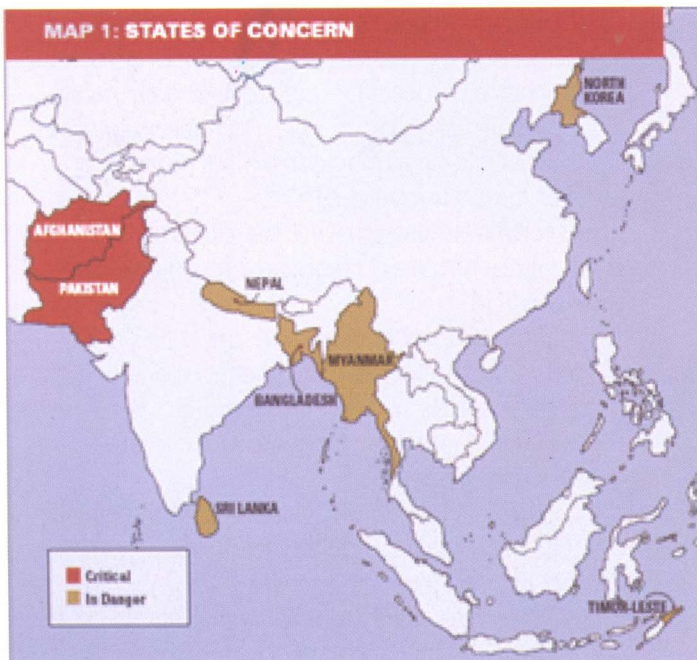


Unpredictable Internal Security Environment

Unpredictable Internal Security Environment-Response Capacity

This decade has seen the worst security crises in Pakistan's history, displacing millions of people and severely disrupting lives, livelihoods, and the provision of public services. Since 2006 over 200 terrorist attacks have killed and injured scores of people in Pakistan and an escalation trend is predicted towards violence and security situation in Pakistan in the face of May 2nd developments.

According to Fund for Peace report 2010 security situation in Pakistan has been placed as "Critical". Pakistan has been placed vulnerable on all 12 indicators:



According to the Fund for Peace and Foreign Policy 2010 Failed States Index, at least one state in each of the Asia Pacific's sub-regions ranks alarmingly high on several of the following indicators:

Social

1. mounting demographic pressures
2. massive movement of refugees or IDPs
3. vengeance-seeking group grievance & paranoia
4. chronic and sustained human flight

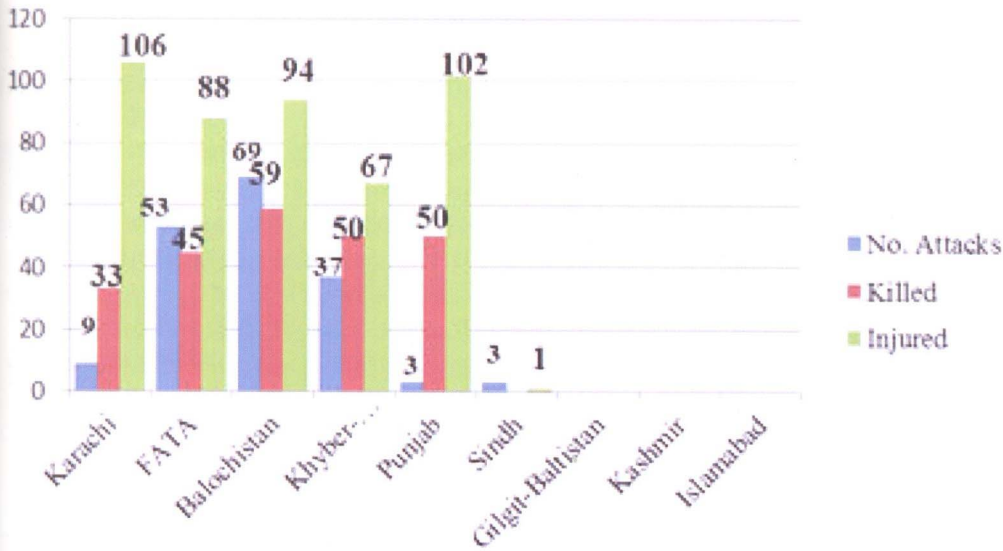
Economic

5. uneven economic development along group lines
6. sharp and/or severe economic decline

Political

7. criminalization and/or delegitimization of the state
8. progressive deterioration of public services
9. suspension or arbitrary application of the rule of law & widespread violation of human rights
10. security apparatus operating as a "state within a state"
11. rise of factionalized elites
12. intervention of other states or external political actors

According to Pakistan Security Report (April 2011) by PIPS (Pakistan Institute for Peace Studies), no let up in violence has resulted in Pakistan's security situation showing no signs of improvement. The following graph shows overall unpredictable security situation in Pakistan during the month of April.



This session was mediated by Prof Dr Rauf-I-Azam, Director PMAS-AAU, and the delegates comprised of embassy personnel, military officers, international and national NGOs, RCRC movement partners and PRCS staff. The delegates divided unpredictable security into three broad classifications; terrorism, crime in general and road & workplace accidents. All these classifications have seen an upward surge in the recent past which essentially means a "mega preparedness plan and response capacity" to tackle mega disasters. The conference participants were resolute in supporting the chairperson's remarks on manmade disasters in Pakistan as the most crucial and hence enhancing the response capacity of all entities involved.



Lessons Learnt

Mega disasters generally share the same characteristics; huge impacted areas, extremely large affected populations and huge economic loss. Effective disaster management requires preparedness. Preparedness and improvisation are central foundations of emergency management which is a continuous process. It is an educational activity based on knowledge and can only evoke appropriate actions if handled in letter and spirit. Some notable lessons learnt are:

- » Humanitarian efforts are always full of challenges but in an unpredictable security environment like ours, Humanitarian organizations are forced to take a security escort which affects their principles of working independently. At the same time it increases the operational cost of a rescue, relief or rehabilitation effort. It was noted that more funds have to be spent on security rather than relief work.
- » In an eventuality the first casualty is always communication breakdown. This causes panic and in most cases people turn to media sources for information. Some quarters in our media sensationalize these events out of proportions causing more panic.
- » Most humanitarian organizations involved in disaster management in Pakistan are donor dependant. Whereas post disaster, donor's funding transfer mechanism uses time. This dependency means that their efficiency and effectiveness to handle a mega disaster is reactive rather than proactive which reduces their effectiveness and swift action in handling unpredictable disasters.
- » Local communities are not trained to handle relief assistance, in a majority of cases, they cause more harm than benefit. These secondary events can be referred as "disasters within the disaster."
- » Natural disasters and manmade disasters are different in their interpretations by people of Pakistan. Natural disasters bring the nation together whereas, manmade disasters cause mixed emotions hence making a unified approach difficult.
- » Not knowing how to prioritize the victims during rescue and relief effort has been a serious impediment.
- » A useful method before enacting any disaster response unit is to carry out a baseline study or atleast a pilot project. The Lahore Pilot project 2004 in case of 1122 has been the enabler in transforming them from an ambulance service to a comprehensive pre-hospital Emergency Management System.
- » To plan and implement a disaster response strategy, qualification procedures to determine magnitude of disasters on scales of; small, medium and large were found useful for developing resource engagement protocols. In case of small scale sole responsibility was with emergency services (ES), for medium scale responsibility was shared by ES and Community Emergency Response Teams (CERT) whereas, in case of large scale disasters ES & CERT as well as Army shared the responsibility.
- » A compendium of good practices developed by some humanitarian/disaster management organizations has saved time and resources for others, but it could only be beneficial, if it is updated and is available through open source medium.
- » Hazard mapping for risks, volunteer base as well as strategic stock piling of relief goods in disaster prone areas has been a neglected area that has hampered performance in almost all major disasters.
- » Disaster management is a multiple entity operation and in some cases due to lack of role clarity and engagement protocols, performance has suffered and efficiency has been undermined.
- » Managing unpredictable security disasters in Pakistan as an independent program does not attract enough funding from the government as well as the donors whereas; it is the most volatile area.

Way Forward

The delegates of this working group discussed the way forward to be designed into three tiers; pre-emption, emergency response ability and execution and post disaster strategies. Delegates supported the views of Margareta Wahlström, United Nations Special Representative of the Secretary-General for Disaster Risk Reduction who told journalists in Islamabad on 22nd Feb 2011 that Pakistan faces massive future losses in lives and livelihoods by not investing now in mechanisms that mitigate

risk. Pakistan is at continued risk to disasters, whether manmade or triggered by natural hazards.

- » Government should enhance the capacity of organizations such as PRCS through enhanced budgetary provisions to improve their sustenance towards handling disasters that are occurring much more frequently than ever before.
- » Besides the negative impacts of disasters to life and properties, they present opportunities to learn from past mistakes. This is attested by the evolution of various safety and emergency laws, acts and regulations regarding disaster management. It is highly recommended to hold a yearly two day conference on the subject.
- » In case of a disaster, media's role becomes even more important. In reporting and analyzing these events some media houses were highlighted as playing negative role. This poses a potential opportunity as well if each media house appoints one disaster coordinator to liaise with humanitarian organizations for dissemination of correct information.
- » Hazard mapping for risks, volunteer base as well as strategic stock piling of relief goods should be done. Cluster mapping of emergencies for all major cities of Pakistan should be done. Black spots for emergencies should be identified and disseminated to all concerned.
- » A comprehensive compendium of disaster specific good practices should be developed and continually updated. A body with representation of government, INGOs, MPs and donors should be formed to develop, oversee, update and disseminate this important document.
- » Results Based Management System (RBMS) linking inputs with outputs should be developed to increase donor confidence and bring transparency into donor funding usage.
- » A comprehensive disaster response strategy should be developed containing resource engagement protocols based on magnitude of disasters on scales of; small, medium and large. A clear explanation of each scale should be developed. These SOPs should be communicated to all relevant agencies for information and implementation. The strategy should also outline which entities would be required for each scale and how they may be



Dr Rizwan Naseer DG 1122 Keynote Speaker and Chairman discussion group Unpredictable Security Environment

engaged. This would ensure effectiveness of rescue and relief effort and also reduce chaos that generally surrounds manmade disasters.

- » Emergency services (ES) on the format of 1122 should be created with presence in all parts of the country.
- » Community Emergency Response Teams (CERT) should be established in all parts of the country. The budget for their training and development should be generated through creating long term partnerships with the corporate sector having CSR programs.
- » Interior ministry should play an active role to facilitate international humanitarian organizations in terms of their visas, security and general facilitation with law enforcement agencies.
- » Capacity of local NGOs should also be enhanced and their efforts facilitated. Also they should be on the information pool to receive all relevant information.
- » Unpredictable security disasters in Pakistan may be handled as an independent program. A swift and comprehensive funding campaign should be launched to

train and equip HR with specialized skills and latest technology to help save lives.

- » Disaster management bodies in Pakistan should consider and plan about special vulnerabilities and capacities of women with relation to disasters.
- » A forum should be created for regular information sharing it should meet at least twice in a year to share experiences of entities involved in managing manmade disasters.
- » A one week disaster management course should be developed for schools, colleges and universities for which funding should be generated through donor network.
- » A baseline survey should be undertaken to prepare a risk mitigation and disaster preparedness plan for unpredictable security based on 5 years, 10 years and 15 year projections.



MNA Syed Nasir Ali Shah in Q&A session, also seen are USAID top management and other diplomats

CLOSING CEREMONY

Conference Outcome: Highlights, by Chief Moderator, Engr Mansoor Malik

During the Closing Ceremony, on 18th May, 2011, the Chief Moderator, Engr Mansoor Malik presented highlights and a précis of the numerous recommendations that emerged from the five plenary discussions. His presentation was logically divided to cover recurring suggestions for a way forward, followed by disaster-specific lessons learnt and recommendations.

Addresses by Senior Executives of the PRCS, IFRC and ICRC

The Closing Ceremony also included the following.

1. A Closing Speech by Secretary General, Pakistan Red Crescent Society
2. A Closing Speech by Head of the Delegation, International Federation of Red Cross/Red Crescent Societies (IFRC)

3. A Closing Speech by Head of the Delegation, International Committee of Red Cross (ICRC)
4. A Concluding Speech by Chairperson, Pakistan Red Crescent Society (PRCS)

Chief Guest's Concluding Address

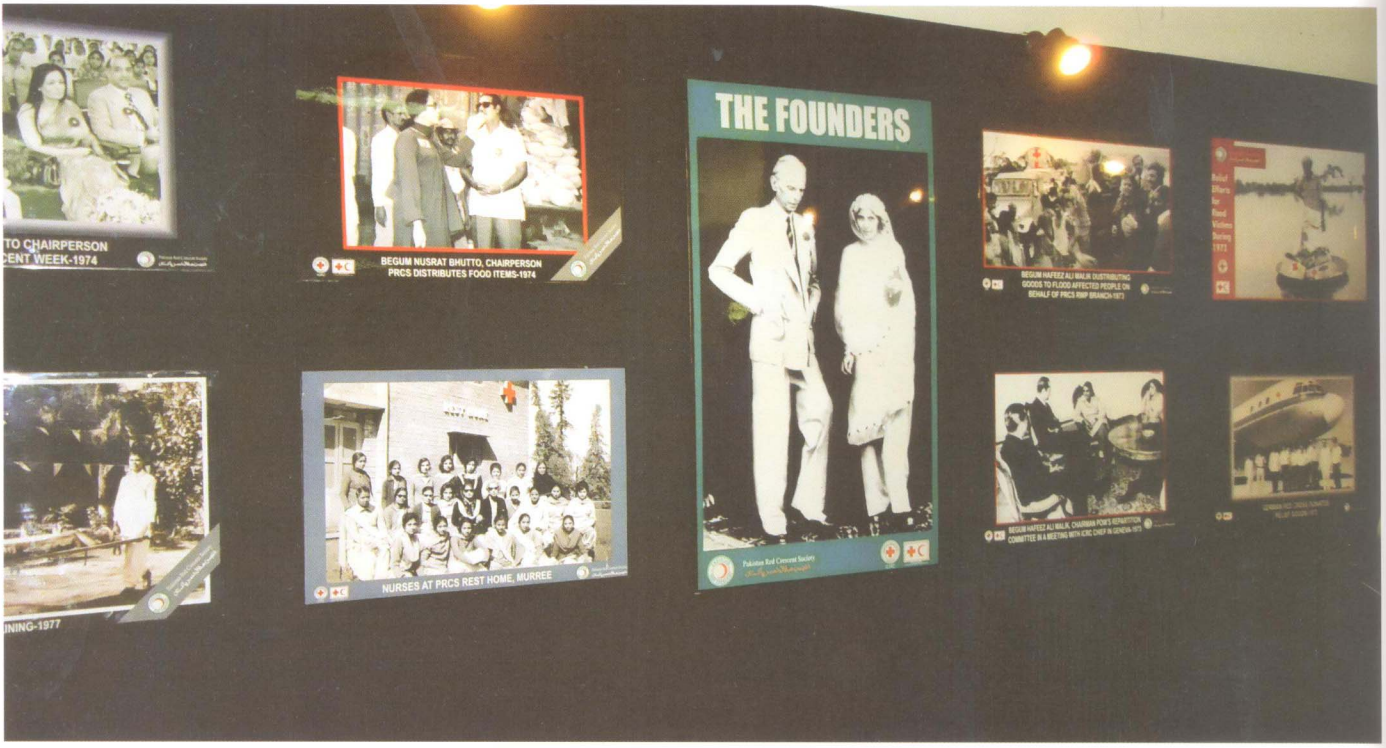
Governor Khyber Pakhtunkhwa, Barrister Masood Kausar graced the Closing Session as Chief Guest where he addressed the audience and congratulated them on having achieved the intended objectives and ambitious agenda of the 2011 National Conference. In his powerful speech he emphasized the need for resource-efficient and sustainable interventions to deal with the devastation wrought by disasters. He also appreciated Pakistan Red Crescent Society's initiative to host a multi-dimensional, lessons learnt conference on mega disasters of Pakistan and congratulated the organizers on its success.



Governor KPK Barrister Masood Kausar seen with Chairperson PRCS, Secretary General PRCS and Keynote Speakers

CONFERENCE PHOTO EXHIBITION

The PRCS also hosted an awe inspiring exhibition featuring photographs of its disaster response interventions in Pakistan and, the interventions of its sister organizations and Movement Partners across the globe. The exhibition drew a lot of attention to the Society's exemplary work in Pakistan following mega disasters.



APPENDIX

Monsoon Floods		
Chairperson		
	Names	Designations
1	AVM (R) Ateeb Siddique	Dir. Operations
Moderator		
	Names	Designations
2	Mr. Jamil Asgher Bhatti (IDREAM)	Chief Executive Officer

IDP Crises		
Chairperson		
	Names	Designations
1	Gen(R) Nadeem Ahmed	Ex-Chairman NDMA
Moderator		
	Names	Designations
2	Mr. Azhar Hussain	Director/Associate Prof. Hamdard University

Cyclones		
Chairperson		
	Names	Designations
1	Mr. Kanwar Waseem	Secretary Sindh
Moderator		
	Names	Designations
2	Mr. Waqqas Mir	Barrister
3	Mr. Adnan Shah	Development Sector Consultant

Earthquakes		
Chairperson		
	Names	Designations
1	Gen(R) Farooq Ahmad	Ex-Chairman NDMA
Moderator		
	Names	Designations
2	Mr. Anwar Ejaz	Head of KM (Punjab Group of Colleges)

Unpredictable Internal Security Environment		
Chairperson		
	Names	Designations
1	Dr. Rizwan Naseer	Director General Rescue 1122
Moderator		
	Names	Designations
2	Prof. Dr. Rauf-I-Azam	Director PMAS-AAU

Delegates**PRCS**

	Names	Designations
1	Brig (R) Muhammad Saleem	Secretary PRCS Punjab
2	Mr. Shafiq Ahmad	DMM
3	Mr. Yasir Manzoor	DMM
4	Mr. Zafar Bashir Bhutta	Volunteer Punjab
5	Dr. Irfanullah	DD Health
6	Dr. Haseeb Shaikh	PBHO
7	Mr. Agha Omar	DMM
8	Ms. Sumaira Qurban	Asst. Director Mkt & FR
9	Mr. Humayam Hassan Jalal	DMO
10	Mr. Hafizur Rahman	Volunteer
11	Dr. Sadaf Sardar	DD HIV
12	Mr. Riaz Dawar	AD Y&V
13	Mr. Shehryar Khan	DM Manger
14	Mr. Amjad Sohail	DMO Fata
15	Mr Shafiullah Khan	PPO
16	Dr. Asif Raza	Coordinator
17	Mr. Tufail Ahmed	Secretary FATA
18	Dr. Azhar Haleem	Director Health
19	Mr. Ali Hassan	Secretary KPK
20	Ms. Nadia Tabsum	PSP Specialist
21	Ms. Saira Zainab	YPE Officer
22	Mr, Manzoor Jan	Volunteer
23	Ms. Shaista Khattak	AD Tracing
24	Mr. Wasif Jan	Finance KPK
25	Mr. Aqeel Mughal	In charge IT
26	Brig. Saleem	Secretary Punjab
27	Dr. Muhammad Younos	PHO
28	Mr. Malik Naeem Ahmad	Member managing Committee Baluchistan
29	Dr. Haseeb Shaikh	PBHO
30	Mr Sandhraish Nisar	
31	Ms Asma	
32	Mr Sheraz	
33	Mr. Dawar Adnan Shams	DD Y & V
34	Dr. Bilal Afzal Minhas	AD BDC
35	Eng. Gohar Ali Shah	JD Construction
36	Mr. M. Atif Khan	DM Officer
37	Mr. Zuhaib Javed	Volunteer
38	Engr. Imran Siddique	Construction/Shelter Coord.
39	Ms. Asma Cheema	JD BDC
40	Mr. M. K. Achigzai	PRCS
41	Mr. Attiq Khan	PPO

42	Dr. Safia Ghufuran	Acting DHS
43	Dr. Khalid Qureshi	BHO
44	Ms. Marium Lodhi	AD Y&V
45	Dr. Riaz-ul-Haq	DD Training
46	Mr. M. Zubair Khan	Ex-ICRC Volunteer
47	Mr. Aqeel Mughal	Volunteer
48	Ms. Sara Naz	DD HR

RCRC Movement

	Names	Designations
1	Ms. Hildur Sverrisdottir (ICRC)	Multilateral Affairs Delegates
2	Mr. M. Mazhar-ul-Islam	Movement Coordinator
3	Saira Gulzar (ICRC)	Protection/RFL
4	Mr. Guillaume Pierrehumbert (ICRC)	WatHub
5	Mr. Govinda Prasad Dahal (ICRC)	Eco-Sec
6	Ms. Razmi Farooq (IFRC)	HD Coordinator AP Zone
7	Mr. Surein Peiris (IFRC)	HD Delegate
8	Mr. Abdullah Abbasi (TRC)	Deputy HoD
9	Mr. Asif Aman Khan (DRC)	Country Representatives
10	Mr. Raj Zafar (IFRC)	Cooperation Officer
11	Mr. Nasir Khan (CRC)	Country Representatives
12	Mr. Steen Frederiksen (IFRC)	Security Coordinator
13	Mr. Peter Iseli (Swiss RC)	Country Representatives
14	Mr. Michael O'Brien (ICRC)	Communication
15	Mr. Laurent Saugy (ICRC)	Protection/RFL
16	Mr. Andrea Lorenzetti (IFRC)	Shelter Delegate
17	Mr. Jaap Timmer (IFRC)	Recovery Coordinator
18	Ms. Donna Chanda (ICRC)	Cooperation Coordinator
19	Dr. Jamal (IFRC)	Health Coordinator
20	Mr. Kaan Saner (TRC)	HoD
21	Mr. Dirk Kamm (GRC)	Country Representatives
22	Mr. Atta Durrani (GRC)	Programme Manager
23	Mr. Qaswar Abbas (IFRC)	DM Coordinator
24	Mr. Haseeb Dar (SRC)	Admin Officer

NDMA/Government

	Names	Designations
1	Mr. Azizullah (M Envir.)	Urban Planner
2	Ms. Sehrash Mumtaz (ERRA)	Training Coordinator
3	Mr. Zaib Khattak (ERRA)	Training Coordinator

Military

	Names	Designations
1	Mr. Ibrar Ahmed	Colonel
2	Mr. Kamal Khalid	Major
3	Mr. Aamir Rashid	Major
4	Mr. Haris	Lieutenant Commander
5	Mr. Asif Ali	Lieutenant Commander
6	Mr. Muhammad Irfan	Deputy Director Maritime Affairs
7	Mr. Fayyaz Farooq	Colonel

I/NGOs

	Names	Designations
1	Mr. Bob Bongomin Jr (ACF)	WASH PM
2	Ms Katherin Lauer (US Aid)	Senior Humanitarian Advisor
3	Mr. Nisar Shah (OXFAM)	Wash Coordinator
4	Ms. Sumaira (PODA)	Programme Coordinator
5	Ms. Salma Khalid (NRSP)	Programme Manager
6	Mr. Salmanuddin (FOCUS)	Programme Officer
7	Ms. Abia Akram (Handicap Int.)	Programme Officer
8	Ms. Qurrat-ul-ain Rafi (Bardashat)	Chairperson Edu.
9	Mr. Abdul Ghafoor (FOCUS)	Programme Officer
10	Ms. Nasira Batool	Deputy Secretary
11	Ms. Qawar Aftab (Bardashat)	Member
12	Hafiz Shahid Hussain (Pak. Edu. Society)	Project Officer
13	Mr. Eliot E. Evans (US Embassy)	Liaison for NDMA
14	Mr. Sajid Iqbal (Helping Hand)	Programme Officer

So Others May Live

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