

**Response to Cyclone YEMYIN and Floods  
June – July 2007**

**Evaluation Report**



**National Disaster Management Authority**

**October, 2007**

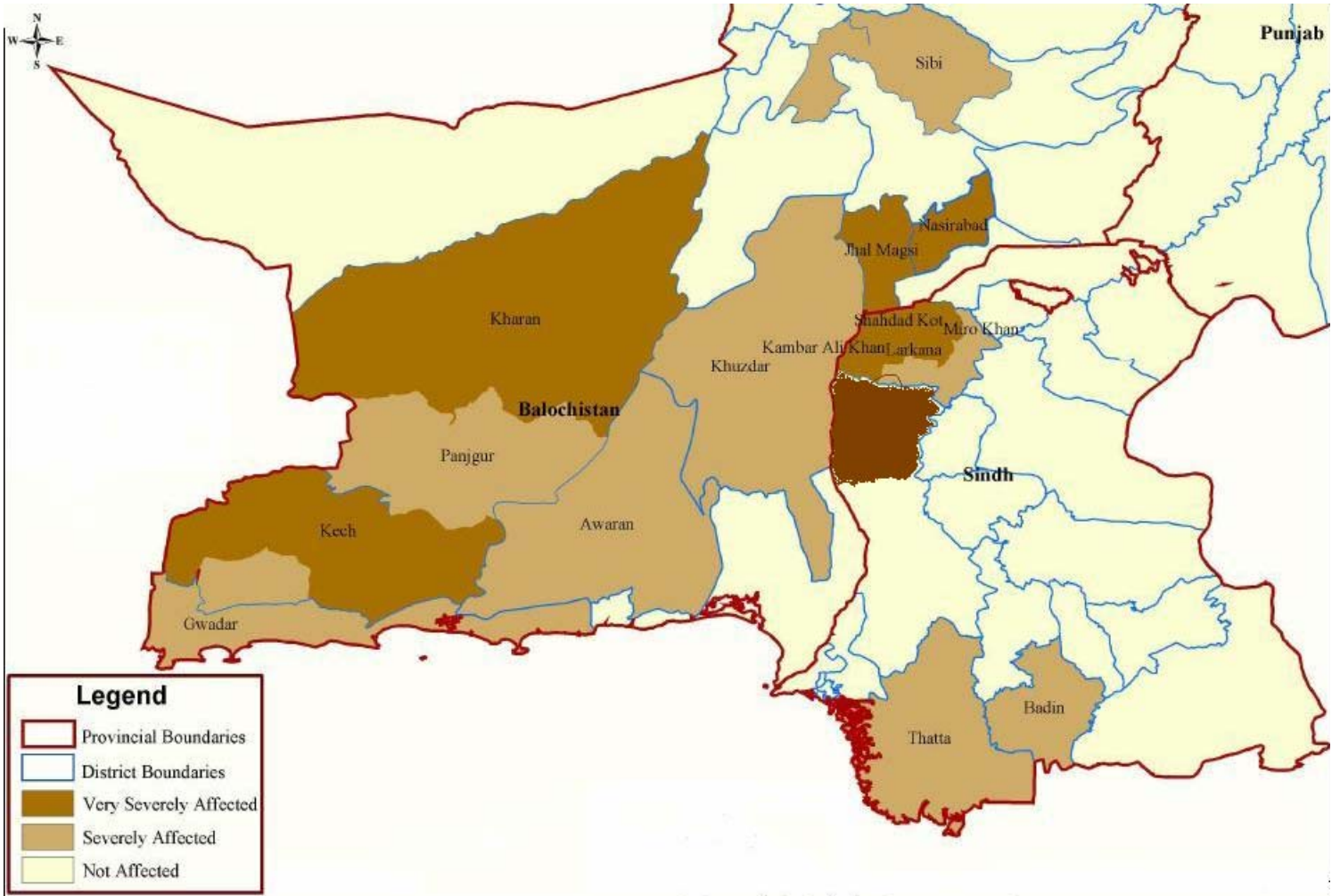
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## Acronyms

C&W	Communications & Works Department
CERF	Central Emergency Response Fund
DDMA	District Disaster Management Authority
DMT	Disaster Management Team
DRR	Disaster Risk Reduction
FWO	Frontier Works Organization
IASC	Inter Agency Standing Committee
IDP	Internally Displaced Person
IFRC	International Federation of the Red Cross
IOM	International Organisation for Migration
KPT	Karachi Port Trust
INGO	International Non Government Organization
MSA	Maritime Security Agency
NDMA	National Disaster Management Authority
NGO	Non Government Organization
NHA	National Highway Authority
NLC	National Logistic Cell
NRSP	National Rural Support Programme
NWFP	North West Frontier Province
NVM	National Volunteer Movement
PDMA	Provincial Disaster Management Authority
PHF	Pakistan Humanitarian Forum
PMD	Pakistan Meteorological Department
PRCS	Pakistan Red Crescent Society
RSP	Rural Support Programme
RSPN	Rural Support Programme Network
SAR	Search and Rescue
SOP	Standard Operating Procedures
TRDP	Thardeep Rural Development Programme
UNDAC	United Nations Disaster Assessment & Coordination
UNICEF	United Nations Children's Fund
UNRC	United Nations Resident Coordinator
USC	Utility Stores Corporation
WAPDA	Water and Power Development Authority
WASH	Water, Sanitation and Hygiene
WB	World Bank
WHO	World Health Organization

Map of Sindh and Balochistan



## Executive Summary

The changing weather pattern has given rise to frequent incidence of tropical cyclones along the coastal regions and flash floods in the mountainous north, northwest and southwest regions of Pakistan. In keeping with this trend, Cyclone Yemyin and ensuing floods occurred over vast tracts of south and central Baluchistan and adjoining regions of Sindh in late June and July in 2007. The disaster affected 2.5 million people in the two provinces, destroying habitats, social and physical infrastructure. Factors accentuating its scope are fragility of the communication infrastructure in vast but sparsely populated regions of Balochistan, development infrastructure accentuating vulnerabilities and risks, reliance on subsistence agriculture in hazard prone areas, near absence of local coping and early warning mechanisms and general lack of awareness with regards to risk management.

National Disaster Management Authority mobilised the national resource base to lead an effective response to the disaster in terms of its scale, timeliness and impact. Armed forces contributed very effectively in search and rescue operations and provided immediate relief through a massive air and ground effort. Parallel efforts went in early restoration of critical land routes that allowed resumption of food supply and shelter deployment. Government monetised relief by empowering those made vulnerable by the disaster. UN agencies, the larger humanitarian community and some friendly countries made valuable contributions.

Response to the disaster, nonetheless, revealed weak capacities of first responders: vulnerable communities and the district governments, and over reliance on the armed forces. Weaknesses in local governance, minimal local surge capacities and absence of early warning mechanisms for flash floods, Provincial Disaster Management Authorities being unable to fully accomplish their mandate are some of the issues that must be addressed. There is also the need to build capacities for post disaster assessments, introducing information management systems that will allow efficient matching of relief inputs with needs, logistic tracking systems, efficient coordination practices, and early identification of the vulnerable plus putting in place disaster impact mitigating strategies for them.

While incorporating risk reduction approaches for improving upon preparedness levels of the critical district and provincial tiers, recommendations seek to address the following areas. Build surge capacities and coping mechanisms of the first responders. Apply knowledge based approach to promote accountability and transparency by introducing response standards and assessment and operational monitoring practices linked to needs. Upgrade interoperability among multiple stakeholders through joint planning and situation relevant coordination practices. Also introduce process oriented benchmarks and crystallise SOPs for promoting uniformity in response. In the provinces there is a need to create organisational structures that can sustain multiple response functions and undertake early resource mobilisation.

Concerns of the most vulnerable should be addressed through early identification of their needs, and by promoting livelihood regeneration as a component of disaster response to create sustainable links with post response recovery and rehabilitation phase. For optimising capacities in disaster response promote operational synergies between local governments and the social sector. Similar efforts on a larger plane must forge multi-institutional links, between national stakeholders, UN agencies, Red Cross Movement and the international humanitarian system. Clearly, a strong advocacy focus must underpin these efforts for promoting stakeholders' ownership and fostering cooperation.

## Objective, Deliverables, Evaluation Parameters and Methodology

The evaluation focuses on the national response to Cyclone YEMYIN and floods in provinces of Balochistan and Sindh. Given the physical expanse of the affected regions and the prolonged and unpredictable realisation of the disaster spanning over a week, 23 – 30 June 2007, and the fact that monsoon generated weather systems prohibited rescue and relief operations during critical periods, the national response to the disaster was very impressive in terms of timeliness, scale, reach and impact. It was led by NDMA and its provincial and district affiliates, armed forces rescued marooned communities and provided post disaster relief and there were contributions from UN agencies, the humanitarian community at large and friendly countries.

The response, though, was essentially top driven and heavy on supply inputs with scarce inputs from lower tiers. Therefore, as its main focus the evaluation will frame recommendations to build capacities of the national disaster response system with regards to the critical provincial and district tiers. This will be based on review of response practices and structures with reference to Cyclone YEMYIN and floods, and also by factoring random assessments of IDPs and vulnerable communities.

The purpose of this evaluation, it follows, is to promote incorporation of risk reduction approaches by addressing weaknesses undermining disaster preparedness through capacity building of DDMA's and PDMA's, first and second responders within the national framework.

Main outputs are in the shape of recommendations meant to improve the governance capacity and institutional support for mounting major relief operations, making operational processes and methods consistent with needs, time sensitivity, and coordination and transparency challenges implicit in such operations. Defining basic standards and parameters governing disaster response, and measures aimed at addressing humanitarian considerations of the vulnerable. On a larger frame, the possibility of drawing public private partnerships in building synergetic capacities is explored. With a similar purpose, measures aimed at strengthening the coordination mechanisms between national authorities and the UN system / humanitarian community are identified. While having a disaster preparedness focus, the evaluation spans DRR considerations and response specific issues.

Please note that given enormous scope of the national response to a major disaster, this study is selective in its objectives and it aims at lending impetus to a capacity building process that will require many more inputs. Therefore, its worth lies within the defined focus. It may be noted that recommendations that define standards, processes and procedures for execution of disaster response have a universal application with regards to PDMA's, DDMA's and other national stakeholders. However, there are some structural recommendations that are specific to the agencies that were evaluated

The evaluation, therefore, draws from following parameters:-

- Response impact in meeting critical needs viz provision of shelter, food security, health cover, access to potable water and basic sanitation.
- Efficacy of Search and Rescue operations.
- Viability of coordination practices in both up scaling response and in its efficient dispensation.
- Effectiveness of operational processes in connecting response inputs to needs.
- Accountability and transparency intrinsic to response practices.
- Viability of early warning measures in saving human lives and mitigating disaster impact.
- Ability to affect surge in response through internal and external resource mobilization.
- Support to the vulnerable in meeting critical needs.
- Preparedness for response in terms of material support and suitability of human resource.
- Factoring early recovery considerations in response, restoration of livelihoods in particular.
- Structural adequacy of Provincial Disaster Management Authorities in meeting response challenges.

In contents the evaluation covers (a) the response, (b) summary of conclusions, gap analysis and recommendations, (c) evaluation of PDMA's Balochistan and Sindh, (d) evaluation of DDMA's Qambar – Shahdadkot in Sindh and Jhal Magsi and Kharan in Balochistan. Semi-structured assessments of some IDP and vulnerable communities are summarised, (e) detailed recommendations, (f) Logical Framework Analysis, and (g) annexures reflecting supporting data and information.

### Methodology

Description of response to Cyclone Yemyin and floods relies mostly on secondary sources. However, the evaluation study draws mainly from a field assessments carried out from 2 – 11 Sep 07, focusing on the response of PDMA's Sindh and Balochistan, and of district governments Qambar – Shahdadkot in Sindh and Jhal Magsi and Kharan in Balochistan. These are among the seriously disaster affected districts. Semi-structured assessments of some IDP groups and disaster affected communities yielded instructive conclusions. The evaluation also builds on an earlier study, "Evaluation of Disaster Response Agencies of Pakistan – Dec 2006"<sup>1</sup> which besides other aspects assessed disaster vulnerable districts and communities affected by the October 2005 earthquake.

### Balochistan and Sindh

Cyclone Yemyin made a landfall on the Balochistan coastline towards west on 26 June 07 after pouring massive inland rains. Flash floods were triggered as a consequence in three distinct regions: Makran comprising district of Kech and the coastal district of Gawadar; districts Kharan, Washuk and Khuzdar and most menacingly along the stretch of plains bordering Sindh known as 'katchi' which includes districts Sibi, Bolan, Jhal Magsi, Jaffarabad and Naseerabad. In all 23 districts of the province were identified as disaster affected, 11 as serious. Critical flood damages are summarised in [Annexure A](#).

The Province is traditionally vulnerable to prolonged spells of drought that last ravaged arid regions from 1998 – 2002 resulting in depletion of livestock, its marginal agricultural base and rangelands. Quetta, the provincial capital and north-western regions are vulnerable to seismic hazard, so is the coastline owing to the 'Mekran Fault line', which experienced a major tsunami in 1945<sup>2</sup>. Changing weather pattern off late has given rise to increasing incidence of precipitation. Some winters can be severe in triggering rain / snow based emergencies in the northern districts. Ongoing internal strife in some regions adds to complexities in managing natural disaster situations. Societal structure is tribal in its construction and the Province reflects weak social indicators with 22.8 % population living below the poverty line<sup>3</sup>.

The central basin of province of Sindh benefits from River Indus based canal fed agricultural infrastructure where bulk of population resides. Desert stretches to the east and mountainous Kirthar Ranges on the west constitute drought vulnerable arid zones. Like in Balochistan, these regions suffered immensely during the drought. The coastal regions are vulnerable to sea based hazards and cyclones that tend to recur in districts of Thatta and Badin. They are also vulnerable to seismic hazard / tsunami emanating from fault lines off Balochistan coast or the adjoining Gujarat state of India. Changing weather patterns, off late, are causing excessive rains in lower regions which inflict much damage to rural and urban economy and infrastructure making the poor more risk prone.

For traditional flood response along River Indus for which it gets adequate warning time, Sindh government has well developed plans and SOPs. However, this does not hold true for the flood water traversing through 'katcha' region east of Kirthar ranges, which is relatively rare. Owing to massive unplanned urban development in Karachi and relative weaknesses in emergency response capacities, even a mild deluge invariably causes losses to life and property.

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<sup>1</sup> OCHA, *Evaluation of Disaster Response Agencies of Pakistan*, Dec, 2006. The study was done by the same author.

<sup>2</sup> National Disaster Management Authority, *National Disaster Risk Management Framework*, pp3, 2007

<sup>3</sup> Asian Development Bank, *Poverty in Pakistan, Issues Causes & Institutional Responses*, pp 18, July 2002

Cyclone Yemyin and the floods struck the province from 23 – 30 June 07, first in the coastal, lower and central districts dispensing heavy rains and later flood waters flowed from Balochistan. This caused havoc in districts Qambar – Shahdadkot and Dadu which persevered till leary August.

## The Response

Armed forces conducted rescue and post – disaster relief operations from 28 June – 20 July 2007. 116 C-130 sorties stocked forward bases at Jacobabad, Larkana, Gawador, Kech and Sibi and 522 helicopter sorties ferried essential relief supplies to the forward bases and mostly to the affected communities<sup>4</sup>. Approximately 20,000 ground troops participated in these operations across the affected regions of the two provinces. Critical rescue missions were launched on helicopters or mostly by troops plying rescue boats under most challenging circumstances. These operations stand out as a sterling success in saving many lives and they were accompanied by supply of food, shelter and potable water and provision of health cover. These were replicated later in districts Qambar – Sahdadkot and Dadu. There is universal acknowledgment of armed forces contributions.

Disaster response was sustained by the national resource base which was mobilised and its delivery was coordinated by NDMA through a one window operation. Utility Stores Corporation made massive and time sensitive contributions of 6000 metric tons of composite pack and bulk rations worth Rs 3.67 million from its nation wide network of warehouses and service outlets. These supplies constituted the backbone of the national relief effort with regards to food security. National Logistic Cell provided logistic support in transporting bulk supplies to the intended destinations. Emergency Relief Cell contributed in mobilising tents and other essential relief items and in building capacities of PDMA's and vulnerable districts through logistic stocking of critical relief supplies. The health response launched by the two provinces with external support averted outbreak of post disaster epidemics. There were provincial contributions to the relief effort. Government of Pakistan also received support from friendly countries both in cash and kind worth US \$ 22.5 million. Federal Government empowered the worst affected through timely monetary assistance to the tune of Rs 880 million targeting 58, 770 vulnerable families in the two provinces<sup>5</sup>. National Highway Authority (NHA), FWO, NLC and provincial C&W departments contributed in restoring road networks critical for sustaining relief operations. Similarly, WAPDA and Sui Gas Southern contributed in restoring essential services. Supporting details appear in Annexure B.

Following UNDAC field assessments UN launched a flash appeal for mobilising resources for responding to the disaster which yielded US \$ 5.9 million<sup>6</sup>. INGOs also contributed to the relief operations. UNICEF, which has a presence in Karachi and Quetta, and WHO supported provinces and affected districts in health and WASH response. UN agencies / INGOs and NGOs contributions to the relief operations are reflected in Annexure B. Short paper supporting DMT as an institutional link for promoting cooperation in disaster response within One UN context and also with NDMA appears at Annex C.

Pakistan Red Crescent Society contributed in post disaster response through its in-country resources. This was reinforced by contributions generated and deployed under the IFRC umbrella through flash appeal process and with the assistance of partner national organisations. Cumulative contributions are reflected in Annexure B which benefited around 100,000 population in 15 districts of Sindh and Baluchistan<sup>7</sup>.

Notable among contributions of national NGOs are those of NRSP, SRSO and TRDP in Sindh and SRSO Balochistan. These represent the RSP network in the country which reaches 93 districts, with contributions in poverty alleviation and social, human and physical resource development in rural regions. By leveraging their village based social mobilisation infrastructure, RSPs can build vulnerable communities' capacity for response. Contributions in Cyclone and floods response are included in Annexure B.

<sup>4</sup> Source: National Disaster Management Authority.

<sup>5</sup> Source: National Disaster Management Authority.

<sup>6</sup> Pakistan Flash Appeal, [http://ocha.unog.ch/fts/reports/ocha\\_R3sum\\_A770\\_07102007.pdf](http://ocha.unog.ch/fts/reports/ocha_R3sum_A770_07102007.pdf).

<sup>7</sup> Information provided by Pakistan Red Crescent Society.



National Volunteer Movement (NVM) claims to have a registered cadre of volunteers, including among students. NVM plans to develop District Volunteer Forums through Community Development Department. This is occurring in collaboration with NDMA in disaster vulnerable districts to impart first responders training to NGOs and social activists. NVM has a cadre of trainers in basic first aid and in first responders' skills. Their contributions to the Cyclone and floods are included in Annexure B.

## Summary of Conclusions, Gap Analysis and Recommendations

Extraneous factors did impact in defining the quality of response. The monsoon weather pattern in the post – disaster period inhibited both air and land based relief effort. For example recurring flash floods repeatedly severed road communication leading in to Jhal Magsi district till late. Secondly, security concerns in some areas of Balochistan not only hampered participation of certain stakeholders but also put an extra burden on resources of participating government agencies. Finally, 2007 being an election year, political considerations at places influenced flow of relief goods inconsistent with needs. There was reported interference in disbursement of relief compensation which led to delays on account of exaggerated assessments.

In some areas it was a case of development and habitation practices accentuating vulnerability and risks. The canal and raised road network in 'katcha' plains extending into Balochistan and Sindh east of Kirthar Ranges proved to be a mixed blessing in terms of shielding some regions but more pronounced in enhancing flood damages by impeding water flows. Similarly, human dwellings that were located in storm water channels caused most fatalities in Balochistan and it was the oft repeated case of marginalised facing the worst. Such vulnerable habitats must be relocated through a risk reduction strategy.

NDMA emerged as the difference between earlier national response to major disasters and Cyclone Yemyin and floods in 2007 as the sole point for coordinating and mobilising the national relief effort. It contributed in sustaining relief operations till critical needs were met and residual capacities created. However, NDMA must build on this experience to improve capacities of PDMA and DDMA and to improve upon contingency planning, information management and logistic tracking functions. It also needs to make up deficiencies in its establishment to fulfil its challenging mandate.

Armed forces once again confirmed their primacy in responding to a disaster of a large magnitude. However, weaknesses in first responders' capacities causes over reliance on the armed forces much in excess to their SAR and immediate relief mandate. Armed forces inputs ought to be selective and they should be viewed as reinforcing a working response system and not substituting a feeble one. In districts Kharan and Jhal Magsi in Balochistan, reliance on armed forces / Frontier Corps continued much after termination of their role in relief operations. Secondly, absence of common practices and operational methods with regards to needs assessments and information management tends to cause temporary disruption in relief operations once local governments resume control. This was apparent in all the three districts that were evaluated.

Response to a major disaster benefits from multi-institutional inputs harmonised through critical sustaining links. There is a need to build on the cyclone / flood response experiences to forge such synergies between government and social sector, UN agencies and the wider international community to benefit cooperation in future disasters.

With the One UN initiative gaining momentum and efforts underway at creating DMTs to serve as an institutional link with NDMA and possibly PDMA, the right environment is being created for putting in place relatively robust coordination and joint planning mechanisms for future disaster situations involving contributions both from the UN and humanitarian community and national response system.

The coherent response of IFRC system benefits immensely from well honed evaluation practices, common operational procedures and SOPs that allow efficient merging of the international response with the national (PRCS) inputs for conclusive outcomes in targeted sectors. There is a lot that one can learn from these practices in promoting interoperability and common standards in the multiple stakeholder based national disaster response system.

Cyclone and floods response experience confirms an upward surge in social sector's contributions in DRR and response at the grass roots since October 2005. Such trend offers scope for promoting public private partnerships to benefit disaster preparedness and response.

Response to a major disaster is sustained by the capacities of local governments. Its human resource base must allow planning, evaluation and action functions and its physical resource base should permit affecting surge to save lives and sustain livelihoods. Quality and scale of such functions must equate with varying governance levels. Contrarily in practice both PDMA's are still patterned on the reactive Relief Commissioner mode of disaster management and the district governments of Jhal Magsi and Kharan in particular revealed a stark capacity gap. Deficiencies are rooted in quality of human and physical resources. Governance structures were also found ill equipped in creating a knowledge base for responding to such recurring hazards.

This evaluation (early Sep 07) occurred during the ill defined transition period between disaster response and early recovery. Politicians and the local administrators saw regeneration of the rural economy and rebuilding of destroyed infrastructure as their priority areas. Whereas in many districts there were small segments that were vulnerable owing to lack of access to shelter, potable water and basic health cover and this aspect rarely figured on the local action agendas. Supporting resumption of livelihoods of such 'residual relief load', it is felt, would not only facilitate empowerment of the vulnerable but would also contribute in reducing the relief burden.

This brings to forth the larger question of what constitutes a disaster relief operation? Is it addressing basic needs as alluded to or should it also include regeneration of livelihoods of the vulnerable? For example in Sindh, those who had the means did sow the late rabbi crop (rice) as flood water receded. Therefore, there is a strong case for making livelihood regeneration intrinsic to disaster relief operations through dedicated inputs and early assessments of needs. It lays the foundation of sustainable recovery and it would also facilitate a smooth transition to post relief rehabilitation and reconstruction.

The government's intervention to empower the vulnerable through timely cash grants, Rs 15,000 per household, was very appropriate. The provincial authorities were, nonetheless, apprised of certain delivery gaps.

Still focusing on the basics, one came across varying standards with regards to meeting shelter, food, WASH and health needs and camp management. There is a need, therefore, for defining basic standards of disaster response which not only should serve as planning parameters or benchmarks but also constitute as 'must achieve' objectives by relevant stakeholders, including armed forces.

Making relief effort transparent and accountable promotes credibility. Many inputs contribute in meeting these objectives, most essential being sound management practices. The entire operation should be sustained by an information management system and a data base that is multi user accessible and which keeps track of supplies. Secondly, the data base should continuously update itself and match relief inputs with needs. Impact analysis through physical monitoring and multiple stakeholders' inputs should supplement such functions. Needless to mention that apt media management promotes transparency

Timely disaster assessments promote anticipatory response. The national system relies on sectoral assessments which generally lack time sensitivity and rarely present a cohesive picture. In districts there was much dependence on armed forces generated assessments beyond their time relevance. There is a need, therefore, to introduce standard post disaster assessment formats and to build capacity of end users. Secondly, assessments should be a repetitive function consistent with the pattern in which the disaster unfolds and generates emerging set of needs. Finally, this vital practice must be replicated at DDMA, PDMA and NDMA for furnishing planning inputs.

Camp management does not figure out as a dedicated practice in the national response system. Though there was reluctance on the part of many flood affected families to move to organised camps and they preferred clan or tribe based support. Nonetheless, camp management requires dedicated multi-sectoral inputs spanning health, WASH, food security, veterinary care

and protection of vulnerable. There is a need, therefore, to promote common camp management standards and practices for DDMAAs.

PDMA Balochistan coordinated relief operations by involving relevant stakeholders quite efficiently. Whereas in Sindh there was more emphasis on 'on-site coordination' considering the relatively smaller scale of disaster by involving key provincial decision makers which contributed to efficient outcomes. Coordination routine in the provincial capital Karachi though remained infrequent. District governments maintained effective coordination with armed forces, and a blend of cluster and sectoral coordination practices are being practised with regards to UN agencies and INGOs.

For ownership and sustainability of relief operations coordination function should be led by NDMA, PDMAAs and DDMAAs. However, this would only happen once these tiers are supported by effective information management and logistic tracking systems.

PDMAAs did deliver timely warning for the Cyclone but not for the flash floods, as it is beyond the competence of existing capacities. However, drawing from traditional knowledge floods affected communities did anticipate flash floods but certainly not its quantum. Drawing from this experience, local governments must develop a knowledge base in the shape of contingency plans and SOPs by involving affected communities for a more anticipatory response.

## Recommendations

Recommendations aimed at improving the level of preparedness of the national disaster response system fall in two categories: specific emphasis / action areas to build capacities of PDMAAs and DDMAAs and common emphasis areas consistent with the scope of the study. These are summarised below while details appear later.

### Specific Emphasis Areas

While the critical deficiencies undermining the quality of governance at the provincial and district tiers should be addressed through ongoing Federal / provincial initiatives, which lie outside the ambit of study, following capacities, however, should be created to enable proactive response to disasters:-

- PDMAAs should be restructured to imbibe a blend of technical and operational capacities for risk management, preparedness and response. Please refer to the proposed organogram.
- Operational Centres should be created within PDMAAs to strengthen their capacity for coherent planning and coordination of time sensitive rescue and relief operations. These are being created through a parallel intervention.
- Statutory cash grants should be included in the budget of PDMAAs and DDMAAs to support surge in disaster response.
- Provinces should raise need based regional PDMAAs to promote proactive planning and surge capacities.
- Warehouses should be co-located with regional PDMAAs.
- Similarly, regional capacities for road clearance, restoration of water supply and emergency health response should be developed through multi-stakeholders inputs.
- Regionalising response capacities would have the advantage of promoting local, cost and environment friendly solutions to relief needs. Photographs of such local shelter solutions are included in Annexure D costing between Rs 4000 – 7000 per shelter.

To promote interoperability between various stakeholders for reasons of efficiency and introducing predictability in outputs there is a need to define basic standards for disaster response and standard practices should be promoted to facilitate integrated implementation. These include:-

- Basic standards with regards to services to be provided to disaster affected communities in food security, shelter, WATSAN, health, and addressing needs of the vulnerable and security issues.
- Post disaster assessments.
- Camp management.

With regards to early warning capacities Federal Government, PMD and provincial governments must develop and deploy early warning systems for flash floods in vulnerable regions of Balochistan, NWFP, AJK, Sindh and Northern Areas through a phased programme.

While promoting public-private cooperation NDMA should facilitate in drawing a framework of cooperation between DDMA and the relevant chapter of the RSP network and possibly PRCS to support the former in social mobilisation for response, in contingency planning, disaster assessment and information management, in supplementing local surge capacity, in promoting community level disaster impact mitigation.

Capacities of DDMA should be developed in partnership with the social sector in promoting following capacities:-

- District contingency plans that enumerate response to various disasters, define internal and external resource mobilisation and specify responsibilities of non-governmental stakeholders.
- District Early Warning plans developed through a participatory process identifying set of measures / SOPs to early warn and save lives and livelihoods of vulnerable communities.
- Rapid Response Teams created through public – volunteer partnerships. Refer to recommendations for details.
- Vulnerable communities' disaster response capacities.

Define standard planning tools, operational practices and facilitate development of SOPs for end users. Following specific competencies should be introduced in PDMA and DDMA:-

- Process based benchmarks for disaster response in a multiple stakeholders setting. Refer to proposed benchmarks based on Cyclone / floods response model in recommendations.
- Standard contingency planning capacities.
- Standard post disaster assessment capacities
- Multiple stakeholders based coordination practices.
- Standard automated information management tools for tracking response against needs.
- Automated logistic tracking system.

Capacity building interventions should target disaster response managers in PDMA and DDMA with regards to contingency planning, post disaster assessments, information management, media management, camp management, support to the vulnerable, planning and tracking logistic supplies, warehousing and inventory management, and developing competencies in Rapid Response Teams functions.

Needs of the vulnerable should be addressed by making local government responsive to their needs in terms of communicating early warning of disasters, through early assessment of their needs and by factoring livelihood regeneration in response. Relief compensation to the vulnerable should, preferably, be dispensed in cash by involving multiple local stakeholders for transparency.

### **Common Emphasis Areas**

- Build capacities of first responders, DDMA, PDMA and vulnerable communities. Structural and non-structural recommendations aimed at building appropriate governance structures, physical capacities and operational tools are configured to support this outcome.
- Introduce transparency and accountability in management of relief operations by promoting sound operational and coordination practices among multiple stakeholders.
- Make disaster response practices supportive of the needs of the vulnerable.
- Promote advocacy and awareness of the proposed standards among governmental and non-governmental stakeholders, including armed forces.

- Promote operational synergies with non-governmental stakeholders to optimise cumulative capacities for disaster response.
- Promote volunteerism in building first responders capacities for disaster response.
- Build situation relevant coordination structures between NDMA / PDMA and UN agencies, INGOs and the larger humanitarian community.

### **Post Evaluation Deliverables**

Consistent with the scope of the study, a capacity building and standard setting intervention is proposed to benefit preparedness for disaster response of PDMA, DDMA and multiple stakeholders . It will introduce:-

- Basic standards governing disaster response.
- Standard post disaster assessment procedures and formats.
- Standard contingency planning tools.
- Disaster response process based benchmarks.
- SOPs for camp management.
- Standard disaster response information management system.
- Logistic supply tracking system.
- Rapid Response Teams within vulnerable districts.
- Capacity building of PDMA, DDMA and other disaster response stakeholders on these interventions.

Note: Please refer to Logical Framework Analysis at Annexure E

### **Implementation Methodology**

After seeking approval of NDMA the evaluation study will be disseminated among PDMA and selected DDMA and other stakeholders for soliciting their views. Proposed interventions will thus be implemented through an interactive process and in consistence with national and international best practices.

Proposed practices will be piloted among PDMA Punjab, Sindh, NWFP, Balochistan and 8 disaster vulnerable districts of the four provinces. Their introduction will also be advocated among the armed and paramilitary forces. Ultimately the proposed interventions will be universally introduced in the national disaster response system by end 2009.

In a parallel process NDMA would endeavour to enter into an MOU with the RSPs network, PRCS to forge public private partnerships with disaster vulnerable DDMA to optimise first responders' capacities and to strengthen local government's capacities in risk reduction and response. It is also proposed to develop district Rapid Response Teams in concert with NVM and IOM. After seeking concurrence of all stakeholders, a common implementation methodology will be identified.

**Tentative Time Frame-** Jan 2008 – June 2009.

**Cost -** US \$ 1.351 Million.

### Evaluation of PDMA's Balochistan and Sindh

Evaluation Factors	Balochistan (10-11 Sep 07)	Sindh (3 Sep)
Natural Environment	<p>Disaster accentuating factors:-</p> <ul style="list-style-type: none"> <li>• Vast distances, vulnerable infrastructure, resource constraints &amp; scattered population.</li> <li>• Canals and elevated road and flood protection dykes impeded water flow in 'katchi' region. It is a DRR issue.</li> <li>• Severance of fuel supply impeded electricity generation in remote regions.</li> </ul> <p>Strength</p> <ul style="list-style-type: none"> <li>• Long coastline allows maritime rescue and relief opportunities.</li> </ul>	<p>Disaster Accentuating Factors</p> <ul style="list-style-type: none"> <li>• Extensive loss of agro based economy in northern Sindh.</li> <li>• Vulnerability of Karachi and urban centres to flooding in rains.</li> <li>• Canals and elevated road and flood protection dykes impeded water flow. It is a DRR issue.</li> </ul> <p>Strengths:-</p> <ul style="list-style-type: none"> <li>• Agri base of disaster affected districts allowed relatively quick recovery.</li> <li>• Relatively well resourced and robust administrative structures.</li> <li>• The province has technical capacity for flood water regulation in canal zone to minimise damages.</li> </ul>
Disaster preparedness	<ul style="list-style-type: none"> <li>• Strong commitment of the provincial governments to disaster response</li> <li>• Provincial disaster management set up yet to transform from Relief Commissioner to PDMA mode.</li> <li>• PDMA's need substantial capacity up gradation in material and human resource to fulfil their disaster preparedness and response mandate.</li> <li>• There is a need to restructure processes and practices in vogue for proactive response.</li> <li>• PDMA's have a very limited surge capacity in responding to major disasters.</li> <li>• Poor capacity for creating institutional memory or knowledge base for handling future disasters.</li> <li>• Heavy reliance on armed and paramilitary forces for disaster response.</li> </ul>	
<b>Operational Aspects</b>		
Early Warning	<p>Sources: NDMA, PMD.</p> <p>Cyclone and flood warning was communicated by the provincial government (Home Department / PDMA) to the vulnerable districts.</p> <p>However, intensity of flash floods took most districts / communities by surprise and revealed utter vulnerability of first responders.</p> <p>There is no Early Warning infrastructure for flash floods.</p>	<p>Sources: PMD, MSA, Pakistan Navy, KPT.</p> <p>Vulnerable districts were early warned of cyclone and flash floods.</p> <p>Vulnerable communities were warned in the coastal regions and in Qambar and Dadu and in most cases they were evacuated to safer locations.</p> <p>There is no Early Warning infrastructure for flash floods.</p>
Search and Rescue	Well managed through an overwhelming reliance on armed forces. There is negligible first responders' capacity.	
Relief operations	Satisfactorily managed by armed forces and provincial authorities supported by NDMA	
Residual Relief	Poorly managed by district governments. There were useful inputs from INGOs / UN agencies and local NGOs	Managed by district government with support of INGOs / UN agencies and local NGOs

<p>Setting up Coordination Mechanisms</p>	<p>In Balochistan, initially the Home Department and later PDMA conducted daily coordination meetings involving provincial stakeholders essential for response and restoration of essential services</p> <p>In Sindh the focus of coordination was more field based given the smaller scale of the disaster. Coordination activity in provincial capital Karachi, though, remained infrequent</p> <p>During the critical stage of the disaster there was a tendency to coordinate response with a limited number of agencies: armed forces, agriculture department in Sindh etc. However, for early restoration of livelihoods, potable water supply schemes, early resumption of schools and essential services participation of relevant stakeholders including international agencies is encouraged.</p> <p>Coordination with the armed forces occurred effectively based on well rehearsed SOPs.</p> <p>Coordination with UN agencies, INGOs and local NGOs occurred by linking relevant cluster and sectoral configurations to the extent practical in Balochistan. However, there seemed to be an absence of a uniform policy in Sindh.</p>
<p>Accountability in Response</p>	<p>This was a weak aspect owing to weaknesses in response management capacities. However, participation of armed forces did introduce transparency, though their presence was limited in time. This aspect needs much attention.</p>
<p>Restoration of livelihoods</p>	<p>It was not fully factored early in the response.</p>
<p>Support to Vulnerable  - dispersing cash: Rs 15000 per household</p>	<p>Both provinces involved armed / para-military forces in this exercise for efficiency and accountability reasons</p> <p>In Balochistan cash disbursements were completed early, whereas in Sindh disbursements were made through cheques after deliberate assessments.</p> <p>There was no common understanding of basic criterion with regards to beneficiaries: on household basis or family basis. The latter criterion was generally applied.</p> <p>Anomalies were experienced in beneficiary assessments in areas prohibiting access due to flooding.</p> <p>Encashment of cheques are posing problems mainly in opening bank accounts owing to the procedural pre-requisite of producing ID cards for opening bank accounts and limited local bank capacities to cope with the work load.</p> <p>There were delays in replacing old / lost ID cards.</p> <p>Political interference was also experienced in the process.</p>

## The Districts' Response

Districts: Qambar Shahdadkot in Sindh, Jhal Magsi and Kharan in Balochistan

Evaluation Factors	Conclusions / Observations
<p><b>District Qambar Shadadkot (Sindh)</b></p> <p>Basic Data and Flood losses</p> <p>Visited on 5 Sep</p>	<p>Population – 1.25 million 7 Tehsils and 40 UCs Falls in canal served region of upper Sindh with rice as the staple crop. Cultivable land - 1453383 acres.</p> <p><b>Flood Losses</b></p> <ul style="list-style-type: none"> <li>• Deaths - 3</li> <li>• Population Affected - 1,37544 (12.4% of overall population)</li> <li>• Cropped area affected - 41,040 acres (mostly rice crop)</li> <li>• IDPs during flood peak – 137,000</li> <li>• IDPs as of 5 Sep – 3000. Most were from the adjoining district of Jhal Magsi.</li> </ul>
<p><b>District Jhal Magsi</b></p> <p>Basic Data and Flood Losses</p> <p>Visited on 7 Sep</p>	<p>Population – 1.08 million 3 Tehsils and 9 UCs About 60% of the district is canal fed (Kirthar Canal emanating from Sukkur Barrage). Cultivable land: 5,60,00 acres Agriculture / livelihood - Rice, wheat and cotton and livestock</p> <p><b>Flood Losses</b></p> <ul style="list-style-type: none"> <li>• 28 deaths ( 5 due to cholera. 8 cholera positive cases identified).</li> <li>• Road links severed and impeded relief effort. Fully restored on 26 July.</li> <li>• Crop losses – Rice 1800 acres, jawar 6500 acres, cotton 2500 and sun flower 2500.</li> <li>• Extensive loss of livestock.</li> <li>• Houses destroyed - 5554</li> <li>• Soil erosion</li> <li>• IDPs as of 7 Sep – 10,000 approx, mostly in UCs Kot Magsi and Bareja.</li> </ul>
<p><b>District Kharan</b></p> <p>Basic data and Flood Losses</p> <p>Visited on 10 Sep</p>	<p>Population – 206, 909. It is a scarcely populated district 1 Tehsil and 9 UCs</p> <p><b>Flood Losses</b></p> <ul style="list-style-type: none"> <li>• 21 died</li> <li>• Extensive damage to road and local irrigation networks, tube wells in particular</li> <li>• Loss to cash crop</li> <li>• Extensive loss of livestock</li> <li>• Houses destroyed - 4961</li> <li>• Soil erosion</li> </ul>
<p>Disaster Preparedness</p>	<p>Weaknesses in basic district governance structure in Jhal Magsi and Kharan limits their capacity for timely disbursement of relief stores.</p> <p>District Jhal Magsi has no heavy plant and the district hospital has no functioning X ray machine, no surgeon, medical specialist or gynaecologist, placing much reliance on external support.</p> <p>Paucity of resources in Balochistan districts inhibits their capacity to affect surge to meet pressing post – relief needs.</p> <p>Poor institutional memory or knowledge base for handling future disasters, particularly in Balochistan districts.</p> <p>District governments have grossly inadequate capacities to meet high paced imperatives of rescue and relief operations.</p>



	<p>There is overwhelming reliance on armed forces and Frontier Corps (in Balochistan) for all facets of rescue and relief operations.</p> <p>Political interference undermined local governments' functioning in some instances, particularly in disbursement of compensation.</p>
Disaster Onset	<p>Flood water hit Kharan without much early warning at 1000 hours on 28 June and swept parts of the city and adjoining rural regions.</p> <p>Jhal Magsi and Qambar districts fall in the traditional 'katcha' flood water flows in from the adjoining mountainous Khuzdar, Sibi and Ziarat districts of Balochistan. About 600,000 cusecs of water flowed through the two districts between 28 June – 15 July 07, equivalent to heavy flood discharge in Indus. Floods were anticipated after heavy rains but the quantum was unprecedented.</p>
Effectiveness of Response	<p>Effectiveness of response is linked to speed and quality of disaster assessments, first responders' capacity and mobilisation of external support. While much was lacking on the first two accounts, armed forces response made up for first responders deficient capacities.</p> <p>For Qambar and Kharan initial need assessments remained erratic but by Disaster (D) + 15 / 20 critical relief needs were met. Distribution related delays occurred in Kharan due to disrupted local land routes.</p> <p>Owing to late opening of land routes, Jhal Magsi was supplied through helicopters and by land in peripheral areas. Relief momentum picked up after 25 July when roads opened. District government has a very limited capacity to distribute supplies. Absence of a viable local health infrastructure warrants dependence on external support.</p> <p>On the whole, given the constraints, essential relief needs were met in the three districts.</p>
Early Warning	<p>As flood water flowed through the upper districts of Balochistan, district authorities in Qambar not only warned vulnerable communities of incoming flood but also took timely action to relocate them to safety. Only one death occurred due to flash floods. Local radio, FM, regional TV and all possible mediums were used to early warn isolated communities.</p> <p>However, in Jhal Magsi and Kharan locals relied more on 'traditional knowledge' in anticipating floods whose quantum was overwhelming. Vulnerable communities took evasive action on their own till rescued. More than 40 died in the two districts in flash floods. No visible effort was made by the local government to warn them or to relocate them to safety.</p> <p>Mountainous terrain in District Kharan tends to isolate communities in such situations.</p>
Search and Rescue Operations	<p>These were undertaken by the armed forces using helicopters, rescue boats and employing search parties in 'katchi' and mountainous regions. The effectiveness of SAR operations can be judged by the fact that most deaths occurred prior to their commencement. Emergency food and medical support accompanied.</p> <p>However, there was near absence of SAR capacities within first responders: communities and districts.</p>
Potable Water Supply	<p>While in Qambar fire fighting vehicles were mobilised from within and neighbouring districts for potable water supply, no such capacity exists in Jhal Magsi or Kharan. Potable water supply to IDPs in Jhal Magsi was much dependent on INGOs inputs.</p>
Camp Management	<p>There is no dedicated input from district governments in managing camps through provision of integrated health, water and sanitation, food security and vet medical cover services. Such must be developed and also to serve the needs of locally displaced residing within villages.</p>
Accountability & transparency	<p>Armed forces presence was critical in maintaining accountability during relief operations. Once Army withdrew, the district governments, less Qambar, were not maintaining updated record of needs viz relief supplies that were disbursed.</p> <p>There was no structured system of assessing impact of relief effort and making amends where needed. Self corrective mechanism was missing.</p>

	<p>Local political office bearers, with some exceptions, advocated for relief support.</p> <p>Provincial authorities rarely reached out in Balochistan to assess the relief effort for its intended impact.</p> <p>However, INGOs and UN agencies did apprise district authorities of the critical gaps in relief, though their coverage was limited.</p>
Coordination mechanisms	<p>Efficient coordination mechanisms were established with armed forces. Armed forces contributed in maintaining records of assessments and disbursement of supplies. However, quality of overall coordination in relief effort deteriorated following Army's exit.</p> <p>In Qambar, key provincial decision makers made themselves available during critical periods to facilitate prompt coordinated response to developing situations, particularly the Irrigation Department for affecting breaches in irrigation and flood protection infrastructure to steer water flow away from major population centres.</p> <p>However, coordination with INGOs was not always institutionalised and one observed duplication in shelter inputs in one location in Kharan.</p>
Support to the Vulnerable	<p>At a time when overall focus was shifting to early recovery, there was not much emphasis within districts to adequately serve the needs of small segments, about 10,000 – 12,000 in Jhal Magsi and 10,000 in Kharan who are vulnerable mainly on account of loss of livelihood and shelter. In some cases water had yet to recede from certain villages. There were inputs from UN agencies / INGOs in meeting their food, potable water, shelter and sanitation related needs.</p> <p>A segment of the vulnerable population kept occupying schools at the cost of children's education. In Qambar 30 schools were occupier by IDPs on 5 Sep. The district government had no clear plan to resettle them duly factoring their needs.</p>
INGOs / UN agencies contributions in residual relief	<p><b>Distinct Qambar</b></p> <ul style="list-style-type: none"> <li>● CARE – Health, WASH and education</li> <li>● OXFAM – Assessment of early recovery needs was underway.</li> <li>● NRC – Camp coordination and legal assistance to vulnerable</li> <li>● IFRC / PRCS – water purification, health, shelter and food</li> <li>● IOM – Camp management and rapid situation appraisals</li> <li>● WHO- supporting DEWS and improving health information management</li> </ul> <p><b>Jhal Magsi</b></p> <ul style="list-style-type: none"> <li>● MSF Holland – health and NFIs</li> <li>● IFRC / PRCS – shelter, WATSAN, food and health</li> <li>● Merlin – health</li> <li>● Mercy Corps – Food, NFI and health</li> </ul> <p><b>Kharan</b></p> <ul style="list-style-type: none"> <li>● American Refugee Council – shelter, food, NFIs</li> <li>● Islamic Relief – Watsan, health and food security</li> </ul>

### Vulnerable Communities

#### Goth Gujrani UC Garejo, Tehsil and Distirct Jhal Magsi – 6 Sep 07

General Information	200 households' approximately with very small land holdings. Caste: Gujrani Magsis
Flood Experience	Located in the foothills of Kirthar Ranges, all houses were destroyed in the flash floods and the entire village was marooned by 29 June till rescued by Army troops plying boats / by helicopters. One person was drowned
IDP Location	They were camped about 3 KMs from their village on a raised ground.
Relief Support	Got relief support from Army initially by helicopters and district authorities. However, they were being supported randomly by PRCS in health and provision of potable water.
Compensation (Rs 1500 per household)	Only 61 households out of 200 received compensation.
Shelter	Living in temporary huts made from local material.

#### Goth Shamabani, UC Bareja, Tehsi and District Jhal Magsi – 6 Sep 07

General Information	Caste : Gujrani Magsis. 600 households approximately with very small land holdings.
Flood Experience	Located in the foothills of Kirthar Range, all houses were destroyed in the flash floods and the entire village was marooned by 29 June till rescued by Army troops plying boats / by helicopters.
IDP Location	They were camped about 2 KMs from their village on a raised ground.
Relief Support	Got relief support from Army initially by helicopters and later from the district authorities. However, they were being supported randomly on 6 Sep by Mercy Corps, UNICEF and PRCS in health and provision of potable water and sanitation.
Monetary Compensation	Only 163 households received compensation out of 600 approximately.
Shelter	Living in temporary huts made from local material or with relatives in nearby villages.

#### Cluster of Villages in UC Kot Magsi along the Main Road leading to Shahdaskot, Sindh – 6 Sep 07

General Information	Villages Allahabad Fazal, Pirabad and Bisharat Mori of fishermen spread along the Road in small hamlets
Flood Experience	Compares to the earlier villages.
IDP Location	Villagers are camped along the main roads in semi-permanent hutments of local material.
Relief Support	Got relief support from Army initially by helicopters and district authorities. However, they were being supported randomly by Mercy Corps and PRCS in health and WASH.
Monetary Compensation	No household had received compensation money.

#### Village Mir Haibat Khan Magsi, Distirct Qambar – Shahdaskot – 6 Sep

General Information	A relatively affluent village of 210 household's approx in KS Shah Tehsil, of which nearly 70 % houses were destroyed by floods.
Flood Experience	Part of the village was swept by the floods but the residents had made temporary shelters within or in the vicinity of the village.
IDP Location	No IDPs.
Relief Support	Got relief support from Army and the district authorities. However, being easily accessible their water supply and sanitation needs were well served by INGOs.
Monetary Compensation	Out of 180 who lost their houses, 25 claim that they never got monetary compensation.

**Kiili Shyan, UC Judai, Tehsil and District Kharan – 11 Sep 07**

General Information	Located in a tube well fed region about 25 KM from Kharan City. The village has about 200 households and about 70% houses were destroyed in the floods. Most locals have small land holdings and they work as agricultural labour.
Flood Experience	Flood water ravaged the village on 29 June and while there have been no deaths about 400 livestock were lost.
IDP Location	No IDPs
Relief Support	Got relief support from Frontier Corps and the district authorities. Some villagers have also received palm leaves woven shelter made from local material from ARC (INGO). Tents were also provided by the district government.
Monetary Compensation	No one had received cash compensation till 11 Sep. Locals claim that they were being discriminated against being political opponents of the local government. The DCO, however, maintained that this was among many villages that are yet to be compensated. As per him, Rs 6 million were available to compensate the left over disaster affectees in the district.

**Issues of Vulnerable Communities**

- Reasons for vulnerability in most cases are: (1) most belong to the marginalized class and work as agricultural labour; (2) loss of livelihoods as rural economy had come to a stand still owing to floods; (3) loss of habitat and non receipt of compensation / shelter support in some cases and; (4) in some situations destroyed houses were still under water.
- No early warning of flash floods was received in Kharan and Jhal Magsi. Locals took evasive action based on traditional knowledge / instincts.
- Vulnerable communities had no inherent capacity to mitigate impact of such disasters.
- Major anomalies were observed in provision of shelter and access to potable water UCs Kot Magsi and Bareja in Jhal Magsi.
- Organized camp management was not observed and local health cover was generally poor.
- Relief compensation payment had many leftovers. Cheque encashment poses problems owing to procedural encumbrances in opening bank accounts.

**Conclusion:** There were major gaps in the district government's capacity in planning and executing residual relief operations.

## Recommendations

### Note

Time frame for implementation is defined as:-

- Short Term (ST) - 9-12 months  
 Medium Term (MT) - 12 – 24 months  
 Long term (LT) - End 2010

Issues	Recommendations	Responsibility / Applicability	Time Frame
<b>Disaster Risk Management and Preparedness Issues</b>			
Restructuring of PDMA	<p>Composition  <b>DG Technical Wing.</b> It will house specialists for: vulnerability and resource profiling, DRR planning, environment safety, NBC, structural assessments and IT.</p> <p><b>Operations Wing.</b> Planning Cell, Operations Cell, Disaster Assessment and Coordination Cell, Logistic support cell, Information management and communication cell, Media management cell.</p> <p>Please refer to organogram on page 42.</p>	Provincial governments / PDMA	MT
Upgrading PDMA Surge Capacity in Balochistan	<p>1. It has been decided in Balochistan to create regional PDMA parallel to the Police DIG structure ( ex- Commissioners' administrative jurisdiction) at Gwador, Kalat, Khuzdar, Sibi and Dera Murad Jamali. Notifications for regional PDMA have been made.</p> <p>2. Regional PDMA should be made responsible to assess, coordinate and implement disaster response in their areas of responsibility encompassing specified districts, in coordination with district governments.</p> <p>3. It is recommended that an Emergency Health Cell of provincial MOH should also be co-located with the regional PDMA on need basis for facilitating health response.</p> <p>4. Regional PDMA capacity should be augmented by PDMA staff on need basis.</p> <p><b>Proposed Composition of Regional PDMA</b></p> <p>1. Should be led by a grade 17 Officer preferably with Revenue administration background and he should be trained post disaster assessment and coordination functions.</p> <p>2. He should be assisted by a Logistic Officer responsible for warehousing and managing logistic sur</p> <p>3. Number of support staff should be determined by the provincial government.</p> <p><b>Note.</b> Many deliberations must go in refining the concept for upgrading PDMA local surge capacity building needs.</p>	PDMA Balochistan / All PDMA	MT / LT
Regional PDMA, Sindh	It is recommended that regional PDMA structure be created in Sukkur to facilitate response in upper Sindh with a similar structure.	PDMA Sindh	MT
Regional Warehousing of Relief Stores for Sindh and Balochistan	<p>Warehouses of specified relief stores for shelter, emergency rations, medicines and NFIs to include hygiene kits, water storage material and purification kits, essential kitchen ware, rescue equipment (boats, ropes, search lights, life jackets, picks and shovels) should be created at following locations :-</p> <ul style="list-style-type: none"> <li>• <b>Balochistan.</b> Gwador, Khuzdar and Dera Murad Jamali</li> <li>• <b>Sindh.</b> Sukkur</li> </ul>	PDMA Sindh & Balochistan / All PDMA	MT / LT

	Regional warehouses are also proposed for other PDMA's following deliberate need assessments.		
Building Financial Capacity for Surge in relief operations	<p><b>Financial Support.</b> Restructuring of Balochistan PDMA on proposed lines should be supported by the Federal Government. However, its sustainability should be the responsibility of the provincial government.</p> <p><b>Emergency Response Fund.</b> Should be made available to the tune of Rs 50 million for all PDMA's and it should be included in the provincial budget.</p> <p><b>District Emergency Response Fund.</b> Rs 2 million should be earmarked in the district budget for facilitating surge operations.</p>	Federal Government / NDMA / PDMA Bal'stn All Provincial governments / PDMA's / DDMA's	MT
Capacity Building Of District Governments for Response	<p>2005 earthquake and 2007 cyclone and floods experiences suggest that provinces must pool resources for vulnerable districts to create capacities for road communication restoration and restoration of water supply. Therefore, PDMA's in concert with relevant provincial government departments must:-</p> <ul style="list-style-type: none"> <li>• Release emergency funds to affected districts to hire plant equipment and mobilise resources for restoration of local potable water supply.</li> <li>• Secondly, undertake regional resource mapping of road repair plant equipment which can be mobilised for urgent use.</li> <li>• Coordinate with armed forces support for road communication restoration.</li> <li>• Mobilise resources for supply of potable water, especially for districts like Jhal Magsi which has no integral capacity.</li> </ul>	All provincial governments / PDMA's / DDMA's	MT
Capacity Building of District Government by drawing synergies with the social sector	<p>The possibility of drawing institutional links with national NGOs with a disaster management focus will be vigorously explored to boost district government's capacity in disaster response. These include provincial affiliates of RSP's and PRCS.</p> <p>Social sector support should be sought to support district government in making disaster assessments, monitoring delivery of relief stores, in information management, contingency planning, vulnerability and resource mapping. Standards formats that have been introduced in the districts will be utilised.</p> <p>NDMA should facilitate trainings of district government partner NGOs for optimising cumulative capacities for disaster response.</p>	NDMA / PDMA's / RSP network / PRCS / DDMA's	ST / MT
Early Warning	<ul style="list-style-type: none"> <li>• PMD to install capacity for providing EW against flood hard prone areas in Balochistan as part of national DRM plans.</li> <li>• PDMA Balochistan to access MSA, Pakistan Navy, Gwador Port Authority as sources for early warning by promoting institutional collaboration.</li> <li>• In case of flash floods PDMA's must communicate information to vulnerable districts and urge taking pre-emptive measures to save lives.</li> <li>• PDMA's must facilitate communication of early warning of floods and flash floods through local radio, TV and other public communication means.</li> <li>• Local Early warning system based on traditional knowledge must be put place and district government must make use of mosques, telephone, wireless and available communication means for quick transmission of such information.</li> <li>• DDMA's must reduce local EW communication and relocating vulnerable communities to implementable SOP's through a communities' inclusive participatory process.</li> </ul>	PMD / NDMA/ All PDMA's / all DDMA's	LT ST ST ST ST
Capacity Building	<p>Following capacity building initiatives are proposed for NDMA, PDMA and DDMA's:-</p> <ul style="list-style-type: none"> <li>• Post disaster assessments</li> <li>• Contingency planning</li> <li>• Disaster response Information management system</li> <li>• Logistic supply chain and inventory management system</li> <li>• Relief support for the vulnerable</li> <li>• Camp management</li> <li>• Media management</li> </ul>	NDMA	ST/ MT

Operational Practices and Standards			
Basic Standards for Relief	Drawing from international best practices, a deliberate exercise should be undertaken to define the basic standards governing disaster response with regards to meeting basic shelter, food security, WASH, health, vulnerable groups and security needs.	NDMA to facilitate drafting of standards	ST
Response Operational Cycle	<p>Broadly following steps should be followed in planning disaster response at all levels:-</p> <ul style="list-style-type: none"> <li>• Undertake initial assessment for identifying gaps.</li> <li>• Analyse gaps to formulate intervention strategy.</li> <li>• Introduce information management tools and multiple stakeholders for accountability.</li> <li>• Get feedback and monitor progress.</li> <li>• Set up robust coordination tools.</li> <li>• Refine strategy / intervention.</li> </ul>	All disaster response stakeholders	
Operational Standards	<p><b>Introducing Operational / Process Oriented Benchmark</b> (Applicable to PDMA's / DDMA's)</p> <p>While disaster response follows a defined method in every province, it needs to be reduced to essential steps and deliverables in the shape of SOPs to make the entire process predictable, easy to implement, needs responsive, transparent and accountable. Following is proposed as a guideline:-</p> <p><b>Disaster Categorization.</b> Response benchmarks will relate to intensity of the disaster. Disasters should be defined as 'moderate', 'intense', 'severe' and 'extremely severe' like the Oct 05 earthquake. Factors that would define severity of a disaster include human losses, loss of habitat, social and physical infrastructure and livelihoods, environmental degradation and the scale of response.</p> <p><i>The proposed benchmarks are based on Cyclone Yemyin and floods response experience which can be termed as a disaster of 'intense' magnitude.</i></p> <p><b>Step 1. Immediate Rescue and Relief by armed forces.</b>  <b>On-spot disaster assessments of losses and needs jointly undertaken by DDMA's and armed forces -- Disaster Day (D – Day onwards)</b>            Following decision of political leadership, spontaneous relief and rescue commences involving armed forces, civil government and civil society capacities that exist in the disaster zone. The response is based on spot assessments. Emphasis is on rescue, disposal of the dead, life saving health interventions, provision of food and shelter. DDMA's are supported by armed forces in directing the local relief effort.</p> <p>Note. For a disaster of a smaller scale SAR operations should be conducted by the affected district governments and the affected communities, whose capacities should be built.</p> <p><b>Step 2. PDMA's first post disaster assessment - D + 7 /10</b>            PDMA, possibly supported by NDMA organizes the <b>first post disaster assessment</b> by incorporating trained disaster assessment specialists, health experts, PHE and C &amp; W experts. This should occur by Disaster plus 7/10 and yield initial estimates of losses, identify food, health and shelter needs, assessments with regards to restoration of potable water supply and local communication infrastructure to facilitate relief effort. The assessment team must factor search and rescue and relief inputs by the armed forces and initial assessments of the affected district governments.</p> <p>Concurrently PDMA imbeds its logistics and information management experts with armed forces to build data base of needs assessed, supply inputs and to create capacity for smooth take over of relief effort as armed forces withdraw.</p>	<p>NDMA to draft benchmarks in consultation with PDMA's</p> <p>Applicable to PDMA's and DDMA's</p>	ST / MT

	<p><b>Step 3. Provincial and national relief effort is launched by D + 10</b> Provincial relief effort, possibly supported by NMDA, is launched in close coordination with and through the armed forces / district government relief dispensation channels. However, district officials should assume responsibility of managing local relief by D + 10.</p> <p><b>Step 4. Armed forces withdraw between D + 15 &amp; D + 30</b> Armed forces start to gradually withdraw between D+ 15 to D + 30. Concurrently affected districts supported by PDMA and its regional affiliates make themselves capable of handling relief operations and managing the logistic supply chain.</p> <p><b>Step 5. PDMA's Second Post Disaster Assessment by D + 20</b> PDMA, possibly supported by NDMA, carries out a more deliberate disaster assessments to update losses, earlier assessments with regards to food security, shelter and health support , make initial assessments for sustaining livestock , resuming livelihoods, restoring water supply infrastructure, resuming education and determine hindrances in resumption of essential services like electricity and gas. The assessments must include inputs from relevant departments and district governments.</p> <p><b>Step 6. Categorization of Relief Beneficiaries by D + 20 /25</b> PDMA's disaster assessment teams in coordination with district governments and armed forces determines relief needs of beneficiaries in following categories by D+ 20/ 25:-</p> <ul style="list-style-type: none"> <li>• <b>Category 1.</b> Those cut off from relief support due to temporary physical isolation, or require limited local support in restoring habitat and livelihood. Majority fall in this category.</li> <li>• <b>Category 2.</b> Those who are shelter less and whose livelihood sources are likely to be resumed within 30 – 45 days. They will be encouraged to move in to spontaneous camps close to their habitats.</li> <li>• <b>Category 3.</b> Those who are likely to be vulnerable account of shelter, livelihood and food security for 90 days are identified as a vulnerable group. They will also be encouraged to move into organized camps or will be supported in their spontaneous camp locations.</li> </ul> <p><b>Step 7. PDMA coordinates broader provincial response factoring early recovery (livelihood regeneration) elements by D + 25 / 30</b> PDMA coordinates response of concerned departments based on Steps 5 and 6 assessments by D + 25 and starts planning relatively long term response for those identified in Category 2 and 3 (major focus), particularly with regards to regeneration of livelihoods.</p>		
Residual Relief	<p>District government should identify Category 2 and 3 relief f beneficiaries early, as suggested, and develop a plan to meet their needs which are likely to exceed the normal relief duration applicable to Category 1 (marginal affectees). This would imply:-</p> <ul style="list-style-type: none"> <li>• Early need assessments of the vulnerable as proposed.</li> <li>• Planning district response based on needs.</li> <li>• Integrating inputs from UN agencies / INGOs / NGOs.</li> <li>• Parallel focus should be in restoration of livelihoods.</li> <li>• Define an exit strategy.</li> </ul>	DDMAs	ST
Exit Strategy	<p>Following criterion is proposed to define exit strategy for relief operations: -</p> <ul style="list-style-type: none"> <li>• Meeting basic shelter, food security, WASH and health needs of the affected population. Corresponding indicators should be developed.</li> <li>• Secondly, identification of strategy to meet the needs of the vulnerable.</li> <li>• Restoration of land communication routes to bring back normalcy in life.</li> <li>• Restoration of electricity, essential for livelihoods reactivation.</li> </ul>	Universal applicability	



Disaster Assessment	<p><b>PDMA</b> With support of provincial government must constitute a standing disaster assessment team which should include the following:-</p> <ul style="list-style-type: none"> <li>• Disaster Assessment specialists of PDMA – 2-3 (will lead and collate assessments)</li> <li>• Public health personnel - DG Health Office - 2</li> <li>• PHE - 1</li> <li>• C &amp; W - 1</li> <li>• Livestock specialist - 1</li> <li>• NGO representatives - 2 They can cover any missing speciality</li> <li>• Specialists from Irrigation Department or Agriculture departments can be included on need basis</li> </ul> <p><b>DDMA</b> Proposed composition is as follows:-</p> <ul style="list-style-type: none"> <li>• Trained representatives of DCO Office -2 (Will lead and collate assessments)</li> <li>• Revenue department</li> <li>• EDO health representative - 1</li> <li>• B&amp;R -1</li> <li>• PHE - 1</li> <li>• Livestock - 1</li> <li>• NGO representative - 1/2</li> </ul> <p>Standard disaster assessment formats will developed for PDMA and DDMA</p>	<p>PDMA / DDMA</p> <p>NDMA to facilitate in developing standard assessment formats and procedures</p>	ST / MT
Information Management	<p>PDMA must be equipped with essential information management tools for creating an updated data base matching reflecting disaster losses and response inputs, sector wise. Data base of standard configuration and should serve the needs of NDMA and PDMA. Disaster assessments and daily relief inputs should be fed in to it.</p> <p>Similarly a standard data base should be introduced which matches disaster losses, down to Tehsils and UCs with relief inputs viz source of supply and quantities in a chronological sequence, and updated in all aspects.</p> <p>Standard logistic supply tracking information management system should be introduced in NDMA and PDMA, and possibly within armed forces.</p> <p>Finally PDMA and DDMA must create institutional memory / record of the response experience covering all significant aspects.</p>	<p>NDMA to facilitate development of information managing system</p> <p>Applicable to PDMA / DDMA</p>	ST / MT
Standard Operational Practices	<p>Affected districts, PDMA and NDMA will feed in standard <b>daily situation reports</b> reflecting cumulative losses and relief inputs by sources. This will be communicated daily at a prescribed time by fax / e-mail. The situation report will be circulated to relevant stakeholders.</p> <p>Besides daily coordination meetings, PDMA will hold <b>weekly assessments</b> involving al provincial governmental and non-governmental stakeholders to assess the relief effort for its intended impact. All stakeholders will share progress and views on the relief effort. Corrections in relief strategy will be applied, where needed.</p>	<p>NDMA / PDMA / DDMA</p>	ST
Coordination Aspects	<p>Following is recommended:-</p> <ul style="list-style-type: none"> <li>• PDMA and DDMA should lead the coordination hubs and not armed forces for sustainability of the process.</li> <li>• However, coordination hubs should be supported by efficient information management and updated disaster assessment and monitoring inputs.</li> </ul>	<p>PDMA / DDMA</p>	ST

	<ul style="list-style-type: none"> <li>• Range of participants to correspond with the situation and needs</li> <li>• Coordination with UN agencies and INGOs to occur on mutually agreed cluster arrangements.</li> <li>• Frequency of coordination meeting to be dictated by the situation.</li> </ul>		
<p>Rapid Response Teams (RRTs)</p> <p>For creating first responders capacity</p>	<p>The concept draws inspiration from IOM created RRTs for creating first responders capacities in disaster assessment, medical first response (MFR) and SAR. It is proposed to create these capacities within disaster vulnerable districts in concert with IOM and possibly NVM on the following lines:-</p> <ul style="list-style-type: none"> <li>• RRTs to be created through Community Development Department (CDD) and EDO CDD to be made responsible for the project within the district.</li> <li>• Each team comprises a Team Leader and three sub-teams for community disaster assessment, local MFR and SAR.</li> <li>• The Team and sub-team leaders to be selected from community volunteers or public servants like school teachers.</li> <li>• Each sub-team to comprise 10-15 locally trained volunteers.</li> <li>• Need and sustainability considerations will decide number of teams in a district.</li> <li>• NDMA will facilitate creation of master trainers in the three RRT areas of function within the district through implementation partners.</li> <li>• The Programme will provide necessary resource set for each RRT.</li> <li>• District government will be made responsible for sustainability of the Programme.</li> <li>• It will be implemented as a focused intervention, first as a pilot project within four disaster prone districts and then subsequently to be widely replicated. PDMA's will also be involved for sustainability reasons.</li> </ul>	NDMA, PDMA's, DDMA's, IOM, NVM	MT
Disaster Compensation	<p>Following is recommended:-</p> <ul style="list-style-type: none"> <li>• Clear definition and communication of compensation criterion.</li> <li>• Beneficiary assessments should be carried out deliberately by multiple stakeholders.</li> <li>• Compensation is not a one time but a recurring exercise till all known beneficiaries, including those who have temporarily out migrated are accounted for and compensated.</li> <li>• DDMA's should ensure facilitation in ID cards preparation and opening of bank accounts if payments are made through cheques.</li> <li>• Cash payments by involving multiple stakeholders is the recommended for early empowerment of intended beneficiaries.</li> <li>• Clear and uniform criterion and procedure must apply for compensating the vulnerable and orphans.</li> </ul>	Provincial governments / PDMA's / DDMA's	ST
Media Policy	<p>NDMA to define guidelines governing media policy governing relief operations.</p> <p>Consistent with these Guidelines and the provincial media policy, DG PDMA will share the progress of relief effort with media on routine basis consistent with transparency needs. This is important also for curbing media disinformation.</p>	NDMA / PDMA's	ST
Accountability in Response	<p>Introducing following measures helps enhance accountability and transparency during response:-</p> <ul style="list-style-type: none"> <li>• Keep track of ongoing operations through constant monitoring and use of information management tools</li> <li>• Get multiple stakeholders inputs on response.</li> <li>• Set up a process of vigorous field monitoring to get feedback of the disaster affected and to judge impact of relief operations</li> <li>• Field evaluation by decision makers.</li> <li>• Make corrections where needed.</li> <li>• Proactive media policy.</li> </ul>	Universal applicability	

### Cyclone YEMYIN and Floods Losses

#### Loss of Life

Details	Sindh	Balochistan	Total
Deaths	215	205	420
Missing	29	80	109

Source: Respective PDMAs

#### Damage & IDPs

Effects	Balochistan	Sindh	Total
Villages Affected	5,000	1,449	6,449
Houses Destroyed	45,753	29,873	75,626
Population Affected	2 M	5,00,000	2.5 M
IDPs in Relief Camps	13,000	35202	48,202

Source: Respective PDMAs

#### Livelihoods Losses

Province	Crop Area Damaged	Livestock Heads Lost	Employments Lost	Direct Damages in Agriculture Sector (Rs Million)
Balochistan	68.4%	393,081	326,000	9977.6
Sindh	31.6%	40,177	164,000	3231.2

Source: Preliminary Damage & Needs Assessment Balochistan & Sindh, ADB & WB

#### Infrastructure Losses

##### Balochistan

S#	Category	Damage
1	PHED Schemes Damaged	267
2	Health Facilities Damaged	149
3	Educational Institutions Damaged	1025
4	Road Damaged (Length in Km)	4379
5		

Source: Preliminary Damage & Needs Assessment Balochistan & Sindh, ADB & WB

##### Sindh

S#	Category	Damage
1	PHED Schemes Damaged	45
2	Health Facilities Damaged	16
3	Educational Institutions Damaged	334
4	Road Damaged (Length in Km)	207.54

Source: Preliminary Damage & Needs Assessment Balochistan & Sindh, ADB & WB

### Relief Inputs – Cyclone YEMYIN and Floods

#### Relief Effort by Armed Forces

Armed Forces	Logistic Effort	Tonnage
PAF - C-130s	116 SORTIES	1300 TONS *
Pak Army – Aviation	522 SORTIES	452 TONS
Navy – Ships	15x SHIPS	960 TONS

\*Shelter, food & medicines Source: NDMA

#### NDMA Directed Relief Efforts

Description	Sindh	Balochistan	Total
Tents	10,000	53,638	63,638
Blankets	27,000	33,300	60,600
Rations (MT)	2,797	5,397	8,254

Source: NDMA

#### Compensation in Balochistan & Sindh (Summary)

Province	Households	Amount Released to Distts (M)	Paid by Distts	
			Households	Rs in Million
Balochistan	36,827	550.83	35,379	530.685
Sindh	29,587	250	23,391	350.86
Total	66,414	00.83	58,770	881.545

Source: PDMAs

#### Contribution of UN Agencies / INGOs

S#	Items	Quantity	Beneficiaries
1	Shelters	25,000	25,000 hhs
2	Shelter Kits	53,000	
3	Fortified Food		13,600 persons
4	Seeds & Fertilizers		21,000 farming hhs
5	Medicines	274 cartons	150,000 persons
6	Static & Mobile Health Service		385,000 person
7	Vaccinations		320,000 children
8	Transitional Shelter Schools	70	

Source: Inter-Agency Real Time Evaluation of Floods / Cyclone YEMYIN, IASC

## Foreign Assistance from Friendly Countries

DONOR COUNTRY/ ORGANIZATIONS	PLEDGED US\$
AUSTRALIA	US\$ 2.2 M
BAHRAIN	US\$ 180,328
CANADA	US\$ 1.9 M
CHINA	US\$ 330,000
FRANCE	US\$ 240,000
GERMANY	US\$ 340,000
IRAN	US\$329,922
IRELAND	US\$598,366
JAPAN	US\$ 352,100
KOREA	US\$ 200,000
NETHERLANDS	US\$ 712,400
NORWAY	US\$ 2.5 M
NEW ZEALAND	US\$ 400,000
SPAIN	US\$ 40,056
SWEDEN	US\$ 581,164
TURKEY	US\$ 2 M
UK (DFID)	US\$ 4.07 M
USA	US\$ 390,000
IFRC	US\$ 206,000
CERF / UN	US\$ 4.4 M
IDB	US\$ 200000
OFID	US\$ 300,000
EMBASSY OF PAKISTAN BAHRAIN	US\$ 24,680
EMBASSY OF PAKISTAN BRUNEI	US\$ 470
CONSULATE GEN OF PAKISTAN DUBAI	US\$ 9,649
EMBASSY OF PAKISTAN WASHINGTON	US\$ 1100
EMBASSY OF PAKISTAN UZBEKISTAN	US\$ 1270
EMBASSY OF PAKISTAN IRAN	US\$ 1065
EMBASSY OF PAKISTAN OMAN	US\$ 2200
<b>TOTAL</b>	<b>US\$ 22.5 M</b>

Source: NDMA

## IFRC / PRCS

## Response to Floods Disaster 2007

Sr.	Relief Items	PRCS NWFP Branch	Sindh	Balochistan	Total	Financial Effects	
		FATA				Unit Cost Rs.	Total Cost Rs.
1	Tents	800	1,094	8,586	10,480	8,000	83,840,000
2	Blankets	4,100	11,469	15,470	31,039	500	15,519,500
3	Plastic Sheets	1,300	361	4,775	6,436	1,000	6,436,000
4	Jerry Cans	900	9,081	11,072	21,053	337	7,094,861
5	Utensil Sets		5,470	4,414	9,884	1,200	11,860,800
6	Stoves	800	336	6,469	7,605	480	3,650,400
7	Lamp Hurricane	800	4,000	5,832	10,632	204	2,168,928
8	Used Cloth Bales			-	300 bales	500	150,000
9	Quilts	1,300	-	-	1300	400	520,000
10	Food Packs in KG		9,874	11,904	431,560	1,000	21,778,000
11	Misc. Food Items kg	10,200	5,000	91,550	106750 KG	50	5,337,500
12	Medicines		-	-	4.5 x tons		4,700,000
13	Hygiene Kits		1,661	9,138	10,799	800	8,639,200
14	Carpets		-	2,500	2,500	500	1,250,000
15	Plastic Roll		-	5,000	5,000	100	500,000
16	Mineral Water Bottle		-	27,000	27,000	24	648,000
17	Bed Sheets		6,800	5,437	12,237	300	3,671,100
18	chlorine sachets		-	37,045	37,045	5	185,225
19	Buckets		-	2,127	2,127	200	425,400
20	Mosquito Nets		2,127	9,209	11,336	500	5,668,000
21	Sleeping Mats		8,000	5,214	13,214	500	6,607,000
22	Shelter Kits		2,000	-	2,000		10,000,000
					<b>Cost in Million PKR</b>		<b>200.65</b>

Source: PRCS

## Health

### Medical Cover Provided by Provincial Health Department

Description	Sindh	Balochistan	Total
Medical Camps	21	253	274
Medical Teams	08	67	75

Source: Ministry of Health

### Total Patients Treated in Balochistan (Summary)

Diseases	Gastroenteritis	Malaria/ Fever	Skin Disease/ Scabies	ARI	Snake/ Scorpion Bite	Skin Rash/ Worm Infection	Others	Total
Total	52102	64385	13786	46080	517	17696	105605	300173

Source: Ministry of Health

### Total Patients Treated in Sindh (Summary)

Diseases	ARI	Diarrhoea/ Gastro	Malaria	Scabies/ Skin Diseases	Snake Bite	Heat Stroke	Miscellaneous	Total
Total	28182	19251	24481	23019	509	574	70276	166294

Source: Ministry of Health

**Rural Support Programs Network  
Response to Floods Disaster 2007**

<b>S#</b>	<b>RSP</b>	<b>Relief</b>	<b>Quantity</b>	<b>Beneficiaries</b>
1	BRSP	Water filters	200	200 hhs
		Clean Water Tanks	07	140 hhs
		Latrines	50	400 hhs
		Dry Ration	800 packs	800 hhs
		Medical assistance		1260 patients
		Veterinary Camps		61000 animals
		Kitchen Sets	750	750 hhs
2	NRSP	Food packets	2538	2538 hhs
		Tents & Transitional Shelter	2700	2700 hhs
		Medical assistance		10,637 patients
		Water survival kits	181	
		Nerox Water Filters	3000	
		Latrines	800	
		Bathing Spaces	2600	
3	SRSO	Cooked Food		31,200 persons
		Drinking water		34,600 persons
		Medical Assistance		5353 patients
		Livestock Treated		411
		Livestock vaccinated		4,019
4	TRDP	Shelter		1500 hhs
		Plastic sheets		700 hhs
		Dry Rations		3000 hhs
		Drinking water	50,000 ltrs	
		Health Camps	6	9000 patients
		Animal Feed		500 hhs

Source: RSPN



### DMT as an Institutional Link with NDMA in Disaster Management

Response to Cyclone Yemyin and floods during the summers revealed absence of an institutional mechanism between NDMA and the UN agencies and the humanitarian community to coordinate integrated operations to the extent possible. Instead one saw initiation of two processes, the national response led initially by the armed forces and then NDMA and its provincial affiliates reaching out the disaster affected regions very early in time. There were contributions from UN agencies and INGOs in responding to the disaster. UN agencies like WFP and UN Habitat have demonstrated information and data management tools which could benefit timely flow of information with NDMA.

Learning from this experience it is recommended to institutionalise coordination for disaster response between NDMA and UN agencies / international community through the DMT forum. Discussions on similar lines have been ongoing for quite some time and numerous proposals were debated. Consensus building behind such an exercise takes time but then Cyclone cum floods experience provides the stimulus for early activation of this forum. Following is, therefore, proposed.

DMT should be made operational under the UNRC Office in keeping with the principles of wider consultancy and participation of humanitarian actors. IASC to furnish policy guidelines and monitor DMT functioning. DMT itself should include two sub-forums, a wider one inclusive of all humanitarian actors for consultancy, information sharing and consensus building and a core group that steers DMT functions.

DMT should serve the purpose of undertaking vulnerability assessments, resource profiling, contingency planning, and advocate and facilitate risk reduction and disaster preparedness jointly with NDMA. In a disaster situation warranting UN / international community response, DMT forum can focus on joint post disaster assessments, planning and coordinate implementation consistent with national policy guidelines that apply.

These objectives can only be achieved through sustained NDMA – UN agencies / humanitarian community consultations, information sharing and joint planning.

NDMA plans initiating contingency planning for various national disaster scenarios in which inputs from the DMT forum will be sought in terms of possible contributions from the UN system, INGOs and humanitarian community at large. This could provide a framework with ingredients of UN agencies / international community's response embedded in NDMA response, should a particular contingency materialise.

To conclude, the need to establish DMT early is once again emphasised as an institutionalised forum for coordinated implementation of disaster response with NDMA.

Local Shelter Solutions

Locally Prepared Shelters in District Jaffarabad



Locally Prepared Shelter in District Jhal Magsi



Locally Fabricated Shelter by American Refugee Council in District Kharan



## Logical Framework Analysis

<b>Objective</b> - Improve upon the national disaster response system by introducing standards, accountability, proactive planning, situation relevance and interoperability between various stakeholders.				
<b>Outcomes</b>	<b>Outputs</b>	<b>OVI</b> s	<b>Method</b>	<b>Assumptions</b>
1.0 Standards for national disaster response introduced.	1.1 Basic parameters defined after studying international best practices Like 'Sphere Standards'. 1.2 Stakeholders analysis for identifying key partners in national disaster response conducted. 1.3 Current practices and capacity of the district government to implement the standards evaluated. 1.4 Draft standards prepared. Standards address concerns of marginalised and factor gender perspective. 1.5.Views of government and non-governmental stakeholders including Armed Forces on the proposed standards sought. 1.6 Standards redrafted after feedback. 1.7 Provincial master trainers trained on standards and their applicability. 1.8 Provincial workshops held for sensitisation on response standards. 1.9 Standards governing disaster response introduced.	1.4.1 Draft national disaster response standards prepared. 1.5.1 Feedback from national stakeholders on the Draft obtained. 1.7.1 National and provincial stakeholders familiarized with the response standards. 1.8.1 National disaster response standards introduced.	Response standards will be prepared and refined by consultants through an interactive process involving identified national stakeholders.  Provincial master trainers will be trained on implementation of the standards in DDMA's.  Provincial and district stakeholders will be sensitised with the standards.	Consensus on key national response stakeholders will be sought on the proposed interventions.  The mode will be stakeholders inclusive and participatory.  Beneficiary national stakeholders are identified through stakeholders' analysis.  Interventions will be implemented as an integrated programme.
2.0 Standard post disaster assessment tools and practices introduced	2.1 Disaster assessment procedures and processes applicable to PDMA's and DDMA's evaluated for situation relevance and integrated outputs. 2.2 International best practices consulted for benefiting national disaster assessment tools. 2.3 Standard draft post disaster assessments formats and procedures developed for PDMA's and DDMA's, relevant to their respective scope of work. 2.4 Assessment processes and SOPS developed. 2.5 Feedback of relevant stakeholders sought on draft assessment formats, processes and SOPs. 2.6 Standard software on post disaster assessment formats and processes developed. (Software will be developed as part of intervention serial 5.0)	2.5.1 Draft post disaster assessment formats, processes and SOPs prepared and circulated among relevant national stakeholders.  2.6.1 Supporting software developed  2.7.1 Relevant stakeholders familiarized with post disaster assessment formats and processes.	The intervention will be introduced under supervision NDMA.  However, IT consultancy will be hired for introducing soft post disaster assessments tools and formats.  Provincial master trained will be trained on application of post disaster assessment tools.  Provincial and district stakeholders will be	Funding support will be sought through One UN Programme and other sources.  Contingency planning would be introduced not as one time intervention but an ongoing process, gradually covering all major disaster contingencies.

	<p>2.7 Provincial workshops for sensitisation on post disaster assessment tools and processes held.</p> <p>2.8 Provincial master trainers trained on usage of assessment formats and related data base.</p> <p>2.9 After refinement assessments formats, SOPs and procedures introduced in 8 districts &amp; PDMA's. Subsequently in 50 DDMA's.</p>	<p>2.8.1 Capacities of relevant stakeholders built on software.</p> <p>2..9.1 Post disaster assessment formats and procedures introduced in PDMA's and 8 DDMA's as a pilot project . Subsequently introduced in 50 DDMA's</p>	<p>sensitised with the assessment tools and procedures.</p> <p>UNOCHA assessment formats and procedures will be reviewed.</p>	<p>All interventions will be introduced through a phased programme: as a pilot involving four provincial PDMA's, and 8 disaster vulnerable districts. After evaluating the outcomes, they will be gradually introduced in 50 DDMA's of disaster vulnerable districts.</p>
<p>3.0 Standard contingency planning tools and disaster response process benchmarks for PDMA's and DDMA's introduced.</p>	<p>3.1 Standard contingency planning format and procedures defined after consulting national &amp; international best practices.</p> <p>3.2 NDMA undertakes winter contingency planning involving relevant PDMA's and other non-governmental stakeholders.</p> <p>3.3 NDMA undertakes monsoons contingency planning involving relevant PDMA's and other non-governmental stakeholders.</p> <p>3.4 PDMA's and DDMA's of disaster vulnerable districts facilitated in contingency planning for winter and monsoons contingencies and local disasters / emergency situations.</p> <p>3.5 Contingency planning for seismic and drought hazard undertaken subsequently.</p> <p>3.6 Contingency plans shared with UN agencies / non governmental stakeholders.</p> <p>3.7 Disaster response processes applicable at PDMA's and DDMA's drafted. International best practices consulted. (Meant to guide response by incorporating post disaster assessment and coordination functions).</p> <p>3.8 Response processes shared with PDMA's and 8 DDMA's and refined based on feedback</p> <p>3.9 Response processes shared with PDMA's and all DDMA's to facilitate introduction of standard and predictable response practices.</p>	<p>3.1.1 Contingency planning for all major hazards gradually introduced at all tiers of national response framework.</p> <p>3..9.1 Standard disaster response formats, procedures and processes introduced.</p>	<p>The intervention will be launched under supervision NDMA.</p> <p>Relevant PDMA's and DDMA's will be incorporated in the NDMA led contingency planning process.</p> <p>PDMA's and DDMA's will be sensitised on standard contingency planning tools and procedures and on response processes.</p> <p>UNOCHA contingency planning tools and processes will be consulted.</p>	

	3.9.1 Contingency plans and proposed response processes shared with PDMA and DDMA in provincial workshops.			
4.0 SOPs for camp management introduced.	<p>4.1 Draft SOPs for camp management prepared after studying international best practices.</p> <p>4.2 Expert input from UNHCR sought.</p> <p>4.3 SOPs adapted to the existing capacities and practices being followed by DDMA.</p> <p>4.4 Draft SOPs circulated to provincial and district stakeholders and refined after feedback.</p> <p>4.5 Provincial master trainers trained on camp management practices</p> <p>4.6 Provincial workshops held to Sensitise PDMA and DDMA on the intervention.</p> <p>4.7 Standard camp management practices introduced in DDMA through PDMA through a phased programme.</p>	4.4.1 Camp management practices introduced in DDMA through a phased programme	<p>Consultants will be hired to draft camp management SOPs.</p> <p>UNHCR will be consulted for expert advice and on the modalities of its introduction within DDMA.</p> <p>Provincial master trainers will be trained on camp management practices and PDMA and DDMA will be sensitised on the intervention</p>	
<p>5.0 Standard information management system for disaster response and logistic tracking system introduced within NDMA, PDMA and DDMA.</p> <p>Note. Information management system will also serve the needs of post disaster assessment intervention (serial 2.0)</p>	<p>5.1 Need assessment of information management for disaster response undertaken for NDMA, PDMA and DDMA. (Essentially the system must reveal disaster losses, needs assessment, updated assessments duly factoring relief inputs, needs of vulnerable, needs for camp management, assessments for livelihood regeneration)</p> <p>5.2 Expert need assessment for logistic tracking system for NDMA, PDMA and DDMA undertaken. International best practices consulted.</p> <p>5.3 Experts design both programmes through an interactive process involving relevant national, provincial and district stakeholders.</p> <p>5.4 Training of provincial master trainers conducted on information and logistic tracking systems.</p> <p>5.5 PDMA and DDMA sensitised on the two programmes in provincial workshops.</p> <p>5.6 Programmes piloted in NDMA, two PDMA and DDMA ( to be identified).</p> <p>5.7 Programmes introduced under expert supervision and refined through disaster response experience.</p>	<p>5.1.1 Need assessment of disaster response and logistic tracking information management systems completed.</p> <p>5.3.1 User friendly programmes designed by experts.</p> <p>5.6.1 Capacity building of relevant stakeholders undertaken.</p> <p>5.6.1 Programmes introduced as explained.</p>	<p>Professional IT experts will be hired for carrying out need assessment and developing the programmes.</p> <p>NDMA will facilitate its implementation by initiating an interactive process with and between relevant stakeholders.</p> <p>International best practices will also be studied to benefit the intervention.</p> <p>WFP will be consulted in developing the logistic tracking system.</p> <p>Capacity building and sensitisation of provincial and district stakeholders undertaken as defined</p>	

	Note. Armed forces included in capacity building trainings.			
6.0 Rapid Response Teams (RRTs) introduced in disaster vulnerable districts.	<p>6.1 Concept crystallised in concert with DDMA, IOM and NVM.</p> <p>6.2 Social mobilisation conducted in districts in concert with NVM and CD Department. Local volunteers, team and sub-team leaders identified.</p> <p>6.3 Teams equipment deployed in Targeted districts.</p> <p>6.4 Training of team leaders and sub-leaders conducted and master trainers trained in the targeted districts.</p> <p>6.5 RRTs formed and local volunteers trained.</p> <p>6.6 Introduced as a pilot in 4 disaster vulnerable DDMA and subsequently in 16 DDMA through a phased programme.</p> <p>6.7 Mock exercises conducted and evaluated for operational efficacy.</p>	<p>6.1.1 RRTs concept crystallised.</p> <p>6.3.1 Social mobilisation conducted and team leaders and sub-leaders identified</p> <p>6.5.1 RRTs formed and local volunteers trained. Equipment deployed.</p>	<p>The intervention will be launched by NDMA in concert with IOM and possibly NVM.</p> <p>It will require social mobilisation within the targeted districts involving Community Development Department &amp; NVM / local NGOs.</p> <p>RRTs leadership will constitute an amalgam of local government functionaries and notables. Volunteers will fill rank and file.</p>	

**GANITT CHART Jan 2008- Dec 2009**

INTERVENTIONS	J F M A M J J A S O N D J F M A M J J A S O N D												RESP	PARTNER	OUTPUT	BUDGET \$		
	J	F	M	A	M	J	J	A	S	O	N	D						
1.0 Standards for national disaster response introduced	1-1-2-1-3												NDMA/ Consultants	PDMA,DDMA, UNOCHA	1-1-2-1-3	80,000		
				1.4													1.4	1,000
							1.5										1.5	10,000
								1.6									1.6	5,000
											1.7&1.8						1.7&1.8	100,000
2.0 Standard post disaster assessment tools and practices introduced	2-1-2-2-3-2-4												NDMA/ Consultants	PDMA,DDMA, UNOCHA	2-1-2-2-3	50,000		
								2.3									2.3	10,000
											2.7&2.8						2.7&2.8	45,000
																	2.9	100,000
																	3.2	
3.0 Standard contingency planning tools and disaster response process benchmarks for PDMA's and DDMA's introduced.	3-2																	
																	3.3	
																	3.6	25,000
																	3.7	15,000
																	3.8	10,000
4.0 SOPs for camp management introduced.	4-1-4-2-4-3												NDMA/ Consultants	PDMA,DDMA, UNOCHA, UNHCR	4-1-4-2	25,000		
																	4.4	20,000
																	4.5	75,000
																	4.6	
																	4.7	100,000
5.0 Standard information management system for disaster response and logistic tracking system introduced within NDMA, PDMA's and DDMA's.	5-1&5-2												NDMA/ Consultants	PDMA,DDMA,W/FP	5-1&5-2	100,000		
																	5.3	100,000
																	5.4	20,000
																	5.5	20,000
																	5.6	50,000
6.0 Rapid Response Teams (RRTs) introduced in disaster vulnerable districts.	6-1												NDMA/ Consultants	PDMA,DDMA	6-1	20,000		
																	6.2	10,000
																	6.3	200,000
																	6.4	40,000
																	6.5	30,000
																6.8	40,000	

## Tentative Budget Summary

INTERVENTIONS	COST (USD\$)
Standards for national disaster response introduced	181,000
Standard post disaster assessment tools and practices introduced	205,000
Standard contingency planning tools and disaster response process benchmarks for PDMA's and DDMA's introduced.	115,000
SOPs for camp management introduced.	220,000
Standard information management system for disaster response and logistic tracking system introduced within NDMA, PDMA's and DDMA's.	290,000
Rapid Response Teams (RRTs) introduced in disaster vulnerable districts.	340,000
<b>TOTAL</b>	<b>1,351,000</b>



## Resource Persons

### Balochistan Government

- |                                     |  |
|-------------------------------------|--|
| 1. Mr. Khuda Bukhsh Baloch          | DG, PDMA - Balochistan                   |
| 2. Mr. Agha Abul Hassan Al Hussaini | DCO Kharan                               |
| 3. Mr. Saeed Ahmed Umrani           | DCO – Jhal Magsi                         |
| 4. Mr. Noorullah Khan Magsi         | EDO (P&F) – Jhal Magsi                   |
| 5. Mr. Shaukat Ali                  | EDO (R) – Jhal Magsi                     |
| 6. Dr. Ashiq Hussain Magsi          | EDO (H) – Jhal Magsi                     |
| 7. Dr. Ghulam Mohammad Khetran      | EDO (Livestock) – Jhal Magsi             |
| 8. Mr. Abdul Nabi Magsi             | EDO (Education) – Jhal Magsi             |
| 9. Mr. Hayat Magsi                  | EDO (C&W) – Jhal Magsi                   |
| 10. Mr. Miran Bux                   | EDO (Agriculture) – Jhal Magsi           |
| 11. Mr. Hafeez Khoso                | EDO (Community Development) – Jhal Magsi |
| 12. Dr. Rukhsana Magsi              | MS DHQ – Gandwal                         |
| 13. Mr. Muhammad Akber              | EDO (PHE) – Jhal Magsi                   |
| 14. Dr. Hari Das                    | Health Department – Jhal Magsi           |
| 15. Dr. Kishor Kumar                | Health Department – Jhal Magsi           |

### Sindh Government

- |                           |                                      |
|---------------------------|--------------------------------------|
| 16. Mr. Syed Anwar Haider | Relief Commissioner Sind             |
| 17. Mr. Shakeel Aamir     | Deputy Secretary Public Health Sindh |
| 18. Mr. Mukhtar Sumro     | DCO Qambar                           |

### UN Agencies

- |                       |             |
|-----------------------|-------------|
| 19. Mr. Fawad Hussain | UNRC Office |
|-----------------------|-------------|

### INGOs

- |                       |                                     |
|-----------------------|-------------------------------------|
| 20. Mr. Bashir        | IOM – Qambar                        |
| 21. Mr. Shafiq Mengal | American Refugee Committee – Kharan |
| 22. Mr. Abdul Rehman  | Islamic Relief – Kharan             |
| 23. Mr. Taimoor Shafi | Merlin – Jhal Magsi                 |
| 24. Dr. Sareer        | Merlin – Jhal Magsi                 |
| 25. Dr. Bilal         | MSF (H) – Jhal Magsi                |
| 26. Dr. Rafiq Ahmad   | Mercy Corps – Jhal Magsi            |
| 27. Mr. Mohammad Ali  | Mercy Corps – Jhal Magsi            |
| 28. Mr. Farooq Shah   | Merlin – Jhal Magsi                 |
| 29. Mr. Irfan Shah    | Merlin – Jhal Magsi                 |
| 30. Mr. Ghulam Ahmed  | MSF (H) – Jhal Magsi                |
| 31. Ms. Rebecca       | Norwegian Refugee Council – Qambar  |
| 32. Mr. Rizwan Ali    | Norwegian Refugee Council – Qambar  |
| 33. Mr. Mangi         | CARE – Qambar                       |
| 34. Mr. George        | Action Against Hunger – Qambar      |

### PRCS/IFRC

- |                           |                                  |
|---------------------------|----------------------------------|
| 35. Brig ® Muhaamad Ilyas | Director Operations, PRCS / IFRC |
| 36. Dr. Asif Iqbal        | IFRC / PRCS – Jhal Magsi         |
| 37. Mr. Irfan Hameed      | PRCS – Jhal Magsi                |
| 38. Mr. Kanwar            | PRCS Karachi                     |
| 39. Mr. Zubair Khan       | PRCS Larkana                     |
| 40. Ms. Sabeen            | IFRC – Qambar                    |

RSPN

41. Mr. Rashid Bajwa
42. Ms. Shandana Khan
43. Mr Memon

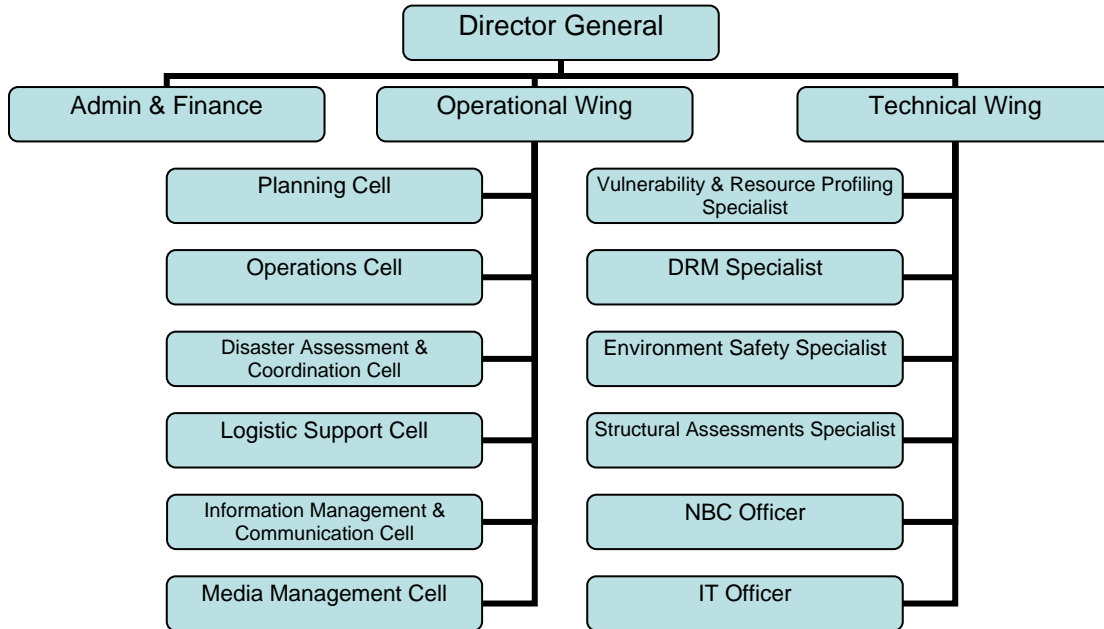
Director, NRSP  
 Chief Executive Officer, RSPN  
 CEO, SRSO

IDPs / Vulnerable Community Members

44. Mr. Mushtaq Ahmad S/O Hanif
45. Mr. Liaqut Ali S/O Arz Muhammad
46. Mr. Muhammad Ali S/O Jangila
47. Mr. Pathan S/O Ahmad Khan
48. Mr. Ali Jan S/O Mir Muhammad
49. Mr. Haji Muhammad Ayub S/O Haji Ali
50. Mr. Muhammad Yunus S/O Ali Gohar Khan
51. Mr. Zaidu S/O Hashmat Ali
52. Mr. Bheel Khan S/O Jogi
53. Mr. Muhammad Ishaque S/O Gul Hassan
54. Mr. Abdul Ghan S/O Shah Dost
55. Mr. Muhammad Punhal S/O Shah Dost

UC Judai, Tehsil & Distt Kharan  
 UC Judai, Tehsil & Distt Kharan  
 UC Garejo, Tehsil & Distt Jhal Magsi  
 UC Garejo, Tehsil & Distt Jhal Magsi  
 UC Garejo, Tehsil & Distt Jhal Magsi  
 UC Bareja, Tehsil & Distt Jhal Magsi  
 UC Bareja, Tehsil & Distt Jhal Magsi  
 UC Kot Magsi, Tehsil & Distt Jhal Magsi  
 UC Kot Magsi, Tehsil & Distt Jhal Magsi  
 UC Bhago Daro, Tehsil & Distt Qambar Shahdakot  
 UC Bhago Daro, Tehsil & Distt Qambar Shahdakot  
 UC Bhago Daro, Tehsil & Distt Qambar Shahdakot

## Recommended Organogram Provincial Disaster Management Authority



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