

Humanitarian Resilience Journal

Issue 3



Life Saving Humanitarian Interventions



Preface:

Humanitarian Resilience Journal is a biannual magazine published with the support of Asian Preparedness Partnership (APP) under the umbrella of Pakistan Resilience Partnership (PRP). This initiative has been undertaken to bring forward different perspectives on the general humanitarian landscape of Pakistan. Each issue of the journal is dedicated to a specific topic of national importance. The contributions to this magazine are purely on volunteer basis.

The third issue of the journal focuses on “Life Saving Humanitarian Interventions” and encourages writers to share initiatives undertaken by the humanitarian community in the country or suggestions for future interventions. The views, thoughts and opinions expressed in these articles are those of the authors and do not necessarily reflect the official policy or position.

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Humanitarian Resilience Journal

Life Saving Humanitarian Interventions for Disasters

ISSUE 3

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Humanitarian Response Facilities



Brigadier Mukhtar Ahmed, SI(M)

Emergencies, conflicts and disasters happen frequently, globally, including natural disasters, chemical or radiological incidents and complex emergencies. Over the last decade, major natural disasters, including the 2004 Indian Ocean Tsunami, the 2005 hurricane Katrina, the 2010 Haiti Earthquake, and the 2011 Japan Earthquake and Tsunami¹ have focused world's attention on the importance of having adequate national legal frameworks in place for disaster prevention and response to save human lives through humanitarian interventions for Disaster Risk Reduction.

Pakistan has a diverse landscape from snowcapped and rugged mountains, riverine plains, vast deserts, forests, hills and extended coastal area exposing Pakistan to all types of natural hazards i.e Hydro-Meteorological, Geological as well as human induced hazards. Pakistan also lies on active seismic fault line between Indian and Eurasian Tectonic Plate and is therefore prone to earthquakes of small magnitude and larger earthquakes occasionally. Most devastating example of natural disasters in the country is the October 2005 Earthquake in Northern Pakistan, which cost over 73,000 human lives, left 3.5 million people homeless, and caused severe damage to infrastructure². Similarly, Super Flood in 2010 caused an overall damage of estimated Rs. 855 billion (5.8% of 2009/10 GDP)³ and recurrent floods from 2011-2015 have also resulted in many deaths, damaged standing crops, left many more homeless, killed hundreds of livestock, and damaged infrastructure.

Establishment of Disaster Management Structure

National Disaster Management Authority (NDMA) is the lead agency at the Federal level to deal with whole spectrum of Disaster Management Activities. It was raised in 2007 through National Disaster Management (NDM) Ordinance and was finally provided parliamentary cover by an act of Parliament in 2010. It is the executive arm of the National Disaster Management Commission (NDMC), which was established under the Chairmanship of the Prime Minister, as the apex policy making body in the field of Disaster Management. NDMA aims to develop sustainable operational capacity and professional competence to coordinate emergency response of federal government in the event of a national level disaster. Under Article 9 (a) of the NDM Act 2010 of Parliament; NDMA is mandated to "Act as implementing, coordinating and monitoring body for disaster management".

Disaster Management is a devolved subject and fundamental responsibility to manage the disasters rest with provinces. NDMA acts as a national backup support for provinces. NDMA's prime task is to mobilize all government resources including those of armed forces in correct timeframe at required places. Implementation of national policies on disaster management is responsibility of Provincial Disaster Management Authorities (PDMAs) / District Disaster Management Authorities (DDMAs) who are responsible to employ given resources for disaster management while NDMA is a federal lead agency to coordinate national effort against disasters.

1 <https://www.peacepalacelibrary.nl/2017/09/natural-disasters-and-international-law/>

2 National Disaster Response Plan 2010 & 2019

3 Pakistan Floods 2010 – Damage and Need Assessment

Need for Humanitarian Response Facilities in Pakistan

Pakistan is among the first five South Asian Countries with the highest annual average number of people affected by floods. During flood 2010, NDMA did not have its own dedicated warehouses for storage of its relief stocks. Mostly emergency stocks were prepositioned on ad-hoc bases at various location in the premises of Pak Army, World Food Program (WFP), Pakistan Agriculture Storage & Services Company (PASSCO) and defunct Emergency Relief Cell (ERC). Flood-2010, which brought massive scale of devastation throughout the country, resulting in human casualties, collapse of infrastructure, houses and left nearly 20 million people affected. The extent of the destruction highlighted immense need for

Response Facility (HRF) across the country for pre-positioning of emergency response and relief supplies. In this context, an agreement between NDMA and WFP was signed in 2012 for construction of HRF facilities across the country.

Initially following 9 locations were selected in consultation with provincial government based on evidence from previous natural disasters, population centers, and with a view to enhancing emergency preparedness and response capabilities: -

- a. Muzaffargarh - Punjab
- b. Lahore - Punjab
- c. Jamshoro /Hyderabad - Sindh
- d. Sukkur - Sindh
- e. Jalozaï - Khyber Pakhtunkhwa



establishment of enhanced relief storage facilities across the country at strategic location.

NDMA, owing to lesson learnt from frequent disasters, started coordination with various UN Agencies to establish dedicated warehouse facilities at strategic locations. NDMA managed to mobilize resources through WFP for construction of 9 Humanitarian

- f. Quetta - Baluchistan
- g. Gilgit - Gilgit Baltistan
- h. Muzaffarabad - Azad Jammu & Kashmir (AJK)
- i. Islamabad - ICT

So far 7 HRF facilities have been completed and handed over to respective PDMA's except HRF facility at AJK and

ICT. Construction of these HRF facilities ensured effective disaster response by up-scaling

- a. Enhancement of country's storage capacity above 5,000 Metric Ton (MT).
- b. Being jointly utilized by NDMA & PDMA.
- c. Could be utilized as Forward Operation Base (FOBs) in case of mega disaster.
- d. Temperature controlled storages for food & medicines.
- e. Having open space for erection of Mobile Storage Units in case of disaster.
- f. Having office space, prayer rooms, large open space for training/simulation, parking area and helipads (where required).

HRF's Institutional Capacity

NDMA can support over 0.3 million people⁴ across the country immediately on the onset of disaster based on the stockpiles with necessary non-food items and flood fighting equipment held in elaborated warehouse networks for relief and rescue operation through Provincial Disaster Management Authorities and armed forces.

Disaster Management is a shared responsibility and a sacred national obligation. No single individual or institution can efficiently manage disasters; however, it is only possible with working in synergy, enhanced coordination, dedication, commitment, good will and sincerity.

⁴ National Disaster Response Plan 2019

Disaster Risk Reduction Total Resilience Approach-(TRA)



Jehangir Khan

Introduction to Disaster Risk Reduction (DRR)

Natural or human induced hazards often follow disasters. A disaster's severity depends on how much impact a hazard has on society and the environment. The scale of the impact in turn depends on the choices we make for our lives and for our environment. Like, how we grow our food, where and how we build our homes, what kind of government we have, how our financial system works and even what we teach in schools. Each decision and action makes us more vulnerable to disasters - or more resilient to them.

"Disaster risk reduction is the concept and practice of reducing disaster risks through systematic efforts to analyze and reduce the causal factors of disasters. Reducing exposure to hazards, lessening vulnerability of people and property, wise management of land and the environment, and improving preparedness and early warning for

"The more governments, UN agencies, organizations, businesses and civil society understand risk and vulnerability, the better equipped they will be to mitigate disasters when they strike and save more lives¹".

adverse events are all examples of disaster risk reduction.²"

For better mitigation you need to increase the capacity or reduce vulnerability of household, communities, area etc. as they are directly proportionate to each other.

$$\text{Risk} = \frac{\text{Vulnerability} \times \text{Hazard}}{\text{Capacity to Mitigate}^3}$$

Disaster ranges from low to high, for household to communities, also village to cities and poor to riches. Total financial collapse for a family is a great disaster but may not be affecting neighbors or communities around. Donor communities only plunge in when the disaster is affecting communities and not a single household. However in this document while planning for resilience our focus starts from a household, because we consider family as a unit of the society/community. Stronger & resilient family can support neighbors. That's why it is said that "Disaster risk reduction is everyone's business".

1 Mr. Ban Ki-moon, former United Nations Secretary-General (Jan 2007 to Dec 2016)
2 UNISDR definition of disaster
3 https://www.preventionweb.net/files/26081_kp1concepdisasterrisk1.pdf (p-15)

Importance of DRR

Conference of Parties COP21⁴ (Paris Summit 2015) is part of DRR which commits to the actions under climate change adaptation by the world leaders. Similarly contribution to the Millennium Development Goals MDG-7⁵ and Sustainable Development Goals SDG⁶ (6 out of 17) is contribution to Disaster Risk Reduction fully or partially. Goals 11 and 13 are very specifically speaking about DRR. On the other hand if we look into these goals down to detail, we will find that the basic purpose of all these 17 Goals are actually contributing to DRR which is ***making the world a safer & resilient place for everyone*** and actually that is the key line for our this new approach to DRR. This also explains the importance and scope of DRR.

09-Build resilient infrastructure, promote sustainable industrialization and foster innovation

11-Make cities inclusive, safe, resilient and sustainable

12-Ensure sustainable consumption and production patterns

13-Take urgent action to combat climate change and its impacts

14-Conserve and sustainable use the oceans, seas and marine resources

15-Sustainably manage forests, combat desertification, halt and reverse land degradation, halt biodiversity loss

There are different international framework⁷ of actions in the sector. Hyogo framework for action 2005-2015 speaks about *"Building the Resilience of Nations and Communities to Disasters"*. However the framework has been replaced & upgraded now with Sendai Framework for Disaster Risk Reduction 2015-2030,⁸

"To enable all communities to become resilient to the effects of natural, technological and environmental hazards, reducing the compound risks they pose to social and

economic vulnerabilities within modern societies. And to proceed from protection against hazards to the management of risk through the integration of risk prevention into sustainable development."

the scope and purpose of which is:

Pakistan's History of Disasters

Owing to geo-physical conditions, climatic extremes, with lofty degrees of exposure and vulnerability, Pakistan is a disaster-prone country. A range of hydro-meteorological, geophysical and biological hazards including avalanches, cyclones and storms, droughts, floods, glacial lake outburst floods (GLOF), earthquakes, landslides, tsunamis and epidemic pose risks to Pakistani society. Some of these hazards (e.g. floods, landslides etc.) are predominantly seasonal and occur on an annual basis, whereas other hazards such as earthquakes and tsunamis are rare events but potentially highly destructive. In addition to natural hazards a variety of human-induced hazards threaten Pakistani society, economy and environment. They include industrial and transport disasters including oil spills, nuclear hazards, urban and forest fires as well as civil unrest.

Pakistan is undergoing rapid changes turning from a predominantly rural and agrarian to an industrial, service-based and urban economy. Communities that have been living in hazard-prone areas for centuries often have mechanisms that allow them to recognize and mitigate the threats that surround them. As people migrate or are forced to migrate within the country, increasing numbers of - predominantly poor - people live in areas that are exposed to hazards they have little familiarity with. A high rate of population growth further feeds into this trend, and leads to environmentally damaging practices such as

4 <http://www.climatefocus.com/sites/default/files/20151228%20COP%2021%20briefing%20FIN.pdf>

5 Millennium Development Goals 2000-2015

6 Sustainable Development Goals 2015-2030

7 <https://www.unisdr.org/we/coordinate/hfa>

8 [www.preventionweb.net/go/sfdr; \(www.unisdr.org\); isdr@un.org;](http://www.preventionweb.net/go/sfdr; (www.unisdr.org); isdr@un.org;)

uncontrolled logging or overgrazing, that may intensify and modify existing hazards. Climate change threatens to alter monsoon and rainfall patterns further and is predicted to lead to more severe and less predictable flooding and drought episodes. Rapid urbanization with little attention to spatial planning and construction norms exposes higher numbers of people to the damaging events such as cyclones and earthquakes.

Both the 2005 earthquake and the 2010 and 2011 floods have revealed the vulnerability of Pakistani society and economy to disasters. Damages and losses have been massive but could have been largely reduced if disaster risk reduction measures had been incorporated into physical, social and economic development. The earthquake & floods illustrated the fact that disasters are not natural; they are closely related to human knowledge, skills and action or inaction. Quran guides us (Chapter #30, Verse 41 *“Corruption has appeared throughout the land and sea by (reason of) what the hands of people have earned so He may let them taste part of (the consequence of) what they have done that perhaps they will return (to correction)”* 2005 earthquake provided a wake-up call to move away from an emergency response paradigm, and to devote more attention to prevention, mitigation and preparedness.”⁹

The major infectious diseases that affect Pakistan are: food- or water-borne diseases: bacterial Diarrhea, hepatitis A and E, and typhoid fever; vector-borne diseases: dengue fever and malaria; animal contact disease: rabies.

The combination of internal political disputes and low levels of foreign investment have led to slow growth and underdevelopment with agriculture accounting for more than one-fifth of output and two-fifths of employment. The unemployment rate is at 5.9% (2020 est.),¹⁰ with approximately 24.3% (Financial Year (FY)

15/16)¹¹ of the population living below the poverty line.

In addition, Pakistan has to also deal with several transnational issues: the Kashmir dispute with India, a UN Military Observer Group has maintained

Between 1980 and 2010, 138 disasters were registered resulting in 58,098,719 people affected with an average of 1,874,152 people affected annually, and resulting in a total of US\$18,402,814 in economic damages. The top two natural disasters over this period were from floods and earthquakes with an annual occurrence average of 1.87 and 0.65 respectively. The top ten reported disasters over this period were: multiple floods occurring twice in 1992, 1995, 1996, 2003, 2005, and 2010 affecting approximately 41,763,868 people; an earthquake in 2005 affecting approximately 5,128,309 people; a drought in 1999 affecting approximately 2,200,000 people; and a storm in 2007 affecting approximately 1,650,000. Economically the drought cost US\$247,000; floods cost US\$194,799.62, and the earthquake US\$261,325, and the storm cost US\$1,620,000 in damages.

peacekeepers in the area since 1949; unclear demarcation of the Durand Line, the border with Afghanistan; military operations in Afghanistan resulting in large influxes of Afghan refugees, approximately 2.6 million (1.6 million registered and 1 million undocumented); and approximately 4.7 million (471,126 families) temporarily displaced returnees due to crisis and repeated monsoon flooding. Therefore according to germanwatch.org Pakistan is on the 7th position among countries most affected in the period 1996–2015¹²

9 National Disaster Risk Reduction Policy 2012, p. 1

10 <https://tradingeconomics.com/pakistan/unemployment-rate>

11 <https://profit.pakistanoday.com.pk/2018/04/26/pakistans-percentage-of-people-living-below-poverty-line-falls-to-24-3-percent-economic-survey-2018/>

12 <https://germanwatch.org/fr/download/16411.pdf>

DRM in Pakistan

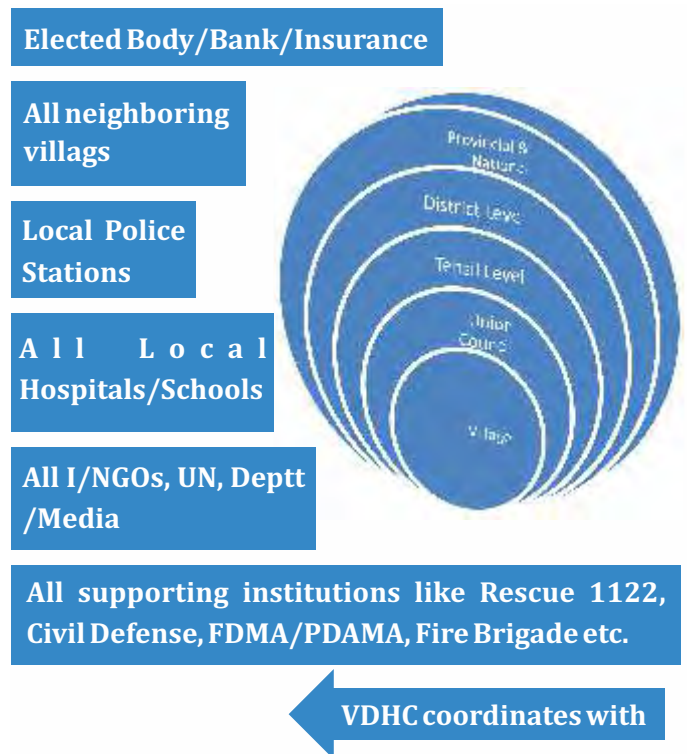
Although disaster management and emergency services were present in some form but it was only after massive infrastructure damages and human losses in 2005 earthquake that the seriousness of need to create institutions and systems for disaster management was realized in Pakistan. Legislative and institutional mechanism was put in place from federal to provincial and district levels and gradually plans and policies were formulated for effective disaster management, risk assessment and analysis, hazard mapping, disaster risk reduction, early warning systems, public awareness initiatives and Community Base Disaster Risk Management (CBDRM). These strategies have not only changed the government perspective about disaster management but it has also changed the public response towards it. Now the public take themselves as stakeholders in the system and realize the importance of their participation in disaster management plans and procedures and hence with the help of Non Governmental Organizations (NGOs), donor agencies and government institutions community based disaster management initiatives were planned and promoted. Independent and vibrant media has also played a vital role in promoting DRM approaches in the country; however we believe it's time now to scale up actions and implement an approach that carries total solutions to DRR and resilience of communities and making it acceptable to all.

The New Approach

"Total Resilience Approach is about countering disaster risks through skilled & coordinated efforts by the community with support from neighboring communities, civil societies, departments and line agencies in a best economic manner; and mitigating disasters through gathered strength and better resilience to recover fast and return to development, from where it was discontinued."

The focus shall be more on resilience & reduction of risks rather than mitigation while studying and implementing this new approach of Community Lead Total Resilience keeping in view Pakistan's hazard

history. Communities are always the first responder to any havoc, therefore Total Resilience Approach (TRA) shall apply all measures, steps, actions that has the potential to avert threat, reduce risks and increase capacity of the communities to have a stronger mitigation power. Resilience through, awareness, skill enhancement, capacity development, better management & linkages, good communication and coordination etc. starts at village level and expanded to the Union Council, Tehsil, District, Provincial & National; while at all level the Disaster Handling Councils (DHCs) coordinate with DMAs (under NDMA or PDMA) for further guidance as per NDMA framework of action. The visible characteristic of the Total Resilience Approach is the activities are led by communities which could be positive and complementing to the existing frameworks¹³. The purpose of all approaches and framework is to make communities resilient therefore, all such actions need



to be appreciated, encouraged and supported rather to negate just because it is not matching fully with some framework or strategy.

Down to Upwards Approach

This is a very comprehensive version of Community

13 <http://www.ndma.gov.pk/plans/National%20Disaster%20Risk%20Management%20Framework-2007.pdf>

Lead Disaster Risk Management (CLDRM), which is covering all aspects of safety and security against natural or human induced disaster for human, wildlife, environment (of that specific village), which is ultimately expanded to the national level. Therefore this is not a simple CBDRM model. The model above is for Village Disaster Handling Council (VDHC) at village level while for higher level like UC/District/Province etc. the coordination level shall be higher keeping in view the scope and response required.

TRA Process

Though the process remains almost the same with just adding values owing to needs, financial stability of the VDHC and provision of facilities in that specific area of implementation; this new approach can be implemented in three stages as mentioned below. For some areas activities of the ideal stage may be a luxury but for some communities it may be considered as basic keeping in view their circumstances therefore the activities mentioned against each stage are not fixed or permanent, it can be changed and adopted as per area requirements. For example marking school or hospital building roof with an identification sign may be



part/activity of ideal stage but in areas where bombs being thrown from fighter jets, it may be activity of basic stage

- 1- (Stage) Basic Resilience,
- 2- (Stage) Advanced Resilience and
- 3- (Stage) Ideal Stage of Resilience.

For example, a village X is selected for TRA implementation on the basis of its vulnerability and exposure to disasters, A complete village profile is developed with help from the community, local leaders, government departments, and other stakeholders; where risks, strength, weaknesses/vulnerabilities of the village are identified; A VDHC is supported to be formed with fixed roles and responsibilities; Basic DRR kit, training & awareness provided; coordination and communication channels established with other stakeholders and departments; DRM plan drafted; mock drill, early warning mechanism figured out; funds raising, implementation monitoring; this is Basic Resilience.

In Advanced Resilience stage, all basic activities are evaluated and value addition is continuously added resulting from M&E inputs on regular basis. Further the scope of TRA is extended (as a trickle-down effect) to

Actions	Basic Resilience Stage 1	Advanced Resilience Stage 2	Ideal Resilience Stage 3
Village Profile	Yes	Yes	Yes
House hold Profile	No	Yes	Yes
VDHC Formation	Yes	Yes	Yes
Community Risk Assessment	Yes	Yes	Yes
Household Detailed Risk Assessment	No	No	Yes
Community Disaster Risk Reduction Plan	Yes	Yes	Yes
Household Tailored Risk Reduction Plan	No	No	Yes
Funds Raising	Yes	Yes	Yes
Implementation of Community Risk Reduction Measures	Yes	Yes	Yes
Implementation of Household Risk Reduction Measures	No	No	Yes
Monitoring & Evaluation	Yes	Yes	Yes
Progressive Improvement in Community Safety, Resilience and Sustainability	Yes	Yes	Yes

the households (HHD). List of whole area is compiled with family members' details; their sources of income; capacity/strength/resilience, vulnerability/issues, assets, education, special persons in the family (for ensuring inclusive DRR); special skills if any in the family. It is considered as population census of the area but it is more than that, as the main purpose of this census is not only to know about population but their strengths and vulnerabilities. Their vulnerabilities shall be addressed and strength utilized to make other families resilient. A detail contact list of all HHDs are also compiled that could be helpful in early warning etc. Few buildings are identified, keeping in view their durability and resilience to the possible threats, for use in case of emergency/disaster. Proper handling of historical disaster be done, e.g. in case of severe weather, the village should use resilient seeds, in case of water shortage the village should form reservoir, rain water can also be stored for harvesting etc.

After successful implementation of Basic and Advanced Resilience, in Ideal Stage, the VDHC collects information about available medicines in all the local hospitals of their jurisdiction and compared with the population needs in case of any outbreaks of any historical disease of the area. Also information about availability of some special medicines like venom antidote, vaccines etc. are also collected. Total number of children and availability of schools (boys/girls) are also checked through coordination with school/education department and suggest new schools or additional class rooms/boundary wall/WASH etc. Such cases are also taken up with local authorities (Nazim/Assistant Commissioners ACs) for early provision. All roads, streets and path ways are checked if an ambulance or a police van can be accessed through, in case when it is required, use of building codes is ensured in all new buildings through consultation with relevant departments and where required for old buildings retrofitting be incorporated for safety. To save money food/agricultural items like vegetable, fruits should be

purchased from neighboring villages in proper coordination with village stakeholders/farmers and any surplus items sent to them for selling. Drinking water of the area is tested and suitable actions may be suggested in consultation with Public Health Department; use of water is also regulated/wastage prevented and need of additional water supply schemes identified and submitted to the government for further action etc.

Though it is a community led approach however for effectiveness it can be adopted by government too. It is not a parallel system of government but it surely strengthens coordination with government, early resolution of issues, conflicts, inter-dependency of communities and support each other in living a healthy and safe life. If the TRA is being implemented by government, they are suggested to establish a DNA library of all the people, install cameras on each and every entry point, and link the data with National Database & Registration Authority (NADRA) for e-identification and keep tracking of all in out in the area with an alert system to provide information regarding a non-resident person's entry in the area.

In short the TRA suggests use of available resources prudently, prevent wastage to avoid disasters, ensure utmost safety for each household and communities in

Progressive Improvement in Community Safety, Resilience and Sustainability



general, it suggests best and frequent coordination with all stakeholders, improve the culture of support within the society thus making them stronger & resilient to any mishap, disaster.

Village Profile Comprises of Basic Village Data & Mapping

- Total no of households;
- Total no of schools, hospitals, mosques, community centers like Hujras;
- Markets' strength;
- Road and other infrastructure
- WASH available services like water, latrine, solid waste management system, drainage system,
- Agricultural land, irrigation channels, livelihood and living style, neighbor support system;
- Civil defense, Rescue 1122, police station, any special force to tackle terrorism, fire brigade, NADRA office, Banks, Easy paisa outlets, Coverage of mobile network

History of Disasters

- total history of disasters happened here, their type, frequency, strength, impact;
- red zones which are extraordinarily exposed to hazards

Local Capacity

- of hospitals, mosque, community centers, schools, mitigation measures or equipment, indigenous knowledge and early warning system, communication system, search & rescue techniques,
- Food, medicine, fodder stock available,
- Safe buildings to shift hhds to stay as long as disaster remains etc.

Note: (These are some of the aspects of profile for a village, items can be added, amended or deleted as per requirement of the area)

community elders are approached, initial meetings conducted and their involvement ensured and interest developed in the project. While developing village/ community profile, members from all walks of life and profession may attend for drafting better and detailed profile. The profiling is led by community organization itself however where the Community Base Organization (CBO) knowledge/ awareness is insufficient about DRR, an outsider/NGO/DDMA can help them to chalk-out a comprehensive useful profile of the area. Therefore a 2-3 days CBDRM is suggested before profiling. It is a one-time rigorous exercise which is updated time to time with any new information that has come around.

The profile may map, all hospitals, police station with locations and jurisdictions, other government and non-government service & support departments/ organizations, schools (private & government) etc; history of disasters, their frequency and likelihood to happen, any new threats or risks identified, capacities of the community and departments/ organizations within the given locality, emergency contact details of the head of offices and respective coordinators. Available stock of medicine, food, fodder, water etc. may also be identified in their respective offices and communities.

Before or after proceeding for village profiling, all available official information is also gathered from the relevant departments, for example, village maps are obtained from Tehsil Municipal Administration (TMA), land & agriculture information from Revenue Office to validate the community knowledge. The profile shall become a valid and updated document for future reference and can also be shared with DDMA/Police/Local administration for their help.

Community Risk & Capacity Assessment:

As TRA is generally a community led model of implementation to ensure total resilience, community risk assessment is therefore also a participatory process and inclusive way to identify risks that the community faces and how people overcome those risks using local knowledge and available resources. The purpose of community risk assessment is to unite the community in common understanding of its disasters

Establishing Rapport & Community Profiling:

As a first step of TRA process, all stakeholders and

risks; the size/volume of its problem; resources & capacities are identified and analyzed carefully. Participatory rapid appraisal tools are adapted for community risk assessment and four components are assessed during the process by community:

- Hazards assessment
- Vulnerability assessment
- Capacity assessment and
- Community knowledge & perception of risks

Risk assessment is part of village profiling however as a process it can be done separately & specifically to be added to the profile later on.

Formation of Village Disaster Handling Council:

When we have compiled a detailed village profile and conducted the risk assessment, now it's time to form VDHC. The committee is a CBO which deals specifically with preparedness, prevention and mitigation of threats or risks of disasters or when it has happened actually. All members are elected from and by the community. It is important to have well versed individuals on DRR in the committee as active members. They are trained and assigned with responsibilities/ tasks as per their capacity/ability. Apart from training on handling disasters the members/groups shall also have training on funds raising, organizational management and development which is equally important for ensured sustainability of continued resilience and implementation of DRR plan.

A wide range of organizational arrangements which can be the core in implementation of the plan at CBO level include the following:

- A committee to run the VDHC
- A disaster volunteers team,
- A project management committee
- A network of community organization for disaster management etc.

The group listed above will form the basis for TRA. Aside from monitoring progress of the planned implementation, this core group usually motivates the community through translation of planned objectives

and targets into disaster reduction activities. This group also leads in necessary adjustment of targets and plans when necessary to keep on course with set objectives to reduce vulnerabilities and increase capacities in the immediate and long term.

Risk Reduction Planning (Action Planning):

After detailed and thorough analysis of risks & threats, a befitting action plan to cater & counter all risks/ threats is chalked by the community, prioritizing the risks as high, medium and low in categories. The high risks are catered first, then medium and low at the end. Responsibilities and duties are assigned to individuals and groups for earliest response. A periodic full rehearsal/drill of the plan is also part of the comprehensive Risk Reduction Plan (RRP).

These risk reduction, preparedness or mitigation measures are not necessarily big projects. The important point is to start off the risk reduction process through community mobilization based on existing capacities and resources within the community's immediate reach. Overall objectives, strategies are translated into operational plans and activities. The people, timetable, resources within and outside the community needed to turn the intent of the plan into reality, are identified here.

DRR Funds Raising:

After drafting action plan, for preparedness and mitigation, resources are also identified to implement the action plan and fund raising should be part of the plan. However it is suggested to divide activities in two parts 1st part consist of those activities under the plan that have available resources and the 2nd part that require some internal or external support. The 2nd part needs funds raising. The TRA suggest monthly contributions by the HHDs with their minimum support which are accumulated and should be allocated activity wise, as mentioned in the plan. Additional activities can be started if required funds are secured in the process at any stage and the contributions shall not discontinue. Further the CBO shall also reach out to the government/NGOs/other

experts for donation in kind or trainings or cash. External support can be of the following kind:

- Capacity building through training & educational activities and material.(SBDRM-School Based DRM and CBDRM-Community Based DRM can be very important and helpful for this¹⁴)
- Resource mobilization to supplement the community's efforts to generate resources to realize the risk reduction plan
- Facilitating linkages with concerned government agencies and NGOs for access to information and resources etc.

Implementation of Risk Reduction Measures:

As prioritized in the plan, the most immediate and high risk part of the DRM plan is started with to cover risks. If somehow it is not feasible, for the time being to work on the highly prioritized part of DRM, due to insufficient funds or else, the next prioritized task should be initiated and arrangements for priority number one should continue along side. Relevant committees formed under VDHC shall work according to their responsibilities as may be prescribed. Coordination committee shall expand and strengthen relations with organizations, departments etc. for resource mobilization while utilizing available indigenous capabilities.

It is equally important to ensure through progress monitoring the direction of the plan and activities have positive impacts on the overall objectives. There should also be a complain and redressal system to support monitoring process and ensure better results of the DRR measures being applied. It is also important to monitor & track risks (being part of the plan) even when we have taken measures. Also measures we have taken under the plan need to be evaluated periodically to see if the measures taken are still effective? Also make "Fall back Plan B" for high risks. Refine and

redefine strategies and risks if and when needed. Remember every risk does not require mitigation.

TRA Framework

TRA approach is strengthening and complementing the existing frameworks of action as drafted under Sendai Framework or National Disaster Risk Management Framework of NDMA¹⁵. However the TRA starts at grass root level and is expanded from village to nearby villages to Union Council, to Tehsil and District. Therefore the TRA framework of action is used down to upward because communities shall be leading the actions under DRR. It can be started without any external support and can be integrated with any program designed for that specific area by Govt. /Semi Govt. /NGO or any individual philanthropist. It can be started simultaneously in different villages/areas and can be networked with each other for more effectiveness.

Scope of TRA

The TRA shall apply to the risk of small-scale and large-scale, frequent and infrequent, sudden and slow-onset disasters, caused by natural or human induced as well as related environmental, technological and biological hazards and risks. It aims to guide the multi-hazard management of disaster risk in development at all levels as well as within and across all sectors".

14 HOPE'87 and FOCUS is working mostly on SBDRM while CARE on CBDRM in Pakistan, can be approached

15 <http://www.ndma.gov.pk/plans/National%20Disaster%20Risk%20Management%20Framework-2007.pdf> (National Disaster Management Authority 2007, Pakistan)

Inclusive Early Warning System (IEWS)

A Key Approach Towards Disaster Preparedness & Risk Reduction.



Waheed Shah

Pakistan is prone to natural, socio-natural and human induced hazards. During recent past has experienced many devastating disasters i.e. 2005 Kashmir earthquake, 2010 super flood and many more. The 2010 flood was the worst ever-super flood that affected the whole of Pakistan. Around 2,000 people lost their lives and over 20 million affected. The United Nations has rated the super flood in Pakistan as the greatest humanitarian crisis in recent history with more people affected than the South-East Asian tsunami and the recent earthquakes in Kashmir and Haiti combined. Based on the experience it's learnt that effective early warning is one of the key tool and preparedness approach to save lives and mitigate the risks for assets, livelihoods etc. Early warning systems (EWS) received very high attention during last two decades after some mega disasters globally. Countries including Pakistan exposed to hydro-met hazards i.e. floods, drought, heat waves, cyclones etc. have realized the significance of EWS at national and local levels. 2005 earthquake and 2010 super flood compelled the authorities concerned to seriously consider the establishment of quality and reliable EWS. National Disaster Management Authority (NDMA) in collaboration with international partners

started deliberations around the subject and developed the multi hazard early warning guidelines as a key disaster preparedness and risk reduction tool.

Early warning is a major element of disaster risk reduction. It prevents loss of life and reduces the economic and material impact of disasters. To be effective, EWS need to actively involve the communities at risk, facilitate public education and awareness of risks, effectively disseminate messages and warnings and ensure there is constant state of preparedness.

Global Framework of Early Warning System by UNISDR (United Nations International Strategy on Disasters Risks): The Fundamental Tenets of an IEWS

The ¹United Nations' Sendai Framework 2015 states that disaster risk reduction requires the involvement and collaboration of society as a whole. It also calls for empowerment and inclusiveness, accessible and non-discriminatory participation, and for special attention to the needs of people disproportionately affected by disasters. In 2013, the UN Office for Disaster Risk Reduction (UNISDR) led the first global survey on disasters and people with disabilities. It found that only

The Fundamental Tenets of an IEWS

A fundamental tenet suggested for IEWS is that the information that it provides, either in the context of a hazard manifesting or long before that, should address the five Ws and one H: what, when, where, who, why, and how:

- What is happening with respect to the hazard(s) and vulnerability/vulnerabilities? Of concern?
- When are impacts likely?
- Where are the locations at risk?
- Who is at risk?
- Why is this a threat, i.e. why are there vulnerabilities?
- How can the EWS be effective—not just for the specific hazard manifesting, but also as a long-term social process?

Source: Mickey Glantz and IlanKleman

(Box 1)

1 http://www.unisdr.org/2014/iddr/documents/2013DisabilitySurveyReport_030714.pdf

20-30 percent of people with disabilities could evacuate in an emergency, and highlighted the importance of having early warning systems in place that could reach all members of the community. Box 1 explains the fundamental tenets of an inclusive (IEWS)

Early warning systems are means by which people receive relevant and timely information in a systematic way prior to a disaster in order to make informed decisions and take action. The word system used to refer to the interplay between an array of elements aimed at facilitating communication and prompt response to protect and aid those in need. A complete and effective early warning system comprises of four inter-related elements, spanning knowledge of hazards and vulnerabilities through to preparedness and capacity to respond.

²There are four basic elements to an EWS where each part must function efficiently for the system to be successful:

- 1) Risk knowledge builds the baseline understanding about risks (hazards and vulnerabilities) and priorities at a given level.
- 2) Monitoring is the logical follow-up activity to keep up-to-date on how those risks and vulnerabilities change through time.
- 3) Response capability insists on each level being able to reduce risk once trends are spotted and announced. This may be through pre-season mitigation activities, evacuation or duck-and-cover reflexes, depending on the lead-time of a warning.
- 4) Warning communication packages the monitoring information into actionable messages understood by those that need, and are prepared, to hear them.

The objective of early warning systems is to empower individuals and communities threatened by hazards to act in sufficient time and in an appropriate manner to reduce the possibility of personal injury, loss of life and damage to property and the environment.

Pakistan Early Warning System:

Pakistan Metrological Department (PMD) is specialized agency in hazard monitoring and warning dissemination. Under PMD multiple hazard monitoring centers are operating at various levels. Few of them are 1) National Weather Forecasting Centre (NWFC) Islamabad 2) Marine Meteorology & Tropical Cyclone Early Warning Centre (TCWC) Karachi 3) National Drought Monitoring Centre (NDMC) Islamabad 4) National Seismic Monitoring & Tsunami Early Warning Centre (NTWC) Karachi 5) Flood Forecasting Division (FFD) Lahore and Flash Flood Forecasting & Warning Centre for Lai Nullah Basin Islamabad.

Addition to PMD, Federal Flood Commission (FFC), Water and Power Development Authority (WAPDA), Provincial Irrigation Departments (PIDs), National Disaster Management Authority (NDMA), Provincial Disaster Management Authorities (PDMAs), district administration, local government, media etc. are key hazards monitor and warning dissemination actors.

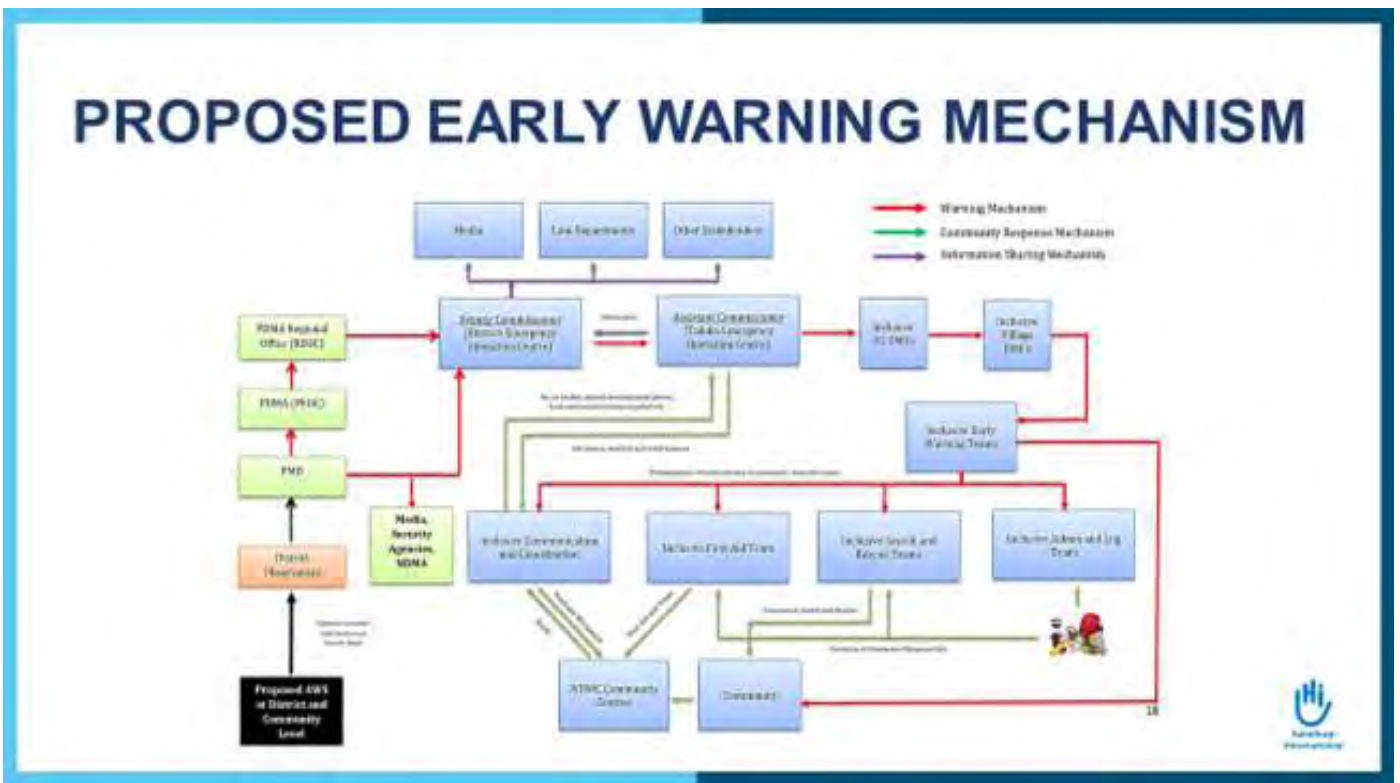
Based on regular observations of various types of meteorological phenomena happening in Pakistan, Pakistan Meteorological Department (PMD) issues seasonal, quarterly/monthly/weekly alert reports and disseminate it to NDMA/PDMAs, relevant government agencies, and media. PMD in recent past has increased its capacity to issue alerts and threat levels on different types of metrological phenomena well in time. It is now contributing in terms of issuing early warnings to the relevant provincial and districts governments in Pakistan. During the passage of time national and provincial level EWS have significantly improved yet need to do a lot more as climatic aspects are dramatically changing the hazard patterns and frequency.

2 <https://www.preparecenter.org/topics/early-warning-systems>

Early warning dissemination standard flow chart;



Proposed community based inclusive Early warning System (IEWS)³;



3 Handicap International (HI) developed this model under Inclusive DRR project in Sindh coastal areas.

Key recommendations and way forward:

- Development and strengthening of multi-hazard inclusive early warning systems rather than stand alone ones.
- Critical review of existing early warning systems and evolve accordingly.
- Inclusive approaches in designing and implementation of early warnings to reach the most vulnerable, at-risk and excluded segments of communities i.e. persons with disabilities, elderly, women, children etc. Early warning messages and signs must be simple, understandable and accessible for all.
- Use of sign language through media and other channels to reach the visually impaired population.
- Building communities' trust on warning information to timely act and evacuate if required. Awareness raising campaigns and periodic mock drills could effectively contribute in this regard.
- Incorporation of indigenous knowledge elements in EWS.
- Use of information technology, telecommunication and social media for information dissemination.
- Close coordination among hazards monitoring and information dissemination actors.

Climate Change, its Implications on Health and Appropriate Humanitarian Response



Shahid Mahmood

Climate change is no longer an abstract concept, rather it is a reality and people across the globe have to face the shocks of the climate change in the coming decades. The Global Climate Risk Index (GCRI) 2019¹ released by the public policy group Germanwatch reveals that more than 526,000 people have died across the globe as a result of 11,500 extreme weather events between 1998 and 2017 with estimated economic losses of US\$ 3.47 trillion during this period.

Climate change is attributed directly or indirectly to human activity that alters the composition of the global atmosphere and which is in addition to natural climate variability observed over comparable times.² Consequently, weather patterns are changing, sea levels are rising, weather events are becoming extreme due to the increased level of greenhouse gas emissions.³ Alongside other negative consequences of climate changes, the life-threatening impact on health through air pollution, heat waves and risks to food insecurity are becoming more apparent and visible.⁴

The GCRI has listed Pakistan as the seventh most vulnerable country affected by climate change, which means that its 200 million people are among the world's most vulnerable victims of the adverse effects of climate change. Pakistan's vulnerability arises from its distinct geography, demographic trends, socioeconomic factors, and lack of adaptive capacity. In the last 50 years, the annual mean temperature in Pakistan has increased by roughly 0.5°C. The number of heat wave days per year has increased nearly fivefold in the last 30 years. Annual precipitation has historically

shown high variability but has slightly increased in the last 50 years. Sea level along the Karachi coast has risen approximately 10 centimetres in the last century.⁵ It is predicted that there will be an increase in the frequency and severity of climate-related events, such as floods, droughts, cyclones, heat, and cold waves in the coming years.

The Impact of Climate Change on Health

Climate change is posing serious threats from shifting patterns of diseases, extreme weather events such as heat waves, floods and severe storms, droughts to the degradation of air quality, food and water supplies, and sanitation. Climate change, therefore, affects human health in two main ways: first, by changing the severity or frequency of health problems that are already affected by climate or weather factors; and second, by creating unprecedented or unanticipated health problems or health threats in places where they have not previously occurred. In other words, weather and climate effects are key determinants of health. It also influences the transmission of infectious diseases.⁶

An outline of the major threat and consequences posed to health due to climate change is given below:

Disruption of essential infrastructure and health services: Climate change is affecting the weather and rainfall pattern in Pakistan resulting in violent rainfall and flood. Pakistan has been severely impacted by weather-related extreme events over the past many years including severe rainfall and concurrent floods that have severely affected the lives and livelihoods of

1 Global Climate Risk Index 2019; https://germanwatch.org/sites/germanwatch.org/files/Global%20Climate%20Risk%20Index%202019_2.pdf
2 https://unfccc.int/files/essential_background/background_publications_htmlpdf/application/pdf/conveng.pdf
3 <https://www.un.org/sustainabledevelopment/climate-change-2/>
4 <https://www.un.org/en/climatechange/un-climate-summit-2019.shtml>
5 Climate Change Profile of Pakistan by ADB; <https://www.adb.org/sites/default/files/publication/357876/climate-change-profile-pakistan.pdf>
6 WHO <https://www.who.int/news-room/fact-sheets/detail/climate-change-and-health>

people. The floods in 2010 through 2014 in Pakistan have destroyed more than 500 of the 3000 hospitals and clinics in affected districts across the country. These floods severely limited access of the affected population to emergency and routine care, safe drinking water and hygiene and sanitation conditions.⁷

Deaths due to extreme heat: Pakistan experiences serious heat index in its southeastern parts including Chhor, Badin, Hyderabad, Jaccobabad, Nawabshah, Padidan, Karachi and Rohri, which falls under desert-like hyper-arid climates. Chances of heat stroke/sunstroke are much prominent in the peak summer days due to the increase in temperature. The mean maximum temperature at most of the stations exceeded 41 degrees Celsius⁸. According to the World Meteorological Organization (WMO), Nawabshah experiences highest temperature for April 2018, which was 50.2 degrees Celsius (122 degrees Fahrenheit)⁹. In 2018, the heat waves took lives of 65 people in Karachi alone.¹⁰

Worsened allergy and asthma conditions: Changes in climate is altering precipitation patterns and increasing concentration of atmospheric carbon dioxide. It increases the amount of airborne pollutants in the environment including carbon monoxide, oxides of nitrogen, and volatile organic compounds. The oxides of nitrogen and volatile organic compounds produce ozone when combined with sunlight, which results in respiratory tract infections among the affected population. People with asthma suffer more since they are more susceptible to the effects of ozone. Similarly, longer warm seasons result in longer pollen seasons and, therefore, longer seasons of allergy prevail. Another hazard is the Mold¹¹ growth, which is related to increased storms, precipitation,

flooding, temperatures, and humidity. Mold can harm our health by decreasing the air quality in homes, schools, and work environments. Mold can cause respiratory irritation and is a common trigger for asthma and allergies.¹² Winter smog in Pakistan in December and January for the last several years, is seriously affecting health and causing respiratory infections. With the increased use of coal and petroleum across the region including Pakistan, India and China, it will exacerbate and will result in serious health-related complications.

Vector-borne diseases: Vector-borne diseases are illnesses that are transmitted by vectors including mosquitoes, ticks, and fleas. Climate change significantly influences the distribution and prevalence of vectors and is likely to have both short and long-term effects on vector-borne disease transmission and infection patterns. In Pakistan, malaria and dengue fever flourish after monsoon especially from August to November. Total 260,100 cases of malaria were reported from across Pakistan in 2016, which are far higher than the cases reported in 2015, which are 141,327.¹³ Alongside other factors, the climate-related changes like warm and humid weather, stagnant water due to floods contribute to the high prevalence of malaria and dengue.

Water-related illnesses: Factors related to climate change—including temperature, precipitation and related runoff, hurricanes, and storm surge—affect the growth, survival, spread, and virulence or toxicity of agents of water-related illness. It increases people's exposure to water-related contaminants due to abnormal precipitation and flooding which likely result in waterborne diseases. Exposure occurs through ingestion, inhalation, or direct contact with

7 <https://www.who.int/hac/crises/pak/highlights/september2010/en/>

8 http://www.pmd.gov.pk/rnd/rnd_files/vol6_issue12/8_Rise%20in%20Summer%20Heat%20Index%20over%20Pakistan.pdf

9 <https://www.reuters.com/article/us-pakistan-temperature-water/pakistans-shocking-spring-heat-drives-up-water-use-health-risks-idUSKCN1IW1JP>

10 <https://qz.com/1285421/pakistan-heat-wave-photos-of-karachi-amid-deadly-high-temperatures/>

11 Molds are fungi that can be found both indoors and outdoors.

12 https://www.apha.org/~media/files/pdf/topics/climate/asthma_allergies.ashx

13 <http://dmc.gov.pk/documents/pdfs/Malaria%20Annual%20Report%202016.pdf>

contaminated drinking or recreational water and through consumption of contaminated fish and shellfish.

Mental health consequences of climate change: Damages and destruction caused by weather-related disasters, extreme heat wave, prevalence of water-borne diseases, disruption of markets, lack of access to food, health and other amenities and displacement results in mental health consequences ranging from minimal stress and distress symptoms to clinical disorders, such as anxiety, depression, post-traumatic stress, and suicide. The mental health and well-being consequences of climate change-related impacts often interact with other social and environmental stressors. Overall climate change effects on mental health and well-being are critical.

Malnourishment: Climate change is very likely to affect global, regional, and local food security by disrupting food availability, decreasing access to food, and making utilization more difficult. It adversely affects the communities in general and children, women, elderly and disabled population in particular. Children and women remain malnourished due to lack of access to food and medicines resulting in high mortality rate of newborn and children.

Humanitarian response

The National Climate Change Policy in Pakistan is the guiding document on climate change, setting out the goal of achieving climate-resilient development for the country through mainstreaming climate change in the economically and socially vulnerable sectors of the country. Many other related policies at national levels and Pakistan's commitments to international conventions in contributing to controlling climate change and resilience building have the potential to reduce risks and vulnerabilities.

Vulnerable group of the population including persons with disabilities, elderly, pregnant women and children, low-income population, and some occupational groups are highly susceptible to the adverse consequences of climate change and hence

need special attention and care during humanitarian response.

To respond to the controlling of and building resilience of communities to climate-related hazardous health conditions, the following framework is proposed:

1. Developing partnerships with government and implementing partners;
2. Building capacity through training and distribution of international evidence-based standards and tools through the partnership of health ministry at the federal level and provincial/ district level health departments with UNICEF and WHO;
3. Provision of essential medicines, emergency health kits and essential supplies through Basic Health Units (BHUs), Rural Health Clinics (RHCs), Tehsil Headquarters (THQs) and District Headquarters (DHQs) in partnership and technical support from UNICEF and World Health Organizations (WHO);
4. Human resource capacity through internal surge mechanisms and standby partners;
5. Fast track processes in emergencies including advocacy, emergency funds and resource mobilization strategies;
6. There should be arrangements for lifesaving care for the displaced population: supply and availability of essential medicines, medical kits, hygiene promotions and primary healthcare services for children and women.
7. Immunization and vaccination against communicable diseases alongside hygiene promotion
8. Awareness raising through disseminating information on the threats that climate change poses to human health.
9. The implementation of public health response to climate change should be timely to reduce health vulnerability to climate change while reducing carbon emissions.

Pakistan's Journey Towards Disaster Management and Risk Reduction



Ali Jabir

The country had undergone a journey of disasters after catastrophic earthquake of 2005 that ushered the need to devise a proper dedicated system to cope with natural calamities.

There are annual monsoon contingency plans and National Disaster Management Plans (NDMP) approved by National Disaster Management Commission headed by the Prime Minister.

NDMA unprecedentedly has successfully developed five strategic warehouses with sufficient stock of non-food items to provide food assistance in case of any disaster, it also helped Pakistan to send aid to its neighboring country Iran which is evidence of the level of excellence achieved in the vision of making Pakistan a disaster resilient nation.

At present, Pakistan Safety School Framework project, a flagship program by NDMA had disembarked the country into a new phase of disaster risk management where sensitization and precautionary measures to protect the most vulnerable groups particularly women and children during emergencies.

NDMA and provincial disaster management authorities (PDMAs) of all the provinces and Gilgit Baltistan Disaster Management Authority have established close coordination and contact that has ensured swift information flow to take in-time preventive and mitigation measures during disasters especially floods and heatwave outbreak.

NDMA has developed its website in line with the frequency of disasters as it has regular monsoon, heat waves, earthquakes, floods and even across the line of control firing loss updates. The website also contains policy framework done by NDMA from contingency

plans to NDMP which is public to everyone however there is room for improvement in terms of making available the best approaches and models of disaster management to risk mitigation.

Pakistan has not reached to an ideal level but it has reached a far better position than 2005 where it has all the required legislations in place with relevant policy making done in the earnest. The dearth of stakeholder ownership and realization of political elite of the gravity of disasters' occurrence projected due to climate change might put impediment in the way of a disaster resilient nation.

However, parliamentarians' caucus on disaster risk reduction and management was formed by NDMA in collaboration with the ministry of climate change which will help in bringing the policy makers well acquainted with disaster risk management and mitigation measures for effective and necessary legislation.

The responsibility then lies on media to educate the masses on lurking disasters due to global climate change impacts.

It is also an obligation of the journalist fraternity to report disasters with accuracy and objectively. National Institute of Disaster Management (NIDM) under NDMA and National Humanitarian Network (NHN) are conducting numerous consultative stakeholder training workshops which are aimed at capacity building of journalists reporting on disasters. Unfortunately, the journalist fraternity has failed to catch the pace as most of the time at various workshops, there are only few who understand the fundamental knowledge of disasters and disaster management. The pertinent question to be raised here

is that the media is supposed to be one of the strong pillars of the society, therefore responsibility also lies on the shoulders of the journalist community to keep themselves abreast with the fundamental knowledge and basic guidelines of disaster management to avoid releasing misleading information to the masses.

No nation is fully prepared to embrace disasters rather possess the ability to withstand and effectively respond to the emergency situation taking place rendering reduced loss of precious lives, infrastructural assets

and any other resource under threat during a natural or human induced disaster. We are a nation that has faced one of the longest and blood spilling conflict in the face of war on terror but still the people are fighting with the menace of terrorism and if we can stand firm after losing a number of innocent precious souls then definitely this nation has the potential to make Pakistan disaster resilient. It is not only the responsibility of disaster management bodies; every stakeholder has to contribute his/her share in this effort.

Strengthening of Local Disaster Management Systems



Fareed Ullah

The rapid change in global climate has given rise to many disasters that pose a severe threat to human life, property and infrastructure. Disasters like floods, earthquakes, tsunamis, droughts, sediment disasters, avalanches, GLOFs, and cyclones with storm surges are some prominent manifestations of climate change phenomenon. Pakistan, which is ranked in the top ten countries that are the most vulnerable to climate change effects, started planning to safeguard and secure the life, land and property of its people in particular the poor, the vulnerable and the marginalised. However, recurring disasters since 2005 have provided the required stimuli for accelerating the efforts towards capacity building of the responsible agencies, which include federal, provincial, district governments, community organizations, NGOs and individuals. Prior to 2005, the West Pakistan National Calamities Act of 1958 was the available legal remedy that regulated the maintenance and restoration of order in areas affected by calamities and relief against such calamities. An Emergency Relief Cell within the Cabinet Division has been serving since 1971 as an institutional disaster relief support at the national level. Similar institutional arrangements existed at the provincial level in the form of relief commissioners. However, that regime only provided a reactive approach towards emergency response. The United Nations International Strategy for Disaster Reduction (UNISDR) introduced the paradigm shift from a reactive to a proactive approach in the form of the Hyogo Framework of Action (2005-2015) signed by 168 countries including Pakistan. To fulfil the global obligations as well as cope with the challenges emerged in the aftermath of the October 2005 earthquake, the Government of Pakistan promulgated the National Disaster Management Ordinance in 2007 to introduce a comprehensive National Disaster Management System in the country. The Ordinance became the Act called the

National Disaster Management Act in December 2010. The Act establishes three tiers for the disaster management system: i.e., national, provincial and district levels. Under the Act, the National Disaster Management Commission (NDMC) was established at the national level, and has the responsibility for laying down policies and guidelines for disaster risk

The importance of local disaster management system in responding and preventing the devastating impact of any human induced and natural disaster cannot be underestimated. But unfortunately very little work has been done so far to strengthening the local disaster management system. Capacity building of DDMA, local NGOs and CBOs who are responding first to any disaster is required to be strengthened in the area of preparedness, prevention and resilience of the local communities to mitigate the possible impact of any disaster on the most vulnerable beneficiaries. For the last decade in Pakistan it has been witnessed that no serious effort has been made to build the capacity of these local responders to effectively undertake emergencies response in a professional, timely and appropriately manner. This has contributed to human sufferings, like loss of lives, damages of infrastructure, livelihood, health, protection and wellbeing of most vulnerable populations.

As mentioned earlier that despite the polices for strengthening the disaster management system very little practical work has been done so far on the aforementioned subject and the greater need is felt to focus more on strengthening the local management system in preparedness, resilience and to effective and timely response should be ensured before during and after the emergencies.

Across Pakistan, communities struggle with the threats

posed by the environment in which they live in. Many areas of the country are prone to natural disaster, from drought to flood, to devastating earthquakes, and as the world's climate shifts, Pakistan is expected to be severely affected. Strong support from international donors is required to boost the capacity of Government and communities to better prepare for any future disasters.

Way Forward

- The capacity building of vulnerable communities is required in order to help them identify hazards and risks, and analyse their own vulnerabilities.
- Efforts are required so that the local disaster management system and local communities are able to develop risk maps and plan preparedness and response plans as they support the adaptation and response measures they identified.
- Community groups and local disaster management system are required to be trained in First Aid and Search & Rescue so that they are equipped to develop into an emergency response force at the frontlines of disaster.
- Local women and men should be able to become active leaders in protecting their

communities instead of relying solely on outside support for emergency relief.

- Capacity of DDMA needs to be enhanced through the availability of human resource, proper set up, established Emergency Information Centre, good relations with citizens/Local NGOs / Local Forums, radio programs and printing materials on NDM act and District Disaster Management Plan (DDMP) for wider circulation.
- District Forum should enhance its capacity through regular meetings, linkage meetings, activity Management and get registered under societies Act 1860.
- CBOs' capacity needs to be enhanced for mitigating the impacts of hazards and preventing them from becoming disasters through review/re-preparation of Village Disaster Management Plans (VDMPs).
- Capacity Building of Local NGOs, Forums, CBOs on DRR/DRM through formation of Disaster emergency response teams.
- Capacity building and provision of guidelines for disaster risk management to the DDMA through revision and formulation of Disaster Management Plans.

Asian Disaster Preparedness Centre (ADPC) with support from Bill and Melinda Gates Foundation (BMGF) is implementing the program 'Strengthening Capacity of Government, Local Humanitarian Organizations and the Private Sector on Preparedness for Response in Asia' in 6 South and South-East Asian countries namely- Nepal, Pakistan, Sri Lanka, Cambodia, Philippines and Myanmar.

The program utilizes a unique network approach by creating the Asian Preparedness Partnership (APP) - a multi-stakeholder regional partnership through the program. APP strives to improve inter-organizational coordination and dialogue between Governments, Local Humanitarian Organization networks and Private Sector networks for enhancing capacities through partnerships, knowledge resources, training and networking opportunities. The program's goal is to strengthen the emergency response capacities in these countries to better prepare for, respond to, and recover from disasters.

With the creation of national partnerships in the program countries and commencement of planned activities, it would be imperative to highlight the value addition of this collaborative approach in the overall humanitarian architecture of each project country. As part of this strategy, communications and outreach can play a critical role in the dissemination of work undertaken to improve and strengthen coordination mechanisms and emergency response capacities of our key stakeholders.

The logo for the Asian Disaster Preparedness Centre (ADPC) is displayed in a large, bold, lowercase sans-serif font. The letters are a light blue color and are set against a dark blue rectangular background. The 'd' is notably taller than the other letters, and the 'p' has a long descender.



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