APP
ASIAN PREPAREDNESS PARTNERSHIP

Pakistan Baseline Assessment Country Report

Program for Strengthening Capacity of Governments, Local Humanitarian Organizations and the Private Sector on Preparedness for Emergency Response in Asia

ADPC
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BILL & MELINDA GATES foundation

adpc

Acknowledgements

The baseline assessment report has been completed with support from the Bill and Melinda Gates Foundation (BMGF) and Asian Disaster Preparedness Center (ADPC). The report has been developed based on consultation and data shared by many government organizations/department, non-government organizations, private sector entities, media persons, academic institutions and United Nation agencies at federal, provincial and district level. Their contribution during the focus group discussion and validation session have been useful in improving the design and contents of the report. We are grateful to all whose support has made the effort turn into a successful publication. Our special thanks to Mr. Muhammad Sufyan for data analysis & report writing, Ms. Sana Javed for data collection & uploading. We also gratefully acknowledge the efforts of Ms. Sana Zulfiqar & Mr. Sajid Naeem for trier contribution.

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Foreword

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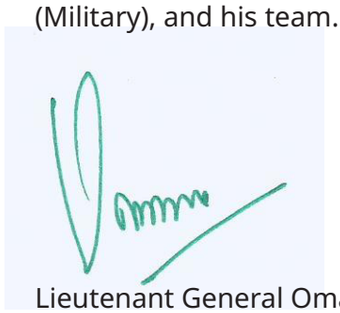


Lieutenant General Omar Mahmood Hayat,
HI (M)
Chairman,
National Disaster Management Authority

Contents

Acronyms and Abbreviations

ADPC	Asian Disaster Preparedness Centre
ADRRN	Asian Disaster Reduction and Response Network
AAL	Annual Average Loss
APP	Asian Preparedness Partnership
BMGF	Bill and Melinda Gates Foundation
CCCM	Camp Coordination and Camp Management
CHS	Core Humanitarian Standard
CSR	Corporate Social Responsibility
DDMA	District Disaster Management Authority
DRR	Disaster Risk Reduction
EM-DAT	Emergency Event Database
FATA	Federally Administered Tribal Areas
FDMA	FATA Disaster Management Authority
FPCCI	The Federation of Pakistan Chamber of Commerce and Industry
GDNR	The Global Network of Civil Society Organizations for Disaster Reduction
GTF	Gender Task Force
HCT	Humanitarian Country Team
HEC	Higher Education Commission
HED	Higher Education Department
IASC	Inter-¬Agency Standing Committee
ICCM	Inter-¬Cluster Coordination Meeting
INGOs	International Non-¬governmental Organizations
KPK	Khyber Pakhtunkhwa
LEAD	Leadership for Environment And Development, Pakistan
LHO	Local Humanitarian Organization
LNGO	Local Non-Governmental Organization
MDG	Millennium Development Goal
NDMA	National Disaster Management Authority
NIDM	National Institute of Disaster Management
NGO	Non-¬governmental Organization
NHN	National Humanitarian Network
NNGO	National Non-¬governmental Organization
NWA	North Waziristan Agency
PCP	Pakistan Centre for Philanthropy
PDMA	Provincial Disaster Management Authority
PEMRA	Pakistan Electronic Media Regularity Authority
PHF	Pakistan Humanitarian Forum
SAARC	South Asian Association for Regional Cooperation
TDP	Temporary Displaced Persons
UNISDR	United Nations International Strategy for Disaster Reduction

Executive Summary

Asian Disaster Preparedness Center (ADPC), in collaboration with the Bill & Melinda Gates Foundation, has launched the program *Strengthening Capacity of Government, Local Humanitarian Organizations, Private Sector and the Media on Preparedness for Emergency Response* in six Asian countries: Cambodia, Myanmar, Nepal, Pakistan, the Philippines, and Sri Lanka. Each country has undertaken a Country Specific Baseline Survey to understand the current context and engagement of government entities, the private sector, local NGOs / civil society organizations, international organizations, academia, and media in Emergency Response.

Each country has completed a sample baseline survey of selected at-risk geographical areas with the goal of investigating the current context and engagement of government entities, the private sector, local NGOs/civil society organizations, international organizations, academia, and the media in emergency response. These country reports will be summarized into a Regional Synthesis Report for the six countries to provide comparisons for the implementation of program.

This report aims to summarize the findings in Pakistan in order to identify gaps and areas for strengthening capacities for a more effective humanitarian response.

The report presents a snapshot of the country profile inclusive of the hazard and disaster profiles, policy, legal and institutional framework for disaster risk management and prevalent vulnerability. It details out the findings of the questionnaire survey, the Focus Group Discussions and the Key Informant Interviews. The findings have revealed gaps in existing institutional capacity, the low level of coordination among stakeholders, and the need for augmentation of knowledge sharing. Recommendations based on the findings include the following:

1. Integration of curriculum on disaster risk management and humanitarian leadership into university courses

2. Strengthening of research on humanitarian coordination to facilitate effective coordination during emergency response,

3. Improve capacity for knowledge management

4. Development of a Comprehensive Emergency Response Database,

5. Review of the Cluster Approach for emergency response

6. Enhance Capacity Building of All Stakeholders and

7. Orientation of Policy Makers for improved risk governance

Pakistan Baseline Assessment Country Report

Preamble

The program on *Strengthening Capacity of Government, Local Humanitarian Organizations, and the Private Sector on Preparedness for Response* is being implemented by ADPC in collaboration with the Bill and Melinda Gates Foundation (BMGF) to improve emergency response preparedness in six Asian countries: Cambodia, Myanmar, Nepal, Pakistan, the Philippines, and Sri Lanka. Selection of the countries was based on the extent of each country's current vulnerability and risk.

The objectives of the program are as follows:

- To improve humanitarian leadership and coordination through systematic and local institutional strengthening
- To attain better coordination of humanitarian actions by enhancing humanitarian information management and knowledge exchange
- To establish more effective partnerships among national and local humanitarian actors

The goal is to improve the collaboration and south-south knowledge and information exchange between participating countries leading to the formation of the **Asian Preparedness Partnership** (APP) in the region.

Outline of the Baseline Survey

The Baseline Survey has the following objectives:

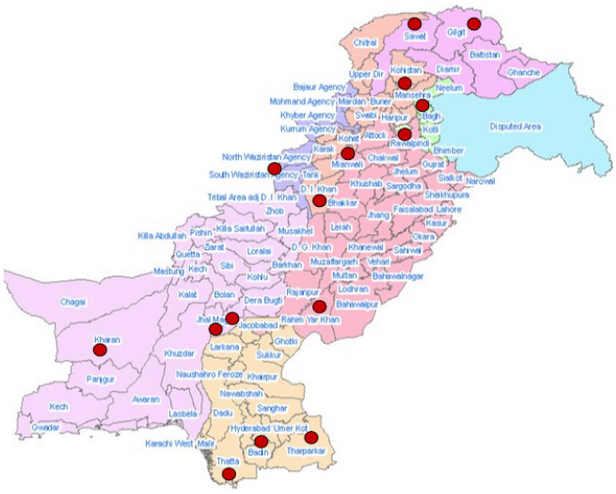
1. To map the status of humanitarian capacity for managing humanitarian crises at the institutional, organizational, strategical, and operational levels and provide a baseline for tracking progress and impacts of the program
2. To establish a strategic roadmap for strengthening the humanitarian institutional leadership capacity based on country needs to streamline the responses and early recovery

The Methodology for the Baseline Survey

The selection of geographical areas for the survey was based on the DesInventar[1] Database of the Disaster Management Center. Fifteen highly hazard-prone districts were selected as follows: Jaffarabad, Nasirabad, Washuk, D.I.Khan, Sawat, Shangla, Mianwali, Rahim Yar Khan, Rawalpindi, Badin, Tharparker, Thatta, Hattian, Aurakzai Agency and Hunza. Figure 1 visually displays their geographical locations.

1 https://www.desinventar.org/

Figure 1 Geographical Locations of Districts Sampled for Baseline Survey



The distribution of participants in the baseline survey was as follows:

Central and Local Government Authorities	54
Local NGOs	56
Private Sector Organizations including the media	31
Academic Institutions	9
Cluster Representatives, including INGOs	13

The methods and instruments used for data collection were as follows:

- Literature Review
- 163 structured questionnaires
- 12 Key Informant Interviews (KIIs)
- 3 Focus Group Discussions (FGDs)

Two languages, Urdu and English, were used at the preference of the interviewees. Data were entered into a database and analyzed using Survey Monkey.[2] Results were validated at a workshop with participating stakeholders.

2 www.surveymonkey.com

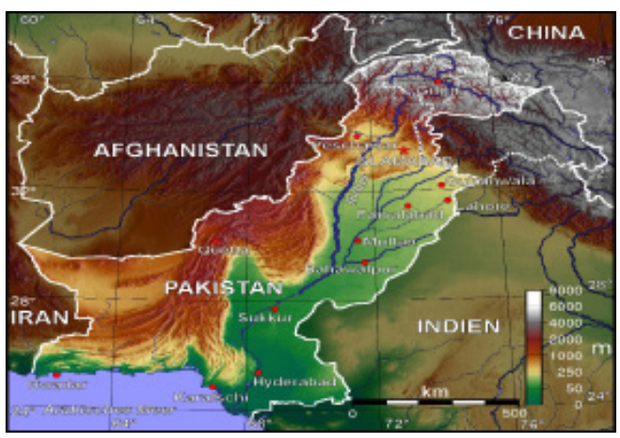
Country Overview

Situated in southern Asia, Pakistan, officially called the Islamic Republic of Pakistan, has an area of 880,940 km^2 (including the Azad Jammu, Kashmir, and Gilgit Baltistan). This makes Pakistan the 34th largest country in the world.[3] It is covered with high mountains on its western, northern and northeastern borders, including some of the highest Himalayan peaks. Pakistan's highest point from mean sea level rises to 8,611 m.[4] Pakistan is bordered on the North East by China, on the East and South East by India, on the South by the Arabian Sea, on the South West by Iran, and on the West and North West by Afghanistan. The coastline is 1,046 km. Pakistan has the fifth largest population (207.77 million) in the world.

Pakistan's capital city, Islamabad, is located in the northern part of the country.[5]

The country's terrain is divided into three major geographic areas: the northern highlands, the Indus River plain in the center and east, and the Balochistan Plateau in the south and west[6]. All of the rivers in Pakistan, specifically Sindh, Ravi,

Figure 2 Topography of Pakistan[6]



3 https://simple.wikipedia.org/wiki/Pakistan
4 https://en.wikipedia.org/wiki/Topography_of_Pakistan
5 http://www.nationsencyclopedia.com/Asia-and-Oceania/Pakistan-LOCATION-SIZE-AND-EXTENT.html
6 https://theodora.com/wfbcurrent/pakistan/pakistan_geography.html

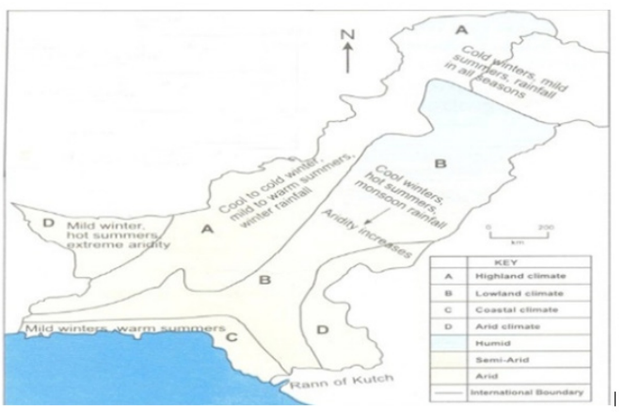
Chenab, Jhelum, and Sutlej Rivers, originate from the Himalayan mountain range (see Figure 2).

Climate

Pakistan has four seasons. The winter is cool and dry and lasts from December to February. A hot, dry spring lasts from March to May. The rainy summer season with the southwest monsoon lasts from June to September. Finally, the retreating monsoon period lasts from October to November. The onset and duration of these seasons vary according to geographic location.

Based on physiographic factors and causes of diversity in climate, the country has been classified into four major climatic regions: A) highland climate B) the continental lowlands, C) the marine tropical coastland and D) the arid climate[7] (see Figure 3).

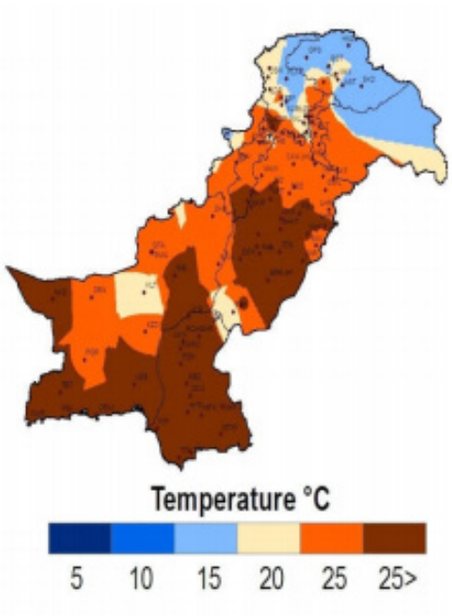
Figure 3 Climatic Zones of Pakistan[7]



The mean temperature during the summer is 38 °F (3 °C) in the plains, where the highest temperatures can exceed 47 °C (117 °F). In the summer, hot winds called *Loo* blow across the plains during the day. Trees shed their leaves to avoid loss of moisture. The dry, hot weather is broken occasionally by dust storms and thunderstorms that temporarily lower the temperature. Evenings are cool; the diurnal variation in temperature may be as much as 11°C to 17°C. Winters are cold, with minimum mean temperatures in Punjab of about 4 °C (39 °F) in January, and sub-zero temperatures in the far north and Balochistan.

Annual Mean Temperatures (actual) for 2016 remained on the higher side in most of the country. Sindh remained above 250 C, Punjab and major Portion of Baluchistan experienced temperatures ranging from 240 C - 270 C or even higher. Only a narrow belt of Northern areas had temperatures ranging from 60 C - 100 C (see Figure 4).

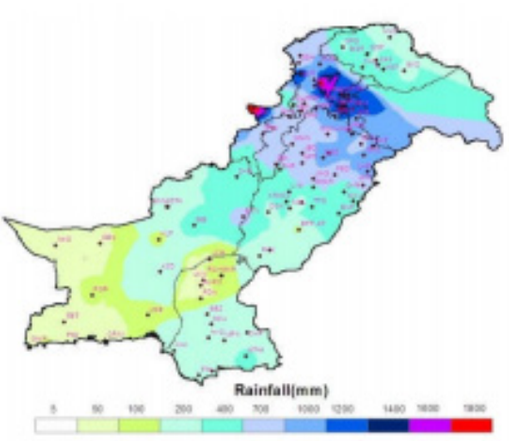
Figure 4 Spatial Distribution of Mean Annual Temperatures of Pakistan for 2016



The spatial distribution of total annual rainfall over Pakistan for 2016 depicts extreme rainfall over north Punjab, Azad Jammu, and Kashmir (AJK), as well as the Eastern Khyber Pakhtun Khwa (KP, the monsoon belt) which exceeded 1000mm. The lower half of Baluchistan received very little rainfall ranging from 50 to 100 mm, nearing meteorological drought conditions (see Figure 5).

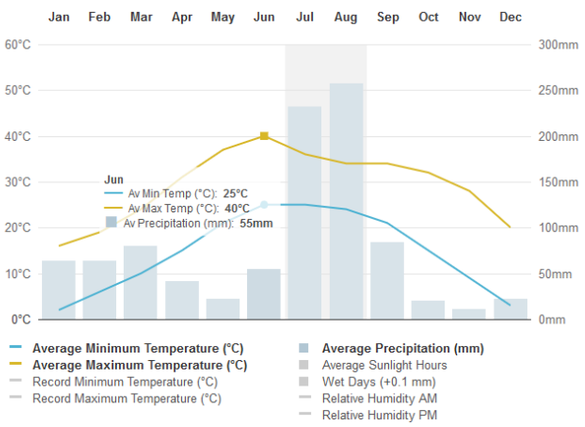
7 ADB (2003). *Preparing for decisions on land use and forestry, Pakistan Report.* COP9 Traders Hotel, Manila, Philippines, October.

Figure 5 Spatial Distribution of Total Annual Rainfall over Pakistan for 2016[8]



Monthly average conditions for temperature and precipitation are displayed in Figure 6. The hottest temperature ever recorded is 53.5 °C (128.3 °F) on May 26, 2010.

Figure 7 Average Conditions of Precipitation and Temperature[9]



Agro-ecological Zones

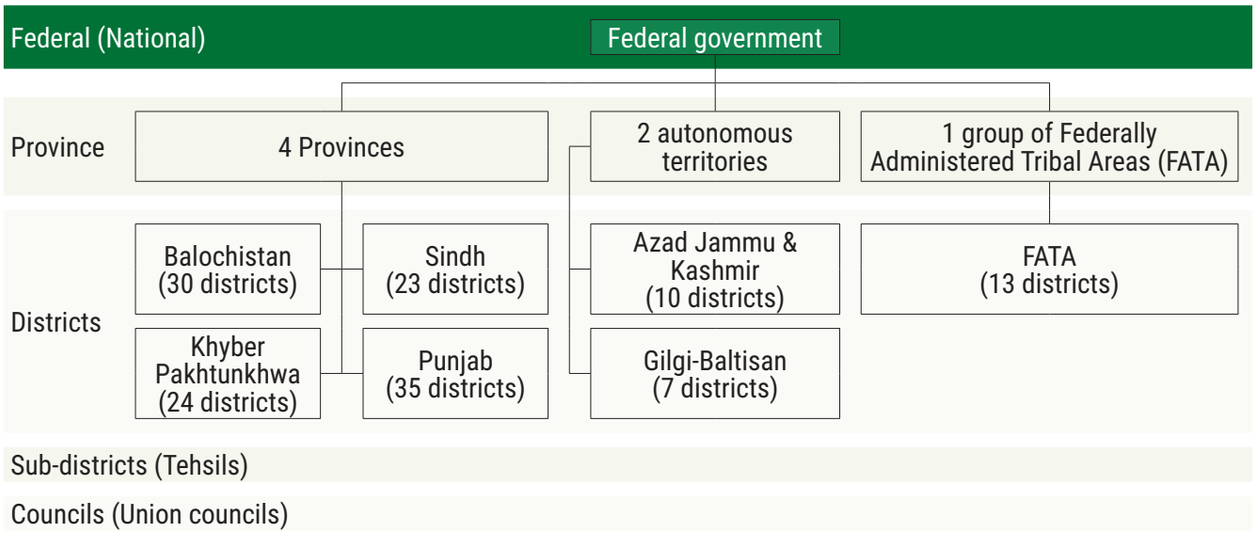
The classification of the ten Agro-Ecological zones of Pakistan on the basis of climate, land use, and water use is given below (See Figure 7). Agriculture constitutes the largest sector of Pakistan economy. It accounts for half of the employed labor force and is the largest source of foreign exchange earnings.[10]

In Pakistan, nearly 61% of the geographical area is mountainous,[11] which accommodates nearly 40 million people.[12] The livelihoods and food security of mountain communities depend heavily on the local resource base at all elevations. The specific agro-ecological and livelihood potentials vary considerably. Agriculture, livestock, and horticulture are the main sources of livelihood, with livestock becoming more important than arable farming at higher elevations. Pakistan's mountain areas are highly diverse and vary considerably in agro-ecological potential and access to institutional services, thus food security and associated challenges also differ.[13]

Figure 6 Agro-ecological Zonation of Pakistan

8 http://www.ndmc.pmd.gov.pk/report2016.pdf
9 http://www.bbc.com/weather/1176615
10 http://www.pbs.gov.pk/content/agriculture-statistics
11 Agricultural Statistics of Pakistan
12 Pakistan Bureau of Statistics
13 https://www.researchgate.net/figure/Agro-ecological-regions-and-administrative-units-in-Pakistan_fig1_280088992

Figure 8 Civil Government Structure



The effects of climate change on agriculture and other natural resources may vary across the diverse agro-ecological regions. In the dry western mountainous areas, the increase in temperatures could enhance the process of de-glaciations affecting water resources on which the country depends for agriculture and energy production.

The mountainous areas are already under severe pressure due to various natural and anthropogenic (human) activities. Consequently, there is an ongoing process of environmental degradation in such areas.[14]

Demography and Culture

Pakistan's estimated population as of August 25, 2017, was 207.77 million. Pakistan has a multicultural and multi-ethnic society and hosts one of the largest refugee populations in the world. It is also a young population. The demographic history of Pakistan from the ancient Indus Valley Civilization to modern era includes the arrival and settlement of many cultures and ethnic groups in the modern region of Pakistan from Central Asia, Middle East, and Europe.

Administrative System

The administrative units of Pakistan consist of four provinces, one federal capital territory, two autonomous territories, and a group of federally administered tribal areas (see Figure 8). Pakistan has three lower tiers of government, including 34 divisions, 149 districts (*zillahs*), 588 sub-districts (*tehsils*), and several thousand union councils (*sherwans*).[15]

Local Governance

There are three tiers of government in Pakistan, specifically the federal government, provincial government, and local government. Pakistan has a bicameral system of government, with a President as head of state and a Prime Minister elected by a 340-member National Assembly. The 2001 Local Government Ordinance and 2013 Local Government Act provide a basis for devolution of powers from federal administration to district administrations. The three levels of

14 https://juniperpublishers.com/ijesnr/pdf/IJESNR.MS.ID.555690.pdf

15 https://en.wikipedia.org/wiki/Administrative_units_of_Pakistan

local government are the district government, gehsil Government, and union government. Each district administration is headed by a District Coordination Officer (DCO) and a Mayer. Grants are provided from provinces and from the central government, and local authorities are responsible for the collection of taxes and user fees as well as property rates, rents, and grants.

Hazards

A hazard is a process, phenomenon, or human activity that may cause loss of life, injury, or other health impacts, property damage, social and economic disruption, or environmental degradation.[16]

Pakistan is prone to a plethora of natural and human-induced hazards due to diverse terrain. A significant area of the country faces a high risk of earthquakes. Droughts and rainfall-induced flooding are recurring phenomena across the country. Pakistan's hilly regions are exposed to landslides, Glacial Lake Outburst Flood (GLOF), and snow avalanches. The coastal belt is vulnerable to cyclones, tropical storms, and tsunamis. Additionally, in the past few years, Pakistan has become prone to terrorism.

An analysis of extreme temperatures during 1965-2009 shows that major parts of the country have been experiencing a warming trend. The frequency of extreme maximum temperature events is increasing significantly in Northern Areas, Southern Punjab, Sindh, and Baluchistan. Two recent heat waves struck the country, one in April and other in May 2016. Most of the country was under the grip of the heat wave during April 25 to 30 and May 17 to 24. An analysis of extreme temperatures during 1965-2009 shows that major parts of the country have been experiencing a warming trend.[17]

16 http://www.preventionweb.net/english/professional/terminology/v.php?id=488
17 http://www.ndmc.pmd.gov.pk/report2016.pdf

Vulnerability

Vulnerability represents the conditions determined by physical, social, economic, and environmental factors or processes that increase the susceptibility of an individual, a community, assets or systems to the impacts of hazards.[18]

Cardorna and Carreno[19] and Wisner[20] discuss the use of the Prevalent Vulnerability Index, (PVI), made up of a series of indicators to benchmark vulnerability that characterizes prevailing vulnerability conditions reflected in exposure in prone areas, socioeconomic fragility and lack of resilience in general. The UNISDR publication - Global Assessment Report (GAR 2009) - categorizes them as Proxy Indicators (PIs), which cover economic status, population density, Human Development Index, income, literacy, poverty, inequality, and access to technology and natural resources. These are indicators that reflect relative weaknesses and conditions of deterioration that would increase the direct effects associated with hazard impacts. These proxy indicators are addressed under initiatives to achieve sustainable Development Goals SDGs (2016-2030).[21] Inter-American Development Bank (2011)[22] suggests that these indicators are variables that reflect, in general, an adverse and intrinsic predisposition of society when faced with a dangerous phenomenon, regardless of the nature and intensity of these events.

Table 1 presents the status of selected proxy indicators. Unless otherwise stated, the values are extracts from the 2016 Human Development Report and provide values for the year 2015.

18 http://www.preventionweb.net/english/professional/terminology/v.php?id=508
19 Cardona, O. & Carreño, M. (2013). System of indicators of disaster risk and risk management for the Americas: Recent updating and application of the IDB-IDEA approach. In J. Birkmann (Ed.), ***Measuring vulnerability to natural hazards*** (2d ed.) (pp. 251–276). Tokyo: United Nations University Press.
20 Wisner Benjamin (2016), Vulnerability as Concept, Model, Metric, and Tool, http://naturalhazardscience.oxfordre.com/view/10.1093/acrefore/9780199389407.001.0001/acrefore-9780199389407-e-25.
21 http://www.un.org/sustainabledevelopment/sustainable-development-goals/
22 Inter-American Development Bank (2011), Indicators for Disaster Risk and Risk Management, TECHNICAL NOTES No. IDB-TN-276.

Table 1

Proxy Indicators of Prevalent Vulnerability

Selected Indicators for Demography	
Population (millions) 2017	207.774
% Urban Population 2017	36.8
% below 15 years	42.61
% 15 – 64 years	55.10
% over 65 years	2.30
Population in most Polluted area	
% population in most polluted areas	35 %[28]
Selected Indicators for Economy	
GDP (Billion USD) 2016-17	304.3
Age dependency ratio per 100	64.971
External Debt Stock (% GNI 2016)	24.106
Country Ranking of External Debt	53
Selected Indicators for Poverty & Income Disparity	
Gini coefficient	41
% population below PPP $1.90 income per day	6.1% (2013)[29]
Selected Indicators for Human Development	
HDI (Medium)	0.550
HDI country ranking	147
Selected Indicators on Gender	
Gender Development Index (GDI)	0.742
Gender Inequality Index (GII)	0.546
GII country ranking	130
Selected Indicators on Education	
Education index[30]	0.372 (2013)
Government expenditure on education (% of GDP)	2.647
Adult literacy rate (15 years and older)	56.97
Adult literacy (Youth % 15-24 male)	79.766
Adult literacy (Youth % 15-24 Female)	65.548
Selected Indicators for Access to Technology	
ICT Development Index (IDI)	2.42
IDI Country Rank 2017	148
Telephones and cellular subscribers per 100 people	71.392
Personal computers per 100 people	0.4713
Internet users % population	22.7
Selected Indicators for Health	
Public Health Expenditure (% GDP ,2016)	0.45 %
Physicians (per 10,000 people)	7.8
Child malnutrition (% under age 5)[31]	31.6%
Ecosystems	
Land area covered by forest (%)	1.965
Percentage of protected areas (%)	8.6

It would be useful to utilize these indicators in making comparisons between the prevalent vulnerability of the six countries which are the focus of this study.

Population

Pakistan has a population of over 207 million. According to Census 2017, average population density is 267/km2. The coastal belt shows higher urbanization and therefore higher population densities and is a vulnerability factor for floods, sea level rise, cyclones, and storm surges predicted to ecerbate in frequency and intensity with climate change.

The land-man ratio has decreased over time in parallel with increasing population. Table 2 shows this trend.[23]

Table 2

Decreasing Trend of Land-man Ratio with Population

Year	Land Extent (million ha)	Population (millions)	Land-man ratio Ha/man
1950	79.61[24]	37.54	2.12
1970		59.38	1.34
1990		111.845	0.71
2011		173.59	0.45
2017		207.77	0.38

With this increase in population is also higher demands for more land for human settlements, critical facilities, infrastructure, amenities, and livelihoods. The increasing demand for land and consequent scarcity of land has led to a proliferation of human interventions to disaster-prone areas.

23 citeseerx.ist.psu.edu/viewdoc/download?doi=10.1.1.6.4524
24 http://www.agripunjab.gov.pk/overview%20new

In Pakistan, 258731 km^2 of land is gazetted as Municipal Corporation and urban land.[25] Pakistan envisages an increase of the current urban population of 32.5% of the total population to 49.45% by 2030[26]. Though Pakistan is taking important steps to implement its urban vision, significant challenges to urban development are emerging. These include inadequate infrastructure and services; poor quality of construction of housing stock, buildings, and infrastructure, and vulnerability to flooding. Urban flood risk is a major concern which is attributed to the neglect of the cities' drainage due to irregular maintenance, and reduction of floodwater retention areas due to the reclamation of natural marshland around the suburbs for development. Rural-urban migration has led to the encroachment of canal banks by slum dwellers and their consequent activities leading to a reduction of the carrying capacity of the canal system. Pakistan's urban air pollution is Average air pollution in major cities is about four times higher than the World Health Organization limits[27] and is a serious health concern.[28]

Economy

The economy of Pakistan is the 24th largest in the world in terms of purchasing power parity (PPP), and 42nd largest in terms of nominal gross domestic product. The GDP is estimated at 304.3 billion USD. GDP per capita is 1, 629 USD, which ranked 147th in the world for 2016.[29]

Poverty and Income Distribution

According to Pakistan's New Poverty Index 2016, nearly 39% of Pakistanis live in multidimensional poverty, with the highest rates of poverty in FATA and Balochistan.[30] Income disparity is high with a GINI coefficient of 41.

External Debt Stock

External debt stock is documented to be 24.11% of Gross National Income (GNI) as of 2016.[31] According to Trading Economics, the ggovernment debt in 2016 stood at 66.5% of the GDP.[32]

The revenues required to service this debt each year incurs large budget deficits to allow the government to meet its essential day-to-day responsibilities.

Human Development

The Human Development Index (HDI) for Pakistan falls in the medium category with an HDI of 0.550 —positioning it at 147 out of 188 countries.

Gender

Pakistan has a Gender Inequality Index (GII) value of 0.546. According to the World Economic Forum's (WEF) Global Gender Gap Report 2016, Pakistan ranks 143 out of 144 countries. The GII can be interpreted as the loss in human development due to inequality between female and male achievements in the three GII dimensions - reproductive health, empowerment, and economic activity. In Pakistan, 20% of parliamentary seats are held by women, and 26.5% of adult women have completed at least a

25 http://www.pbs.gov.pk/sites/default/files//tables/AREA%20POPULATION%20DENSITY%20AND%20URBAN%20RURAL%20PROPORTION.pdf
26 https://www.aup.edu.pk/sj_pdf/Urbanization%20trend%20and%20rban%20population%20projections%20of%20pakis.DOC.pdf
27 https://www.usatoday.com/story/news/world/2017/11/05/smog-india-pakistan-air-pollution-causes-car-accidents-illness/833620001/
28 http://documents.worldbank.org/curated/en/701891468285328404/Cleaning-Pakistans-air-policy-options-to-address-the-cost-of-outdoor-air-pollution
29 https://en.wikipedia.org/wiki/Economy_of_Pakistan
30 http://www.pk.undp.org/content/pakistan/en/home/presscenter/pressreleases/2016/06/20/pakistan-s-new-poverty-index-reveals-that-4-out-of-10-pakistanis-live-in-multidimensional-poverty.html
31 https://data.worldbank.org/indicator/DT.DOD.DECT.GN.ZS?locations=PK&view=chart
32 https://tradingeconomics.com/pakistan/government-debt-to-gdp

secondary level of education compared to 46.1% of their male counterparts. Female participation in the labor market is 24.3% compared to 82.2% for men.[33]

Pakistan shows a value of 0.742 for the Gender Development Index (GDI). It is the ratio of the female to the male HDI. The GDI reflects gender inequalities in achievement in the same three dimensions of the HDI. The GDI groups are based on the absolute deviation of GDI from gender parity, 100. Countries with absolute deviation from gender parity of more than 10 percent are considered countries with low equality in HDI achievements between women and men and are classified as group 5. Pakistan belongs to group 5.[34]

The National Plan Disaster Risk Reduction Policy in 2013, includes the following statement, "DRR requires the involvement of women as stakeholders to build resilient communities. Needs and damage as well as vulnerability and risk assessments, and DRR programs (such as Community Based Disaster Risk Management (CBDRM), recovery, and reconstruction or sector-specific mitigation initiatives) need to demonstrate gender -sensitivity". However, there is no detailed description of the role of women in disaster management, and how women and girls are empowered through the processes of disaster management. The National Policy Guidelines for Vulnerable Groups in Disaster 2014 describe in detail the steps to be taken related gender-sensitive programming and gender mainstreaming during disasters.[35]

Education

Pakistan has an Education Index of 0.378 (ranked 146 out of 187 countries[36]). Pakistan has failed to achieve universal primary education - Goal 2 of the Millennium Development Goals (MDGs), The completion/survival rate seems to have declined rapidly in recent years implying that more than a quarter of the students enrolled in primary schools do not complete their education. Pakistan's literacy rate, though it has improved marginally over the years, remains considerably short of the MDG target of 88% by 2015, which currently stands at 58%. Closer inspection reveals large gender and rural/urban disparities.[37]

In Pakistan, a program has been introduced to develop curriculum for schools, colleges, and universities on disaster risk management, particularly in hazard-prone areas. The National Disaster Management Authority (NDMA) has engaged the Higher Education Commission (HEC) and Provincial Education Departments to include elements of DRR in the education system and to mobilize all stakeholders, including the private sector, to ensure that DRR is fully integrated into school curricula.[38] Few universities in the country offer MS, BS and Diploma Courses related to disaster risk management.

Health

Pakistan spends 37 USD per capita on health, which is lower than the WHO's prescribed level of 44 USD per capita, a minimum spending package required for essential health services. The total public health expenditure as a percentage of GDP has increased to 0.45% in FY2016.[39] Child malnutrition in Pakistan is a concern. According to the Global Food Safety Initiative (GFSI), Pakistan is in the 77th position out of 109 countries ranked by the new GFSI in 2014.[40]

33 http://hdr.undp.org/sites/all/themes/hdr_theme/country-notes/PAK.pdf
34 http://hdr.undp.org/sites/default/files/hdr2016_technical_notes.pdf
35 https://reliefweb.int/sites/reliefweb.int/files/resources/gcc_policy.pdf
36 Human Development Report 2016
37 http://www.pk.undp.org/content/pakistan/en/home/post-2015/mdgoverview/overview/mdg2/
38 http://www.preventionweb.net/files/4006_ADPCEducGuidelineConsultationVersion3.1.pdf
39 http://www.finance.gov.pk/survey/chapters_16/11_Health.pdf
40 http://foodsecurityindex.eiu.com/Home/DownloadResource?fileName=EIU%20Global%20Food%20Sec..

ICT Development

Pakistan's ICT Development Index (IDI) is 2.42[41] as of 2017, and the country rank is 148. Pakistan ranks the lowest in IDI out of all South Asian countries. This is a concern because of the reduced ability to latch onto modern ICT applications for disaster monitoring, forecasting, and climate modeling capabilities.

Environment

Of Pakistan's total land area, it has 1.97% forest cover and 8.6% is classified as Protected Areas (PAs). Forests and PAs are critical for the conservation of biodiversity from the impact of climate change. They are also the catchment areas for the rivers and providers of ecosystem services for both rural and urban human settlements.

Disaster Risk Profile

Disaster risk is the potential loss of life, injury, or destroyed or damaged assets which could occur to a system, society, or a community in a specific period of time, determined probabilistically as a function of hazard, exposure, vulnerability and capacity.[42] In terms of the number of people affected and the social cost incurred in relief and rehabilitation, floods and droughts are in the forefront of natural disasters (See Figure 9).

In terms of cumulative fatalities, injuries, destroyed infrastructure, houses, and livelihoods

Figure 9 Total People Affected by Selected Natural Hazards, 1990 – 2013[43]

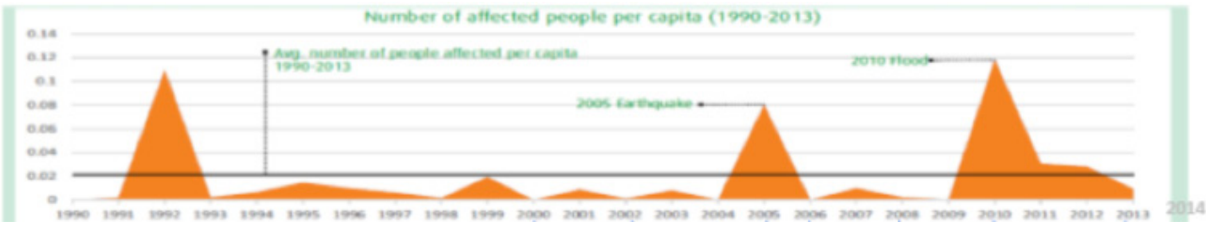
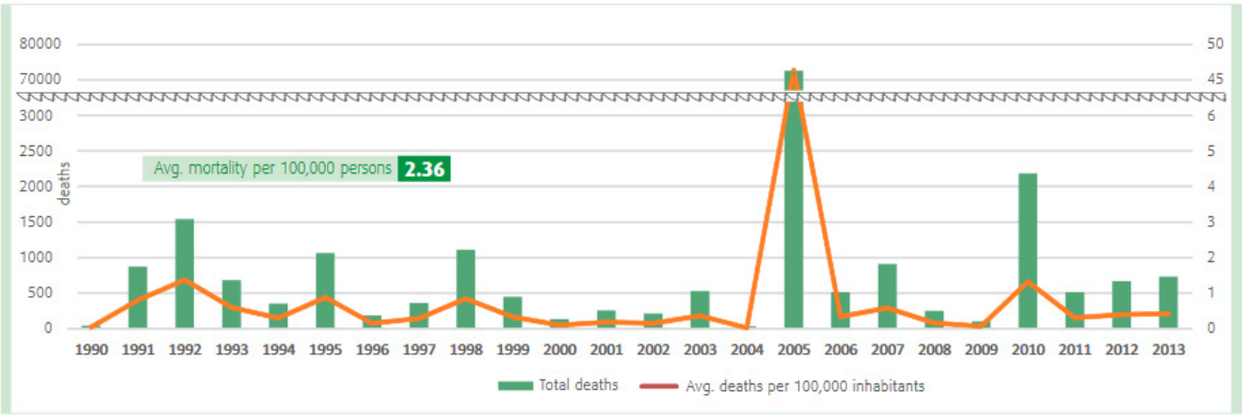


Figure 10 Trends in Disaster Mortality Due to Major Hazards, 1993 – 2013[44]



41 http://www.itu.int/net4/ITU-D/idi/2017/

42 http://www.preventionweb.net/english/professional/terminology/v.php?id=7818

43 http://www.lead.org.pk/lead/attachments/briefings/LPNB2.pdf

44 http://www.lead.org.pk/lead/attachments/briefings/LPNB1.pdf

affected, the flood of 2010 was the greatest. On event basis, floods, earthquakes, and landslides account for most fatalities in that order (See Figure 10).

Drought is considered a critical disaster due to its impact on the rural poor whose livelihoods center on rain-fed agriculture. Around 64% of Pakistan's population is rural. Drought impact has significant negative impacts on their household income.

The EM-DAT data[45] for Pakistan for the period of 1990-2013 indicates that 71.2 million people have been affected by disaster-related incidents. At least 20 million people were affected only by the 2010 flood.

The Potential for an Unexpected Extreme Nuclear Event

Pakistan Executive Committee of the National Economic Council in 2013 approved the construction of two 1100 MW reactors[46] at Karachi and Chashma nuclear plants.

Additionally, the Bangladesh Power System Master Plan has approved the establishment of two 1000 MW nuclear plants by 2020.[47]

Kudankulam Nuclear Power Plant in the Tirunveli district of the southern Indian state of Tamil Nadu has already been launched.[48]

The SAARC region is, therefore, developing a potential for a nuclear accident.

The Pakistan Atomic Energy Commission is mandated to deal with radiological incidents, but the country's capacity to deal with such an emergency is average. This calls for a trans-national and national prevention and response mechanism.

EM-DAT Risk Profile for Pakistan

According to UNISDR, the level of reduced disaster loss is the ultimate indicator of the success of public policy in disaster risk management

Fundamentally if losses are increasing, disaster risk management is not ffective and vice versa.

UNISDR has recommended the use of Annual Average Loss (AAL) as an indicator of risk and resilience in order to highlight future losses that a country could experience.[49]

> AAL is the expected loss per annum associated with the occurrence of future perils assuming a very long observation timeframe. While there may actually be little or no loss over a short period of time, the AAL also accounts for much larger losses that occur less frequently. As such, AAL is the number of funds that need to be put aside annually in order to cumulatively cover the average disaster loss over time. It considers the damage caused on the exposed elements by small, moderate and extreme events and results in a useful and robust metric for risk ranking and comparisons.
>
> Probabilistic risk assessment gives an overview of estimated losses, which can provide guidance to predict and plan for future losses. This information can be used to plan and prioritize investments and strategies for managing disaster risk.
>
> UNISDR, 2013

45 http://www.emdat.be/
46 http://www.world-nuclear.org/
47 Begum, Z. (2011). Status of Nuclear Activities of Bangladesh Atomic Energy Commission, 16th WIN-Global Conference, Marseilles, May.
48 http://www.world-nuclear-news.org/NN-Kudankulam-II-project-launched-17101601.html
49 www.unisdr.org/files/35716_newsystemofprogressindicatorsfordrr.pdf

The Internationally Reported Database CRED EM - DAT[50] disaster data for events that qualify the following criteria:

- Ten or more people reported killed
- One hundred or more people reported affected
- Declaration of a state of emergency
- Call for international assistance

The criteria, therefore, prevent the representation of drought impact where no deaths occur. Drought has significant impact on livelihoods in Pakistan. Therefore, national and sub-national databases are important to monitor droughts and small-scale disasters not recorded in EM-DAT.

The following data (Figures 11 and 12) present the frequency of hazard impact and the Average Annual Loss (AAL) has been adopted from CRED EM – DAT as presented in the Prevention web domain.[51]

Flood (46.8%) and earthquake (15.3%) are the most frequent disasters according to EM-DAT. Landslides (14.5%) have been on the rise for reasons explained earlier.

For Pakistan, the AAL for floods is the highest at 77.6% with earthquake at 20.%. However, the significance of droughts is not emphasized here and may ecerbate due to climate change.

Leadership for Environment and Development LEAD Pakistan 2015 Report[52] shows that disasters damage the human and physical capital, leading to a short-term reduction of GDP in Pakistan. For emple, prolonged drought brought a 50% reduction in GDP growth during 1998-2001, and floods in 2010 cost Pakistan 10 billion USD (5.7% of GDP). While this is a negative impact in the short term, the impact of disasters in the medium and long term is difficult to establish the due absence of reliable data.

Figure 11 Frequency of Disasters

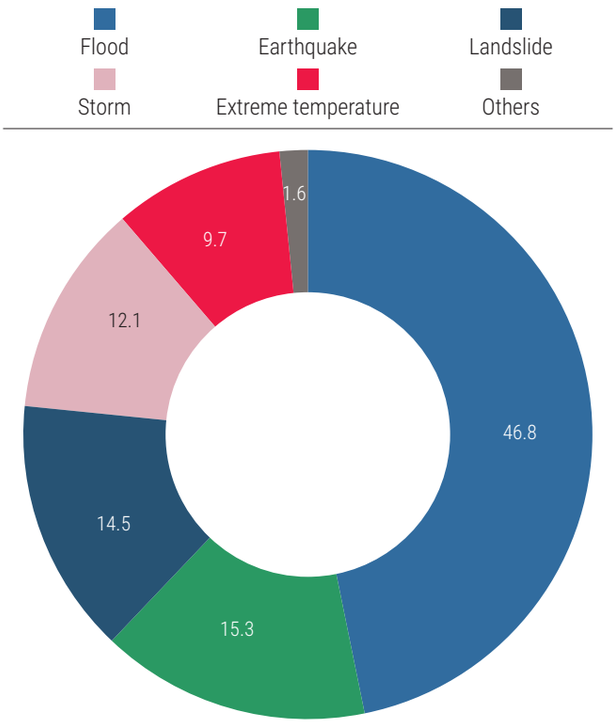
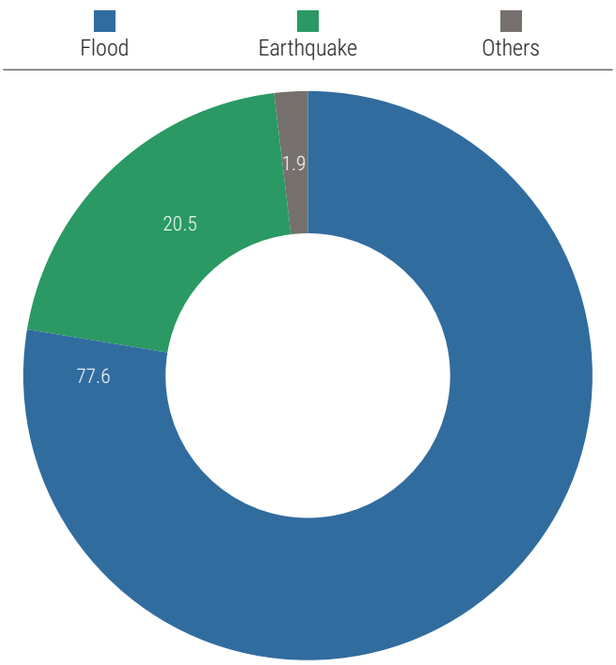


Figure 12 Annual Average Loss



50 www.emdat.be Universitè Catholique de Louvain Brussels – Belgium
51 http://www.preventionweb.net/countries/pak/data/
52 http://www.lead.org.pk/lead/attachments/briefings/LPNB3.pdf

Legal and Institutional Arrangements for DRM

The widespread destruction caused by the 2005 earthquake reconfirmed the urgent need for multi-sectoral, inter-institutional, and multidisciplinary approaches to managing disaster risks in the country. Following the earthquake, the **National Disaster Management Act 2010** was enacted in the Parliament.

After the implementation of this Act, the Federal Government by a notification in the Official Gazette, established a Commission called the **National Disaster Management Commission (NDMC)** mandated with national disaster risk management.

Immediately after issuing of notification under sub-section (I) of section 3 of the Act 2010, the Federal Government established an Authority called the **National Disaster Management Authority (NDMA)** as the implementing agency of the NDMC. The Federal Government, by notification in the Official Gazette, also created a fund called the **National Disaster Management Fund (NDMF)** for providing financial support for any disaster threats or events.

After issuing of the notification under sub-section (1) of section 3 of the NDMA Act 2010, each Provincial Government by notification in the official Gazette established a **Provincial Disaster Management Authority (PDMA)** for the four provinces, **FATA Disaster Management Authority (FDMA)** for the Federally Administered Tribal Area, **GB Disaster Management Authority (GBDMA)** for Gilgit-Baltistan, and the **State Disaster Management Authority (SDMA)** for Azad Jammu and Kashmir. These were mandated with provincial level disaster risk management.

After the issue of notification under sub-section (1) of section 13, each Provincial/Regional/State Government by notification in the official Gazette established a **District Disaster Management Authority (DDMA)** for every District (see Figure 13).

The National Institute of Disaster Management (NIDM) was established in 2009 as the premiere institute of training and capacity development programs for managing natural disasters occurring in Pakistan.

Figure 13 Institutional Framework for DRM

Pakistan has achieved the following policy instruments for DRM:

1. National Disaster Risk Management Framework (NDRMF) 2007
2. National Disaster Response Plan (NDRP) 2010
3. National Climate Change Policy 2012
4. National Disaster Management Plan (NDMP) 2012
5. National Disaster Risk Reduction Policy 2013

Figure 14 depicts the timeline of major disasters and the legal and policy evolution for DRM.

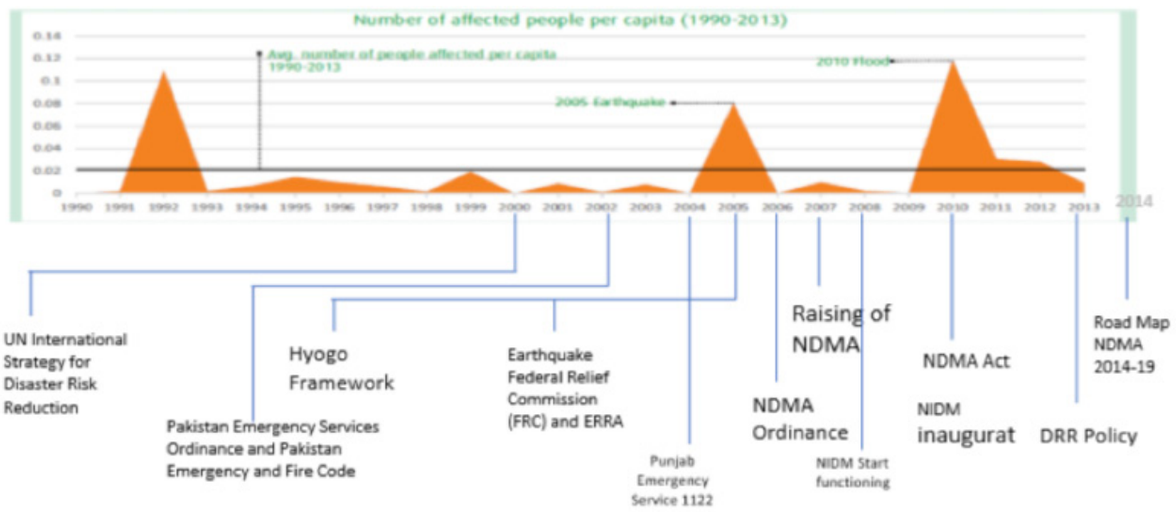
The National Disaster Management Commission and national, provincial, and district disaster management authorities (NDMA, PDMA, DDMA) are nascent, with severe gaps in manpower and technical capacity, especially at the district level[53].

The **National DRR Policy 2013** mandates local governments to proactively manage disaster risk. However, by-laws to implement the policy are not operational as yet.

National Financial Allocation for DRM

Analysis of budget estimates from 2009 to 2016 (See Table 3) reveals that the total allocation for direct interventions related to Disaster Management activities by agencies under the purview of the Ministry varies from 0.04% to 0.1% against the total annual budget. According to a World Bank report from 2015, "annual expected sector-specific loss from natural disasters represents 1.16% percent of Pakistan's GDP"[54]. This reflects the need for increased budget allocation for disaster risk reduction efforts in the country in the future.

Figure 14 Timeline of the Development of the DRM Framework



53 http://sp-fragility-displacement.onetec.eu/docs/OPM-Policy-Brief-2017-SRSP-Pakistan.pdf

54 http://www.lead.org.pk/lead/attachments/briefings/LPNB3.pdf

Table 3

Budget Estimates for National Disaster Management Fund 2012 -2015[55]

Description	Annual expenditure in PKR Millions			
	2012-13	2013-14	2014-15	2015-16
National Disaster Management Fund (NDMF)	1,300,201,443	2,435,750,390	1,741,765,993	1,655,411,100
Allocation for NDMF as % of the total annual budget	0.040	0.069	0.040	0.037

Instruments for Disaster Risk Financing

Insurance

1. Currently, 24 insurance companies out of 59 in the country contribute to sharing the risk by offering non-life insurance policies for fire incidents.[56]

2. Insurance Ordinance 2000 in Pakistan introduced an agriculture insurance scheme to cover the loss of or damage to agriculture-related property, including crops.

3. The Kissan Package 2015, announced by the Prime Minister, stated that the government would bear the Rs. 2.5 billion premium on the agricultural insurance, which would benefit 0.7 million small farmers including livestock insurance for farmers having 10 animals or more.

Catastrophic Drawdown Option

The Government of Pakistan, in collaboration with the World Bank (WB), has established a Development Policy Loan (DPL) as a contingent line of credit, with a Catastrophic Drawdown Option (CAT-DDO).[57] The government has to declare a state of disaster to activate the fund. The fund could be drawn over a period of three years, which may be renewed up to four times for a total of 15 years.

Baseline Assessment Study in Pakistan

This sample baseline study was completed as the first step of the program implementation to establish the current status of emergency preparedness in Pakistan. It will serve as a benchmark to inform decisions on future interventions. It will also be useful to assess the impact of the interventions at the end of the program and is, therefore, an integral component of the monitoring and evaluation mechanism for this program.

The baseline survey mainly focused on key local actors in the emergency response including government organizations, local non-government organizations, and private sector entities. The following sections provide key findings of the survey results from the three sectors listed above, and will be helpful in strengthening the emergency response capacities of local actors.

55 http://www.ndma.gov.pk/publications.php
56 https://www.gfdrr.org/sites/default/files/publication/Fiscal0disaste0ideration000Pakistan.pdf
57 https://tribune.com.pk/story/1128371/reform-push-world-bank-approves-1-02b-package-pakistan/

Findings from the Baseline Survey for Government Organizations

Purpose of the Organization

In Pakistan, the purpose of the organization was assessed using the availability of a vision and mission statement for the organization. All government organizations have responded that a vision and a mission statement have been formulated. Additionally, all organizations currently have their own websites, which display these statements.

Institutional Capacity

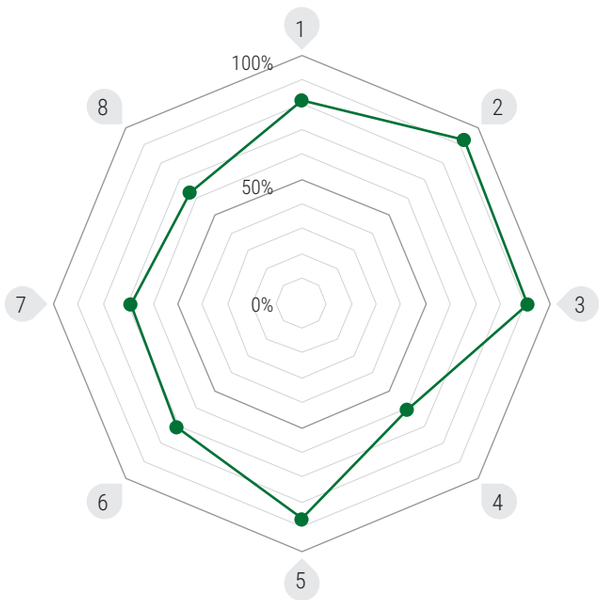
Institutional capacity was assessed based on several criteria (represented by roman numerals) and sub-criteria (represented by bullet points) as follows:

1. Organizational Structure
2. Administrative Processes
   - Manuals on administrative procedures
   - Manuals on human resource management
   - Recruitment policies
   - Code of Conduct
   - Work Place Harassment Policy
   - Gender Sensitive Work Place Policy
   - Adequacy of documented procedures
   - Staff orientation in administrative procedures

In Pakistan, government organizations are established through legislation or gazette notification based on cabinet approval pending parliamentary enactment. The organizational structure and cadre are a constituent part of these enactments. Administrative procedures are governed by the Establishment Code issued by the relevant ministries. Responses obtained for the availability of manuals, policies, adequacy of these documents, and the level of staff orientation provided are depicted in Figure 15 as a spider chart in the shape of an octagon. In this Figure, each angle of the octagon represents one of the eight sub-criteria of administrative process from the list above. The outer-most line of the octagon represents a value of 100% responses (availability), while the innermost represents 0%.

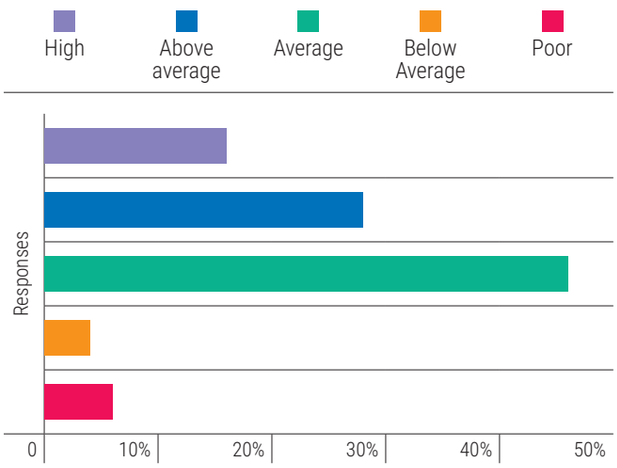
Figure 15 'Yes' Responses for Sub-Criteria under Administrative Process

1 Human resources	2 Recruitment policies	3 Selection policy	4 Staff orientation
5 Code of conduct	6 Work place harrassment policy	7 Gender sensitive work place policy	8 Manuals on administrative procedures



Manuals on administrative procedures, staff orientation, gender-sensitive workplace policy, and workplace harassment policy show lower values compared to other sub-criteria. Responses to the adequacy of available documents are depicted in Figure 16.

Figure 16 Responses for Adequacy of Documented Procedures



The overall perception regarding the adequacy of documented procedures is high.

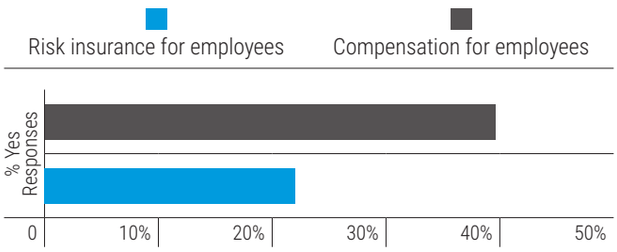
The Focus Group Discussions (FGDs), revealed that the majority of government staff were not aware of The Protection Against Harassment of Women at the Workplace Act 2010. The participants in the FGD expressed that social norms and culture were obstacles to the implementation of this initiative.

Staff Security

The intention of this question was to find out whether employees working in hazardous locations were covered by risk insurance. Responses are depicted in Figure 17.

A total of 22% of organizations have risk insurance for employees working in hazardous locations, and 40% have compensation for employees working in hazardous location.

Figure 17 Responses to Staff Security



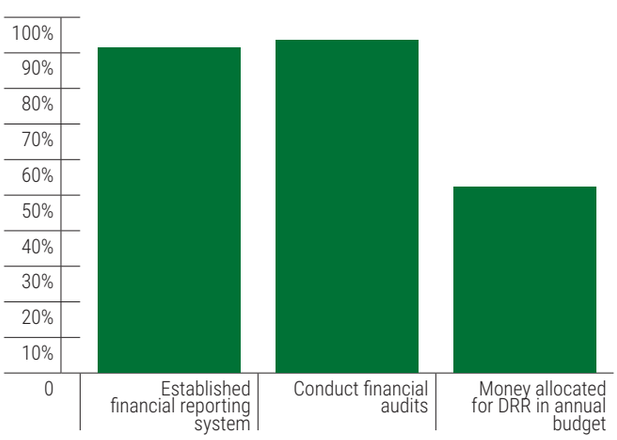
Financial Management

Government organizations were requested to respond 'yes' or 'no' to the following criteria:

1. Established financial reporting system
2. Conduct annual financial audits
3. Budget allocated for DRM in annual budget

Responses obtained for these criteria are depicted in Figure 18.

Figure 18 Responses for Knowledge Management



Financial reporting is mandatory for all government organizations as they are required to apply financial regulations compiled by the

Ministry of Finance.[58] Annual financial audits, is subject to the Pakistan Accounting and Auditing Standards and the Auditor General of Pakistan is mandated to call for audits for government organizations.[59] 93.43% responded 'yes' to these criteria.

A total of 65% of the organizations responded that there was budget allocated for DRM in the budget, though the level of the allocation varies as per needs and the specific situation.

Monitoring and Evaluation (M&E)

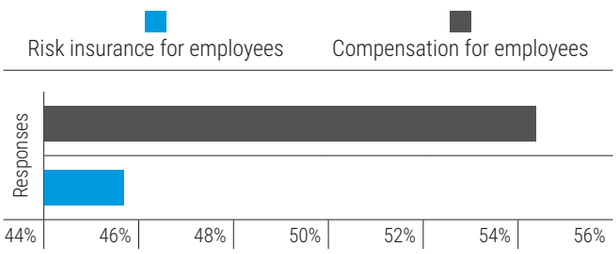
M&E capacity was evaluated based on the following criteria:

Availability of a written monitoring, evaluation, and learning policy (MEL)

Availability of a communication strategy for disseminating lessons learned from monitoring, evaluation, and learning activities

Responses are depicted in Figure 19 and 20.

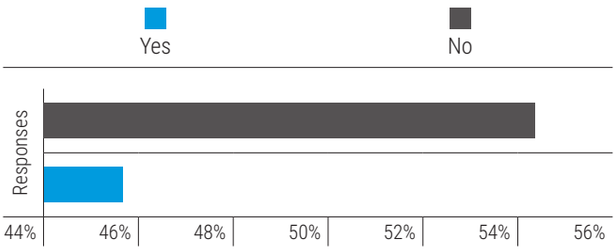
Figure 19 Responses for Availability of a Written MEL



(Note the restricted range of percentages on the X axis)

For both criteria, 45.65% responded 'yes'. However, the questionnaire did not specifically ask whether M&E was for emergency response activities or for generic organizational performance.

Figure 20 Responses for Availability of a Communication Strategy



(Note the restricted range of percentages on the X axis)

Technical Capacity for Emergency Response

Organizational technical capacity for emergency response was assessed based on the following criteria, which also serve to indicate organizational preparedness for emergency response:

1. Staff adequacy to perform emergency response_
2. Established Standard Operation Procedures (SOP)
3. Availability of Emergency Response Plan
4. Conduct simulation drills
5. Staff training for preparedness in emergency response_

Responses for staff adequacy are depicted in Figure 21.

Only 37.5% of organizations expressed that staff was adequate to carry out emergency response work. This raises concerns about the capacity of organizations to manage emergency response.

Responses for established SOPs are depicted in Figure 22.

58 http://www.finance.gov.pk/
59 http://www.agp.gov.pk/index.php?page=about

Figure 21 Responses for Staff Adequacy

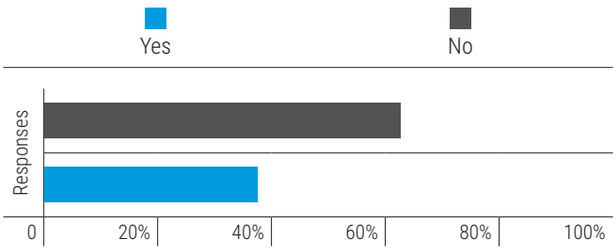
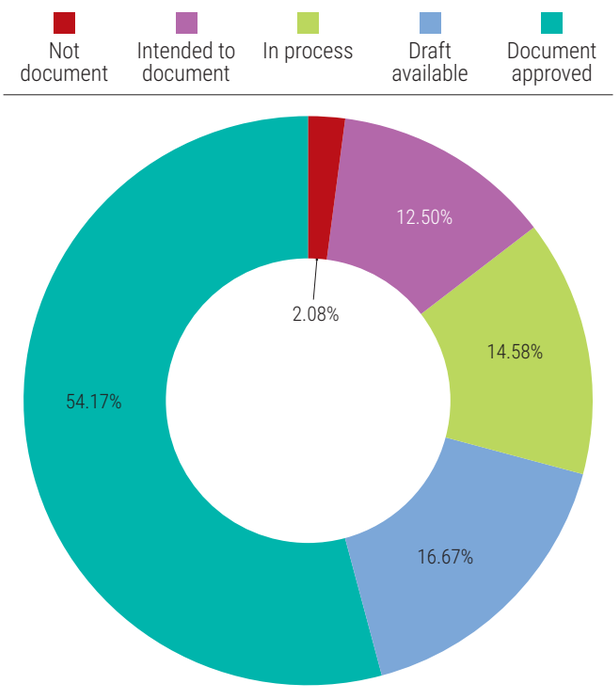


Figure 22 Responses for Established SOPs



A total of 54.17% responded that approved SOPs are available, while 16.67% responded that drafts were available.

Responses to the availability of an emergency response plan are depicted in Figure 23.

A total of 76.47% responded that emergency response plans were available.

Responses for conducting simulation drills are depicted in Figure 24.

Figure 23 Responses for the Availability of Emergency Response Plan

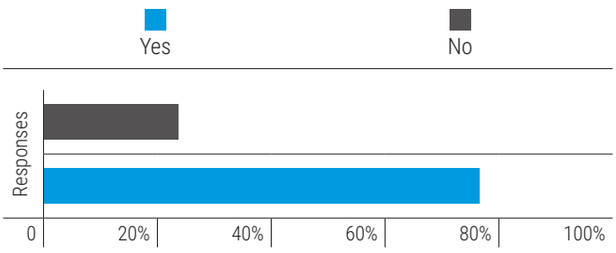
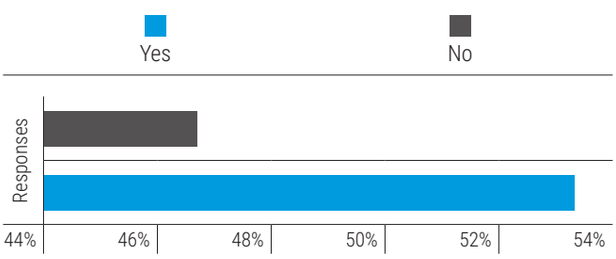


Figure 24 Responses for Conducting Simulation Drills



(Note the restricted range of percentages on the X axis)

A total of 53.3% of the organizations expressed that they conduct simulation drills.

Figure 25 depicts the number of capacity building events for officers of the governmental organizations.

Figure 23 reveals an inadequacy of both the types and numbers of trainings undertaken for government organizations. The area that gets the most training appears to be first aid (14%), and emergency response management (13%), but they are still quite low.

Figure 26 depicts gender disaggregated data for staff training.

Figure 26 reveals that male staff have been provided more opportunities for capacity building.

Figure 25 Staff Training for Preparedness in Emergency Response

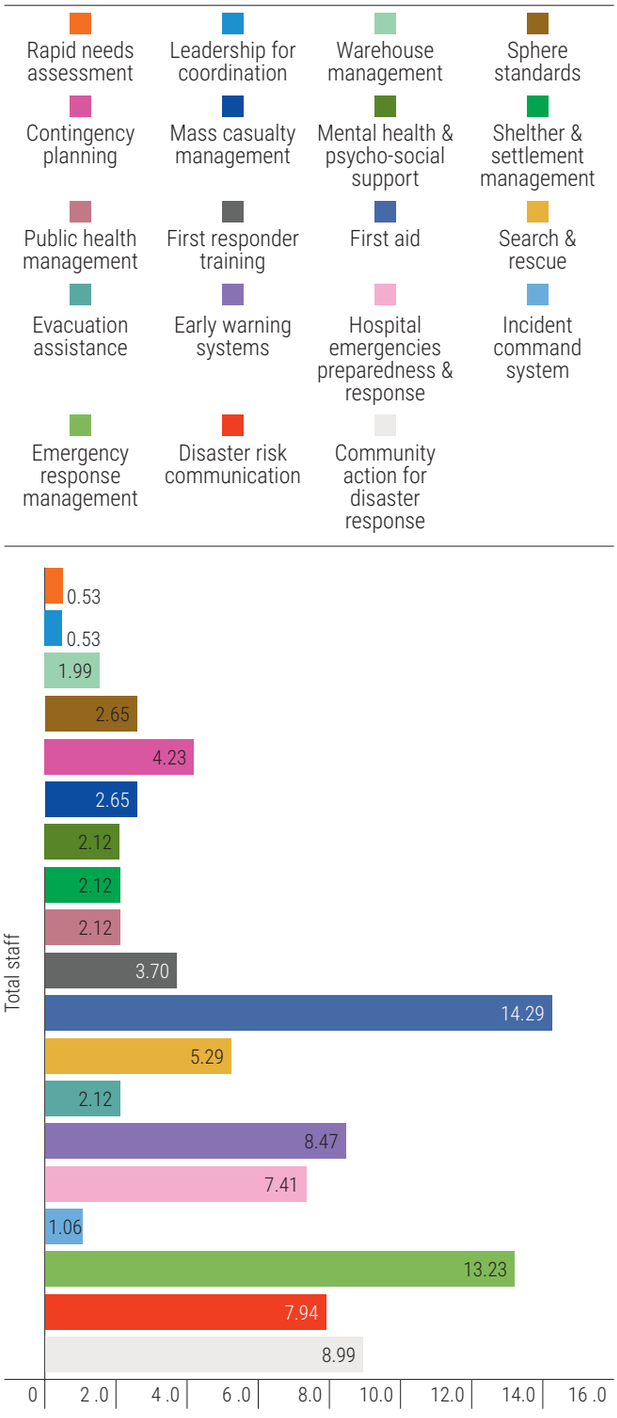
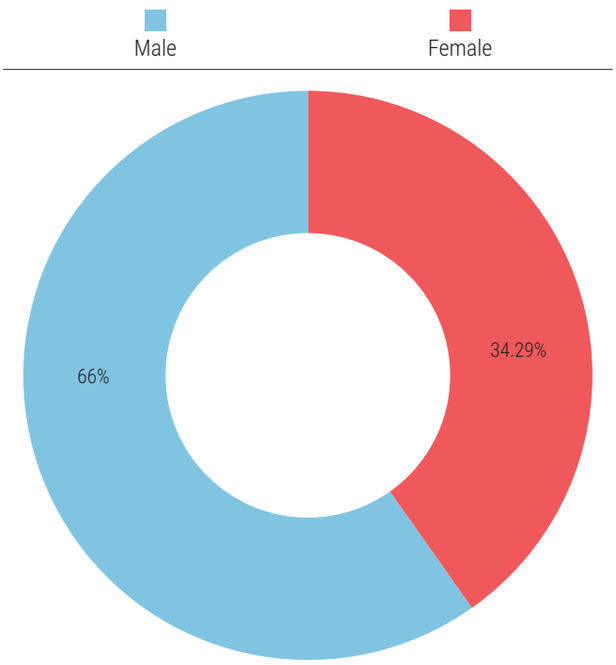


Figure 26 Gender Disaggregated Data for Staff Training



FGDs revealed a desire from participants to establish a partnership between the National Institute for Disaster Management (NIDM) and the National Humanitarian Network (NHN) for staff capacity building. NHN is the biggest civil society network in Pakistan. The recommendation is to establish a pool of trainers by NIDM and NHN at the district, provincial and national levels in collaboration with other stakeholder departments, as relevant. Participants expressed that providing formal training in mixed groups of government staff and NGOs would be desirable to encourage both strong understanding as well as coordination between the government and non-governmental sectors.

Coordination between Stakeholders

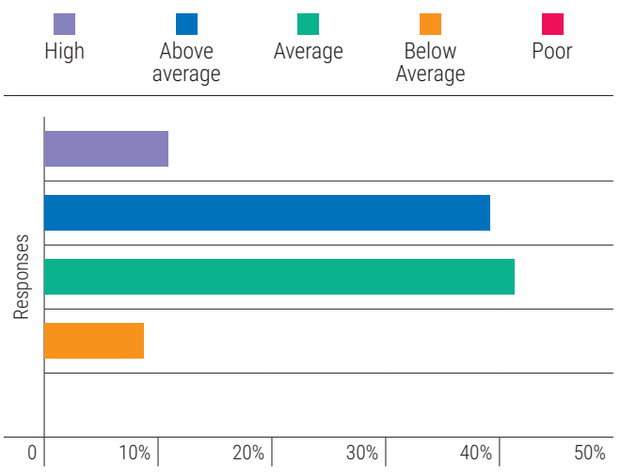
The level of coordination between stakeholder organizations during emergency management was measured based on the following two criteria:

1. Inclusion in a disaster management coordination network

2. Perception of the adequacy of its functional effectiveness

A total of 85% of respondents expressed that they are included in a disaster management coordination network. In terms of the effectiveness of the network, slightly over 40% expressed that the functionality is average, and slightly less than 40% expressed that it is above average.

Figure 27 Perception of Effectiveness of Existing Coordination Network



The majority perception falls within the average to high categories.

FGDs revealed that the members of DDMAs take on preparedness and emergency interventions as additional work. The preparedness component is usually ignored. Drills and simulations are being organized by the leading emergency service in Pakistan Rescue 112260 every year, but they face difficulty in ensuring the presence of all relevant stakeholders.

60 http://www.rescue.gov.pk/

Cluster Approach for Humanitarian Coordination

In 2005, clusters were introduced globally, but there was little understanding or global guidance on how they could function. The cluster approach was rolled out in Pakistan after the earthquake of 2005. Since that time, it has been observed and evaluated in a number of reports. The humanitarian community has had to adapt to the changing political scenario in Pakistan as well as changing responsibilities between different levels of government. In particular, the 18th amendment to the constitution in 2010 devolved the focus of both government and coordination away from national levels toward the provincial level.

Clusters are groups of humanitarian organizations, both UN and non-UN, designated by the Inter-Agency Standing Committee (IASC) and have clear responsibilities for coordination in the post-disaster context.[61] The coordination structure in Pakistan consists of the Humanitarian Coordinator (HC), the Humanitarian Country Team (HCT), and the Inter-Cluster Coordination Mechanism at the national and, where relevant, also includes provincial levels, district coordination cells, the Cluster System, and UN OCHA.[62]

The HC chairs the Humanitarian Country Team meetings with OCHA acting as the Secretariat. OCHA contributes to operational coordination, humanitarian financing, advocacy, and information management. The clusters adopt a sectoral approach with Oxfam and World Vision leading the water, sanitation and hygiene (WASH), Plan and Save the Children leading Education, UNICEF leading nutrition and child protection, UNFPA leading women's protection, WFP leading food security, FAO leading agriculture, WHO leading health, IOM, IFRC and UN-Habitat leading shelter. Through knowledge sharing and training, OCHA also seeks to strengthen the capacity of stakeholders to respond to emergencies.

61 https://www.humanitarianresponse.info/en/about-clusters/what-is-the-cluster-approach
62 http://pakhumanitarianforum.org/ocha-and-cluster-system/

However, during the 2010 floods response, due to the severity and magnitude of the disaster, a separate senior humanitarian advisor was appointed, and this was generally viewed as a positive and flexible approach to leadership during the emergency.

Knowledge Management

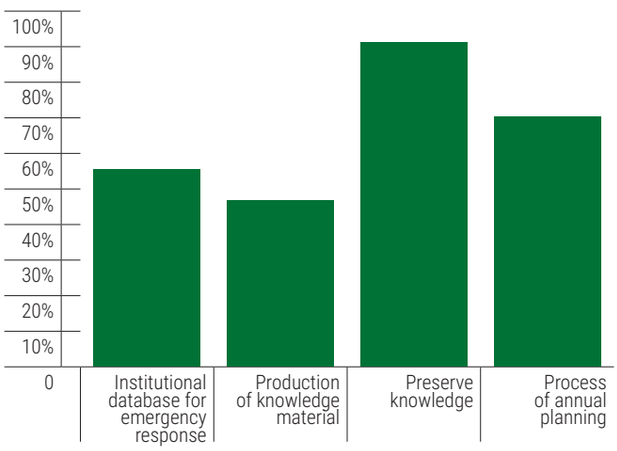
The level of knowledge management for emergency response in the government sector was measured under the following criteria and sub-criteria:

1. Availability of institutional database for emergency response
2. Production of knowledge material
3. Preservation of knowledge
4. Sharing of the produced knowledge material

Types of organizations with which knowledge material is shared and the level of sharing

Yes, responses obtained for criteria I to III are depicted in Figure 28

Figure 28 Level of Knowledge Management



Government capacity needs to be enhanced in terms of producing knowledge, such as producing publications and materials, as well as archiving knowledge products.

Responses to the availability of an emergency response database are depicted in Figure 29.

Figure 29 Availability of Emergency Response Database

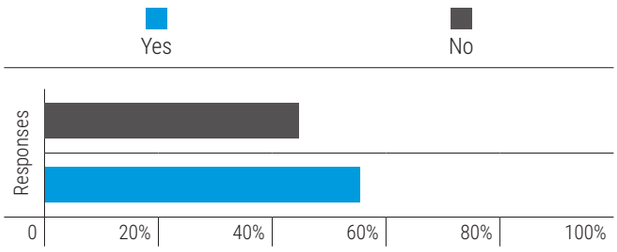
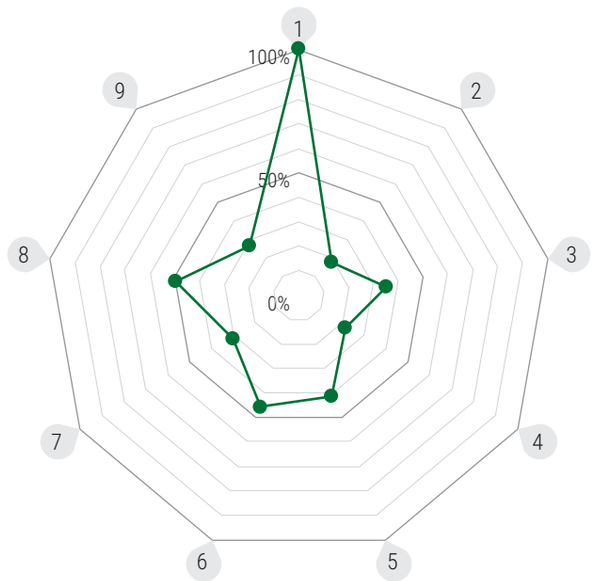


Figure 30 Level of Sharing Knowledge Material

1 Government	2 International non-governmental	3 Bilateral organization
4 Donor Agencies	5 Local non-governmental organizations	6 United Nations organizations
7 Private organizations	8 Media	9 Academic institutions



Only 55% of the organizations have an emergency response database that can be shared. Departments require support in developing web-based institutional databases.

Responses for sharing knowledge with stakeholders and the kind of organizations the knowledge products are shared with is depicted in Figure 30 as a spider chart in the shape of an octagon.

Overall sharing is low as revealed by the highest response around 35% for level of sharing between government agencies. This is followed by UN agencies, the media, LNGOs and bi-lateral organizations. Sharing with private organizations and INGOs is low. One reason for this may be that knowledge products produced related to project activities is shared only amongst government agencies involved in implementation. However, this requires verification.

Capacity Building Needs

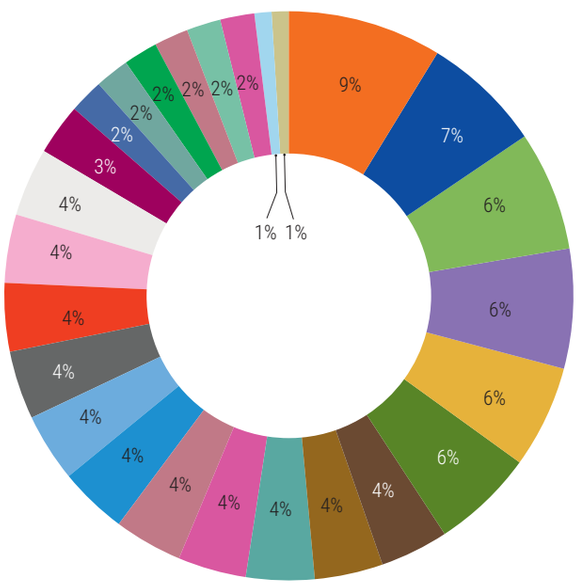
Participants were asked to list their staff capacity building needs. The responses are depicted in Figure 31.

The responses reveal the need for rapid needs assessment, mass casualty management, emergency response management, early warning system, search and rescue, mental health and psychosocial support warehouse management, and sphere minimum standards. These are followed by evacuation assistance, contingency planning, public health management, leadership for coordination, and incident command system. These responses are helpful for informing the design of future capacity building initiatives within the project.

Humanitarian Standards

Affiliation with humanitarian standards was assessed based on the following three criteria:

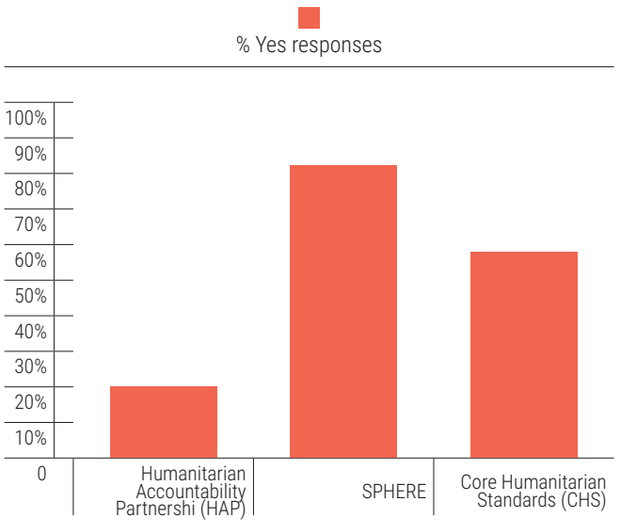
Figure 31 Capacity Building Needs



1. Member of the Humanitarian Accountability Partnership (HAP)
2. Acknowledgment of SPHERE Standards
3. Acknowledgment of Core Humanitarian Standards (CHS)

Responses are depicted in Figure 32.

Figure 32 Responses for Humanitarian Standards



A total of 82% of government departments acknowledged SPHERE minimum standards, 57% acknowledged CHS, and 20% acknowledged HAP.

The FGD results revealed that government departments need to enhance the capacity of their staff on Humanitarian Standards. There is a need to develop/revise/update existing policies and procedures as per Core Humanitarian Standard (CHS) and Sphere Minimum Standards.

Findings of the Baseline Survey for LNGOs

Legal Mandate and Registration

Responses were sought based on the following criteria:

1. Registration with the national government
2. Geographical location(s) of emergency response activities

There are between 10 to 18 different laws in Pakistan that may govern an NGO.

There are four main registration laws described below.

The Societies Registration Act of 1860

NGOs can register under the Societies Registration Act of 1860. Societies that may register under this Act include: charitable societies, societies established for the promotion of science, literature, or the fine arts, for instruction, the diffusion of useful knowledge, the diffusion of political education the foundation or maintenance of libraries or reading rooms for general use among the members or open to the public, or public museums and galleries of paintings and other works of art, collections of natural history, mechanical and philosophical inventions, instruments or designs.

The Trusts Act of 1882

A trust is a "'gift' of property to a person or institution providing benefit to both parties," and may be either a public trust, which benefits the public at large, or a private trust, which benefits individuals. Private trusts for public charity are governed by the Trusts Act, 1882. A public charitable trust can also be registered under other registration acts.

The Voluntary Social Welfare Agencies (Registration and Control) (VSWA) Ordinance, 1961

NGOs may register under The Voluntary Social Welfare Agencies (Registration and Control) (VSWA) Ordinance, 1961. A voluntary social welfare agency (agency) is "an organization, association or undertaking established by persons of their own free will for the purpose of rendering welfare services in any one or more of [the proscribed] fields and depending for its resources on public subscription, donations or Government aid."

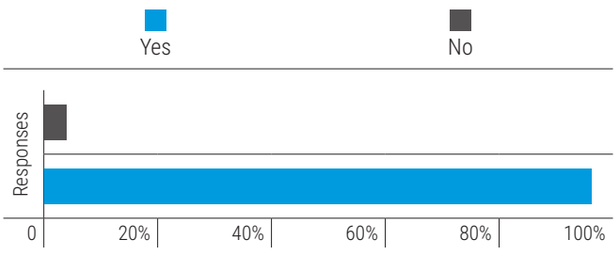
The Companies Ordinance, 1984

The Ordinance is one of the principal laws that governs the conduct of companies established for commercial objects. Nonetheless, this law

also provides for and facilitates the registration of Associations Not-For-Profit. Section 42 of the Ordinance and Rule 6 of the Rules provide the legal framework for licensing of such associations.

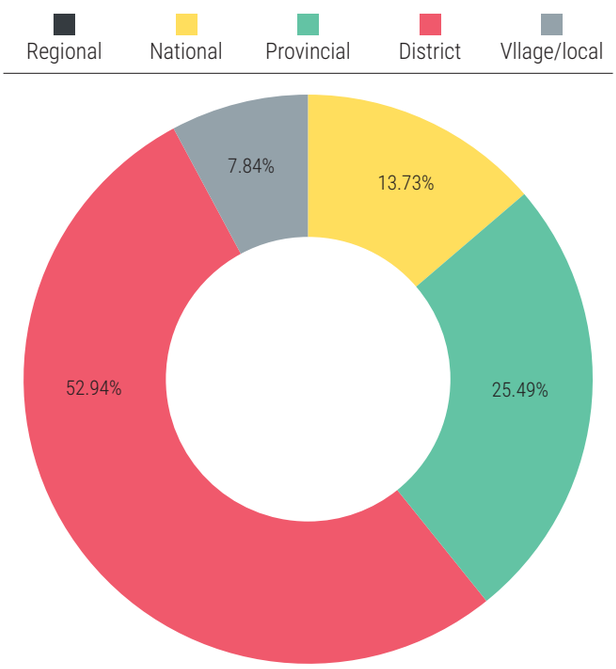
Responses for registration with the national government are depicted in Figure 33.

Figure 33 Registration with the National Government



A total of 98% of the LNGOs expressed that they are registered legal entities.

Figure 34 Geographical Areas of LNGO Operation



Geographical Locations of Work

Operational areas of the NGOs sampled are given in Figure 34.

Most of the organizations (53%) are operating at the district level.

Purpose of the Organization

The purpose of the organization was assessed using the availability of a vision and mission statement for the organization. All of the participating organizations have a mission and vision statement.

During FGDs, respondents indicated a need to review existing organizational purpose to integrate emergency response. There is a perception in the corporate sector, the media, and the government that LNGOs have low capacity and they are not transparent in their operations. Therefore, these sectors are reluctant to cooperate with NGOs at times. LNGOs lack long-term and sustainable linkages with communities. This is an area identified for strengthening for effective partnership for emergency response in the future.

Institutional Capacity

Institutional capacity was assessed based on several criteria (represented by roman numerals) and sub-criteria (represented by bullet points) as follows:

1. Organizational structure
2. Administrative processes
   - Manuals on administrative procedures
   - Manuals on human resource management
   - Recruitment policies

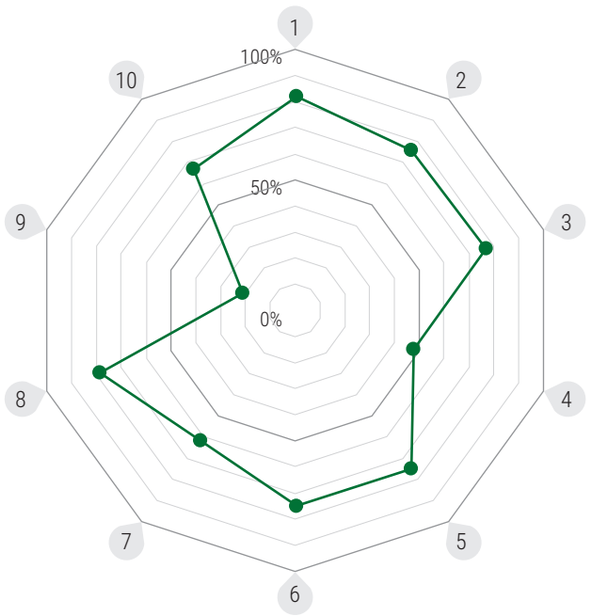
- Code of Conduct
- Work Place Harassment Policy
- Gender Sensitive Work Place Policy
- Adequacy of documented procedures
- Staff orientation in administrative procedures

Organizational Structure

All organizations responded "Yes" to the availability of an organizational structure.

Figure 35 Responses for Documented Administrative Procedures

1 Human resources	2 Recruitment policies	3 Selection policy	4 Professional development procedures
5 Code of conduct	6 Work place harrassment policy	7 Gender sensitive work place policy	8 Administrative policies and procedures
	9 Adequacy of the written policies	10 Staff orientations in adminstrative procedures	



Administrative Process

Responses to the administrative process are depicted in Figure 35 as a spider chart.

A total of 50% expressed that documented procedures are adequate. Availability of manuals for human resource management, recruitment procedures, selection policy, Code of Conduct, and Workplace Harassment Policy have all received a high level of responses. Responses to staff orientation, and gender-sensitive workplace policy have lower responses. Responses for professional development is below 50%.

Administrative procedures for NPOs including Non-Governmental Organizations are guided by regulations specified in the "Statement of Recommended Practice" and therefore are sustained at an acceptable level.

FGDs revealed that many LNGOs developed administrative policies and procedures aligned with INGOs to fulfill donor requirements. Contextualizing these to local requirements is, therefore, a challenge. Staff are not typically orientated regularly on such policies, and hence the implementation varies. FGDs, also revealed that many organizations are reluctant to invest in staff capacity building as trained staff are recruited by INGOs for higher salaries.

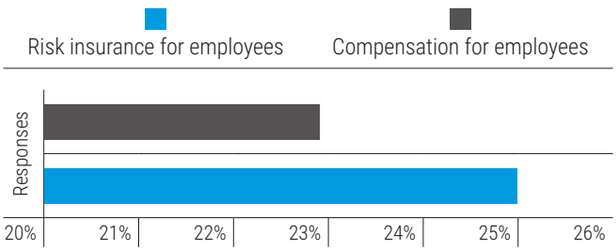
It was also found that a Gender-sensitive workplace policy is not a priority for many local organizations. It is given attention only to fulfill donor requirements. Social norms and culture of operating areas hinder the implementation of gender-sensitive policies.

Staff Security

Responses were sought on insurance coverage for staff working in emergency response. These are depicted in Figure 36.

A total of 25% of the LNGOs responded that they do have insurance coverage for staff. Around

Figure 36 Responses to Staff Security



(Note the restricted range of percentages on the X axis)

23% of the organizations compensate employees working in hazardous areas.

FGDs revealed that many LNGOs abstain from spending money on staff risk insurance, and divert funds to other priorities.

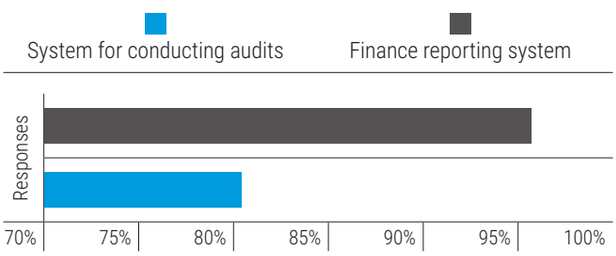
Financial Management

LNGOs were asked to respond yes or no to the following criteria:

1. Availability of an established financial reporting system
2. Annual financial audits
3. Allocation for DRM in annual budget

Responses obtained for these criteria are depicted in Figure 37.

Figure 37 Responses for Financial Management



(Note the restricted range of percentages on the X axis)

Responses indicate high compliance with financial regulations. A total of 55% of the sample responded that they have an annual budgetary allocation for DRM, which varies between 5-80% of the total annual budget.

FGDs revealed that LNGOs have minimal reserve funds, which becomes a constraint for emergency response.

Monitoring and Evaluation (M&E)

M&E capacity was evaluated based on the following criteria:

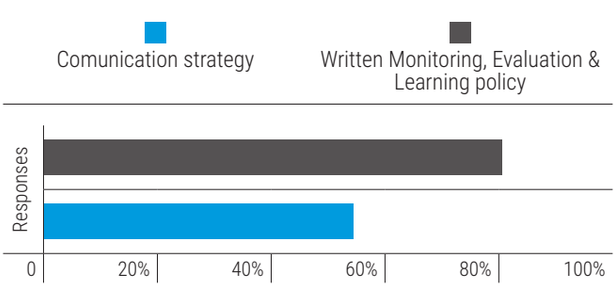
Availability of a written monitoring, evaluation, and learning policy (MEL)

Availability of a communication strategy for disseminating lessons learned from monitoring and evaluation

The responses on the availability of an M&E policy and a strategy for communication is given in Figure 38.

Responses indicate an adequate level of M&E processes. However, the survey did not specify

Figure 38 Responses to MEL



M&E for emergency response specifically, and therefore the responses may reflect the status of general institutional processes.

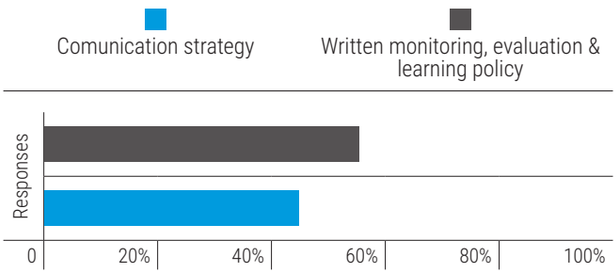
Technical Capacity for Emergency Response

Organizational technical capacity for emergency response was assessed based on the following criteria, which also serves to indicate organizational preparedness for emergency response:

1. Emergency response activities undertaken by the organization
2. Staff adequacy to perform emergency response
3. Established Standard Operation Procedures (SOP)
4. Availability of Emergency Response Plan
5. Conduct simulation drills
6. Staff training for emergency response_ preparedness

Emergency response activities of LNGOs tend to focus on the provision of WASH, food and non-food items, and early warning dissemination. Provision of heavy equipment, clearing rubble, and debris, mass causality management, dead body management, and provision of psychosocial support are low. Responses reveal that activities demanding physical resources are lower in LNGO emergency response work. Responses for adequacy of staff is depicted in Figure 39.

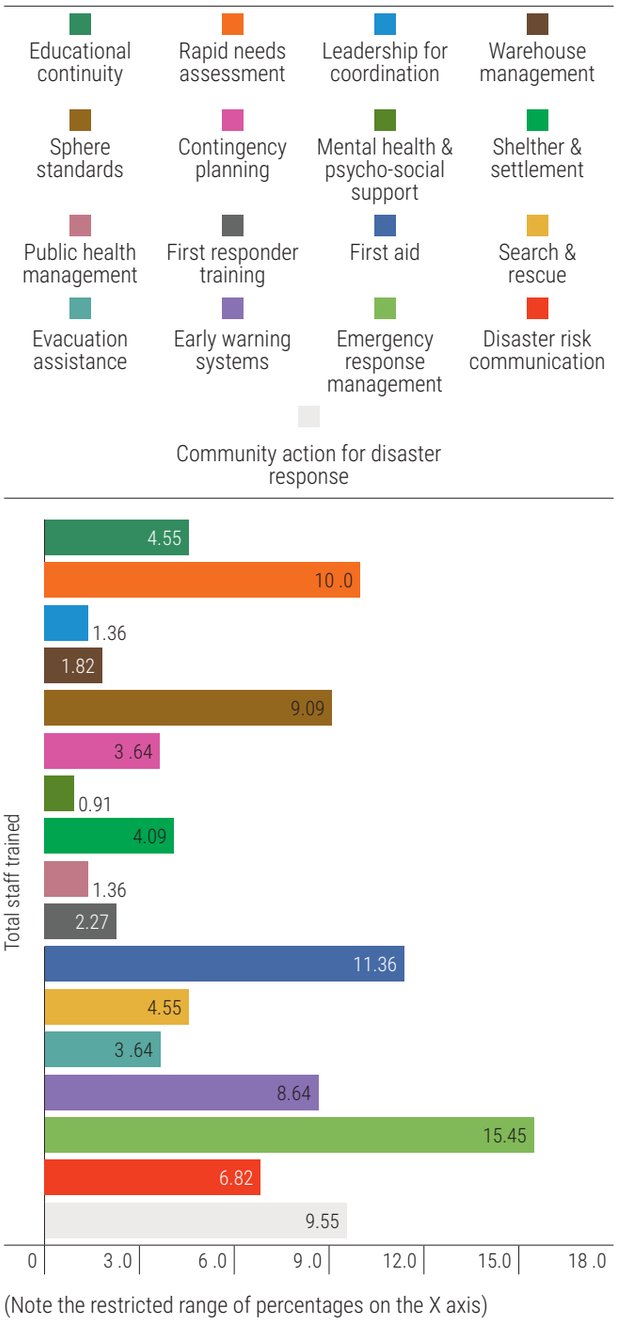
Figure 39 Adequacy of Staff



A total of 45% of LNGOs responded that they have adequate staff, while the rest (55%) responded that staff was not adequate.

Staff training in emergency response preparedness is depicted in Figure 40.

Figure 40 Staff Training Carried Out

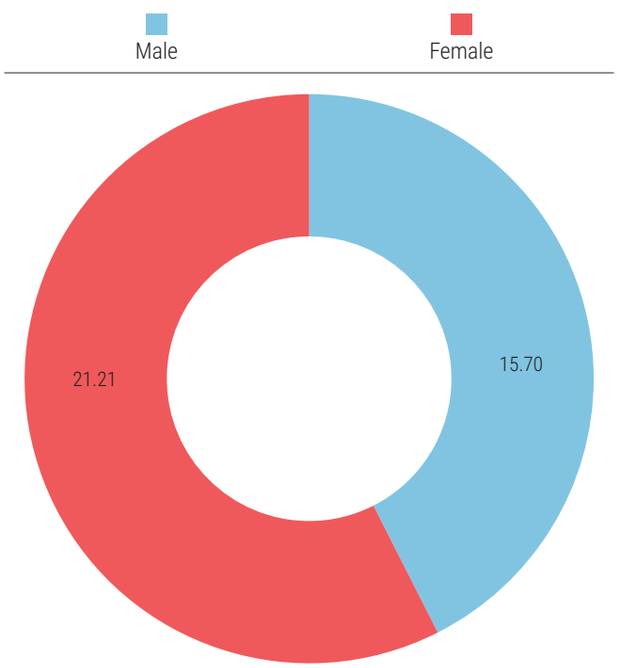


(Note the restricted range of percentages on the X axis)

It appears that the types and numbers of training are not adequate. The most staff training was conducted on the topic of emergency response management (15%), and first aid (11%), but remains low.

Gender disaggregated data for staff training is depicted in Figure 41.

Figure 41 Gender Disaggregated Data for Staff Training

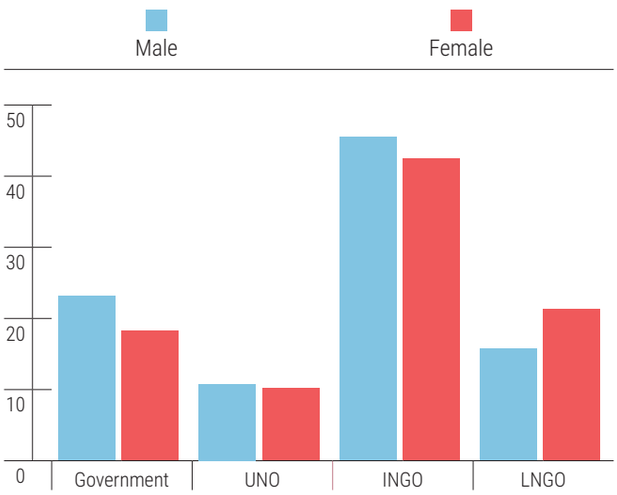


The percentage of staff undergoing capacity building training is low overall. Figure 41 reveals that comparatively, the female staff have a slight edge over the male staff in terms of undergoing training for capacity building. The percentage of females who have undergone capacity building is also higher than in the government sector.

Providers of Capacity Building

Figure 42 depicts the level of capacity building initiatives provided by the government, UN organizations, INGOs, and LNGOs.

Figure 42 Level of Capacity Building Provided by Stakeholders



Most capacity building initiatives have been conducted by the government, followed by INGOs, LNGOs, and UN organizations in that order.

Coordination between Stakeholders

The level of coordination between stakeholder organizations during emergency management was measured based on the following two criteria:

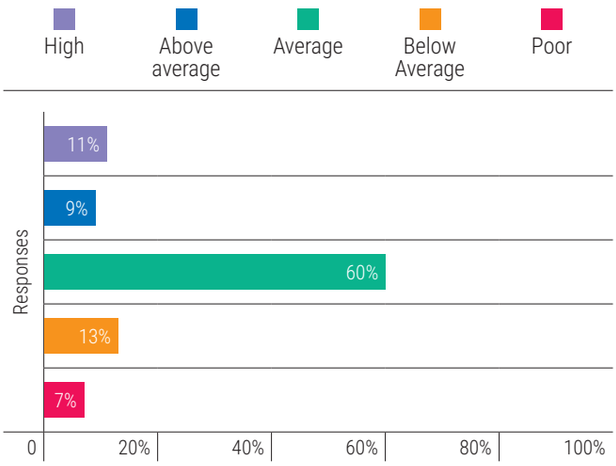
1. Inclusion in a disaster management coordination network

2. Perception of the adequacy of its functional effectiveness

A total of 77% of organizations are included in a disaster management coordination network. The responses regarding the perception of its effectiveness are given in Figure 43.

The majority of LNGOs perceive the effectiveness of coordination during emergencies as average. However, coordination seems to be an area that

Figure 43 Perception of Effectiveness of Existing Coordination Network



needs to be enhanced according to a research conducted after 2014 floods.[63]

FGDs revealed that LNGOs do not have dedicated focal persons to attend coordination meetings. The participants expressed a need for authorizing representation at coordination meetings of selected LNGOs using a transparent selection process and ensuring the selection of a diverse range of national and local NGOs. There is also a need to determine criteria for participation in clusters.

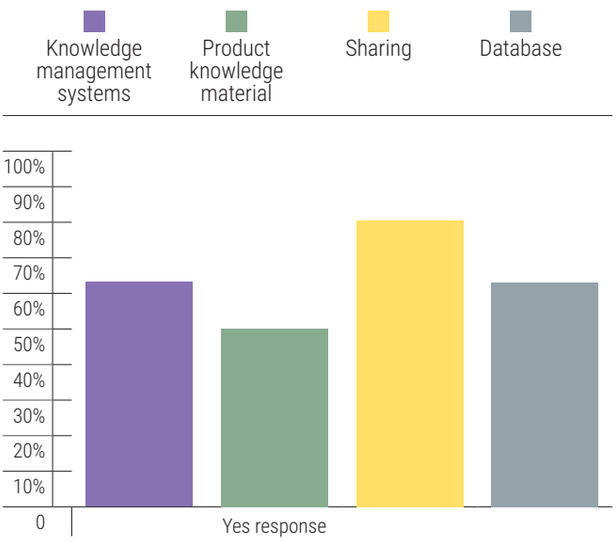
Knowledge Management

The level of knowledge management for emergency response was measured based on the following criteria and sub-criteria:

1. Availability of institutional database for emergency response
2. Production of knowledge material
3. Sharing of the produced knowledge material
4. Types of organizations with which knowledge material is shared and the level of sharing

'Yes' responses obtained for these criteria are depicted in Figure 44.

Figure 44 Level of Knowledge Management



A total of 63% LNGOs have institutional databases. However, the responses do not reveal whether these constitute emergency response information. Production of knowledge products stands at 50%. Responses for sharing is high at 80%, but responses regarding the stakeholders they usually share with is limited as depicted in Figure 45.

Figure 45 depicts the level of sharing knowledge products with stakeholders.

Figure 45 reveals a low level of sharing, with the highest sharing happening with government organizations and LNGOs. The lowest level of sharing is with the media. This reveals that the sharing process requires significant

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Figure 45 Status of Sharing Knowledge Products with Stakeholders

1 Government	2 International non-governmental	3 Bilateral organization
4 Donor Agencies	5 Local non-governmental organizations	6 United Nations organizations
7 Private organizations	8 Media	9 Academic institutions

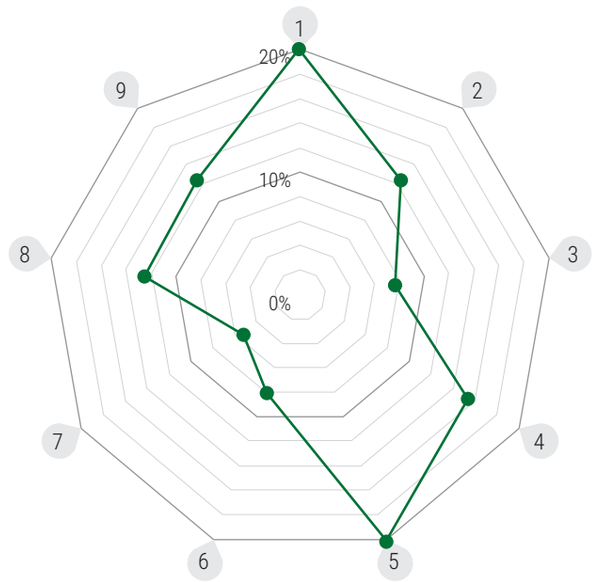
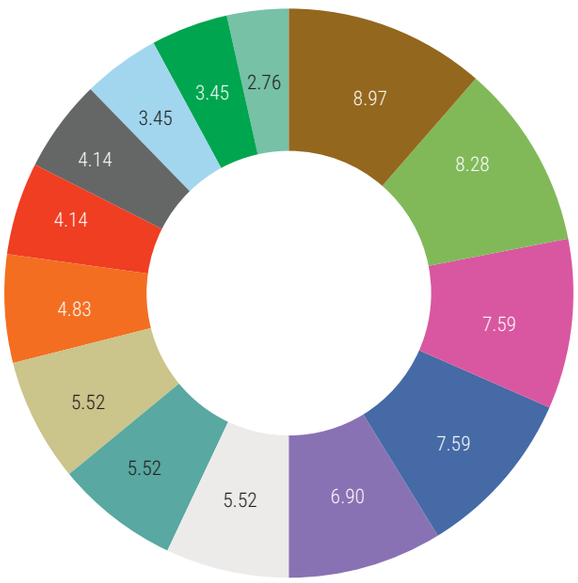


Figure 46 Capacity Building Needs



improvement and efforts to improve sharing should be incorporated into future work.

FGDs revealed that knowledge management is a neglected area. Identified causes are lack of competency, resources, and perception of low priority.

Capacity Building Needs

Participants were asked to list staff capacity building needs. The responses are depicted in Figure 46.

Capacity building in areas such as SPHERE minimum standards, emergency response management, contingency planning, first aid, early warning system, and community actions for disaster response appear to be priority needs.

Humanitarian Standards

To measure affiliation with humanitarian standards, following criteria were assessed:

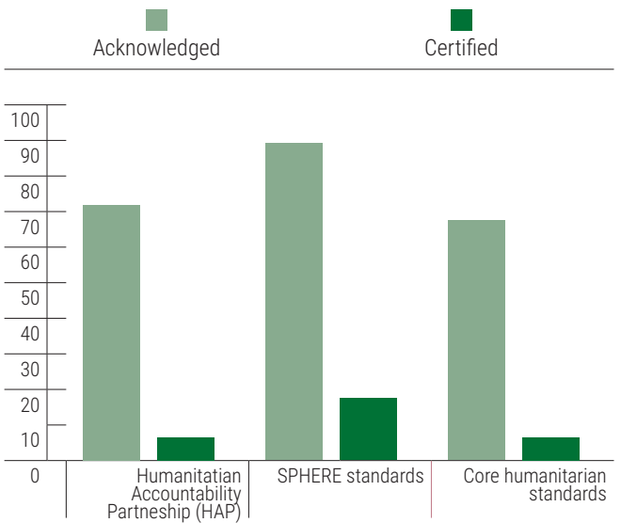
1. Member of the Humanitarian Accountability Partnership (HAP)
2. Acknowledgment of SPHERE Standards
3. Acknowledgment of Core Humanitarian Standards (CHS)

Responses are depicted in Figure 47.

A total of 72% of LNGOs responded that they comply with HAP. A total of 89% acknowledge SPHERE standards, and 67% acknowledge the

CHS. However, the certification under these standards is still very low.

Figure 47 Affiliation with Humanitarian Standards



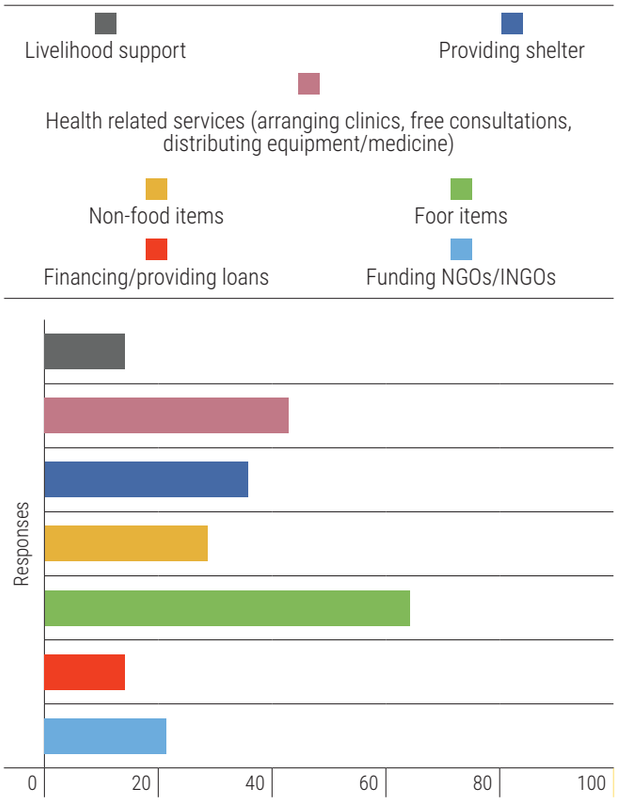
Findings from the Baseline Survey for the Private Sector and the Media

Emergency Response Activities Undertaken

The private sector and media organizations were asked to list the types of activities they undertake during emergencies. Response levels from the private sector are depicted in Figure 48.

Distribution of food items, medicines, and provision of shelters are the key areas of intervention. Provision of shelter, livelihood recovery, and provision of financial support to the affected are also common. Distribution of non-food items and funding INGO/NGO activity are also key intervention areas.

Figure 48 Emergency Response Activities Undertaken by the Private Sector



FGDs revealed that there is a geographical limit of intervention by the corporate sector. Their responses are limited to areas where supply chains or potential customers are concentrated. For emple, Shakar Gunj Sugar Mills only operate in the sugar growing area where they get sugarcane. They are conducting health and education activities in these areas only.

Emergency response activities undertaken by media organizations are provided in Table 4.

Media organizations have played a significant role in the supply and dissemination of information during recent emergencies. Unfortunately, relief distribution has turned into a competition between media organizations to build their corporate images. How these efforts can be coordinated to serve the affected more efficiently has yet to be studied.

Table 4

Emergency Response Activities Undertaken by the Media

Criteria	Percentage
Supply and disseminate information	83%
Resource mobilization	39%
Sensitizing for volunteerism	39%
Give voice to communities/public	78%
Other	22%

Coordination with Stakeholders

The overall level of coordination is perceived as low.

FGDs also revealed that the National Humanitarian Network (NHN), Pakistan Humanitarian Forum, Pakistan DRR Forum, other networks, and LNGOs lack linkages with the mainstream media outlets such as TV, radio, and print for supplying and disseminating information, giving an opportunity for affected communities to raise their voices, resource mobilization, and sensitizing volunteerism for emergency preparedness and response.

FGDs revealed that the corporate sector and the media are not included in drills and simulation exercises conducted by DDMAs. The corporate sector and the media did not demonstrate an awareness about the humanitarian coordination mechanisms and role of all the humanitarian actors.

FDGs recommended that NHN should formulate a training module on **humanitarian principles and values, the role of the media for emergency preparedness and response and humanitarian reporting.** It was recommended that the government adapt this training package to the local context, and advocate for its use. Donor funding may be required to implement training.

Findings from the Baseline Survey of INGOs

Emergency Response

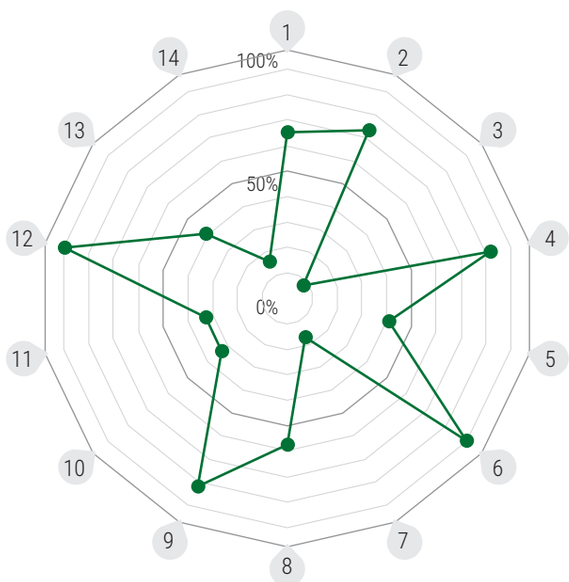
Emergency activities performed were assessed based on the following criteria:

Criterion I: Emergency response as part of organizational strategy/policy

Criterion II: Institutional protocol for local coordination during emergency response

Figure 49 Emergency Activities Performed by INGOs

1 Protection	2 Food security	3 Emergency telecommunication
4 Early recovery	5 Education	6 Water, sanitation & hygiene
7 Logistics	8 Nutrition	9 Emergency shelter
10 Camp coordination & management	11 Health	12 Disaster risk management
13 Climate change adaptation		14 Others



Criterion III: Involvement in emergency response activities

The study revealed that all organizations have emergency response as a part of their organizational strategies/policies, and 92% have an institutional protocol for local coordination during emergency response.

Figure 49 reveals that INGOs in Pakistan are mostly involved in DRM, early recovery, WASH, and providing emergency shelters in humanitarian response. A question was asked regarding the response activities undertaken by the different organizations.

Coordination with Stakeholders

All of the organizations are part of an existing national platform in Pakistan. They are part of different networks such as the National Humanitarian Network (NHN), Human Resource Development Network (HRDN), Social Accountability Network (SAN), Scaling-Up Nutrition Civil Society Alliance Pakistan (SUN CSA), National DRR Forum, Pakistan Centre for Philanthropy (PCP), Global Network of Civil Society Organizations for Disaster Reduction (GNDR), Asian Disaster Reduction and Response Network (ADRRN), Start Network, Clusters, Pakistan Humanitarian Forum (PHF) and the Gender Task Force (GTF). Perception about the coordination of these national platforms is above average.

Areas of Improvement for Stakeholders

The desirable areas of improvement proposed by INGOs for the government include:

1. Facilitate coordination for effective resource allocation and channeling of donor resources
2. Effective functioning of DDMAs
3. Effective response time and needs assessment
4. New policies, innovation, flexibility, and database management
5. Inclusive humanitarian response
6. Use of technology in disaster management
7. Preparedness and response keeping in view the promotion of humanitarian standards and principles and DRR/CCA.

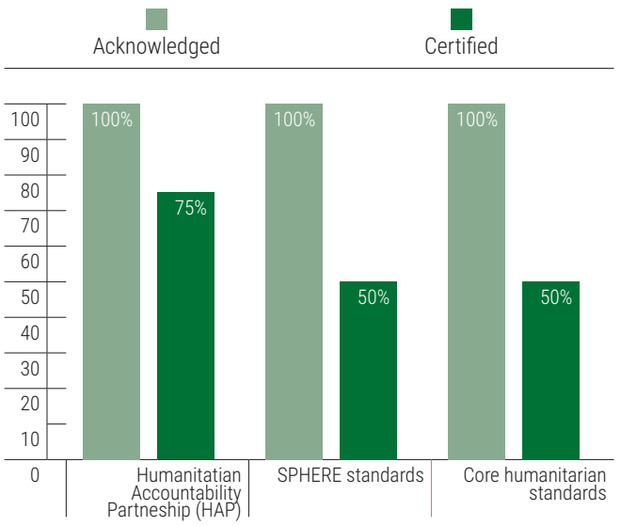
The desirable areas of improvements proposed by INGOs for Local Humanitarian Organization are:

1. Resource mobilization
2. Effective humanitarian needs assessment and humanitarian planning
3. Knowledge management
4. DRM and DRR
5. Documentation and proposal writing
6. Financial management
7. HR development
8. Reporting and grant writing
9. Sustainability and developing long-term organizational strategy
10. Leadership in humanitarian response

International Humanitarian Standards

All of the organizations acknowledged minimum humanitarian standards as depicted in Figure 50.

Figure 50 Acknowledgement and Certification of Humanitarian Standards



Core Humanitarian Standard (CHS) is a voluntary and measurable standard, which means its application can be objectively assessed. It offers four verification options with different degrees of rigour and confidence in the results. These are self-assessment, peer review, independent verification and certification. Acknowledgment of the humanitarian standards is perceived as high, and certification is also perceived as satisfactory.

HAP certification is perceived as high followed by SPHERE standards.

Findings from the Baseline Survey with Academia

The role of academia is traditionally accepted as vital for knowledge development through teaching curriculum at the undergraduate and postgraduate levels, and carrying out research to build the existing knowledge base.

A total of 78% of institutions/universities have specialized courses on Disaster Management (DM). The most common courses being offered are disaster management, DRR, and GIS remote sensing. There is an allocated budget for disaster management courses and research in 44% of institutions/universities.

The courses conducted during last five years have covered the following topics:

1. Disaster Management
2. DRR
3. Climate Change
4. Public Health in Emergencies
5. Emergency Preparedness for Response
6. Geographical Information System and Remote Sensing
7. Community-Based Disaster Risk Management
8. Mainstreaming DRR into Development Planning

However, there are is low enrollment due to lack of job opportunities in this field.

Student Participation in Emergency Response

The survey revealed that 89% of universities are training student volunteers on search and rescue, rapid assessment, or relief distribution.

Universities have lists of student volunteers. FGDs revealed that that academia is willing to share these lists with governmental and non-governmental actors. However, humanitarian actors need to develop linkages with the universities for this purpose. Volunteers from universities require training on awareness-raising related to emergency preparedness and response.

Research on Disaster Management

As a part of a degree program, institutions conduct research related to disaster management. The survey revealed that 67% of universities are conducting research on Disaster Risk Reduction, Earthquake Engineering, Disaster Risk Assessment, Climate Change, MHVRA, Flood Management, CBDRM, DRR Policy, Fire Engineering and Gender Mainstreaming. These research outputs are published in journals, presented at conferences, and uploaded on websites.

During FGDs, universities showed a willingness to increase research on DRM. However, support and facilitation by INGOs/NGOs, UN, and donors are required for this purpose.

In FGDs, participants expressed that it is vital to involve academia in developing the training module on knowledge management, and stakeholders should seek support from academia for its effective delivery. Universities are also required to increase their competency and capacity in this regard.

Conclusion

Socio-political and Cultural Context

The Common Country Assessment (CCA), conducted in 2011 as a first step in the development of the United Nations Sustainable Development Framework (UNSDF) 2018-2022, took stock of the economic, political, social, cultural and environmental context of Pakistan and impacts on human development. The CCA identified four causes common to the development challenges faced by Pakistan in overall development aspirations:

1. 1. Institutional and governance causes, focused on key gaps in the policy and legislative framework as well as an acute need for systems and institutional strengthening, at the national and sub-national levels alike;

2. 2. Persistent inequities arising from economic and socio-cultural causes, including significant challenges related to gender, despite notable progress;

3. 3. Environmental and geographic causes, including the country's extreme heightened vulnerability to disaster and the negative impacts of climate change; and

4. 4. Capacity causes, the acute need to strengthen Pakistan's capacities related to data generation, collection and effective analysis, all of which could be used for evidence-based policymaking.[64]

64 http://www.undp.org/content/dam/pakistan/docs/Legal%20Framework/UNDP-PK-Common%20Country%20Assessment%202012.pdf

Conclusions from the Baseline Survey

This study has focused on assessing the humanitarian capacity to manage te humanitarian crises at the institutional, organizational, strategical, and operational levels.

Legal and Institutional Framework

Pakistan has an adequate legal and institutional framework in the government sector for DRM. However, there are gaps in devolution from the national to the local level. Although at the national level the disaster management policy framework has shifted to proactive risk reduction, it is not reflected in the legal mandates for local governance. They are still relief and response-oriented.

Under the National Action Plan 2015, the interior ministry and economic affairs division are taking actions to regulate the affairs of LNGOs and INGOs in Pakistan for more effective partnerships.

Organizational Purpose, Institutional capacity, and Financial Management

Findings reveal that these areas are adequate and controlled by legal enactment and policy.

Human Resource Management

In government and LNGOs, a significant gap exists between the desired and achieved levels in administrative procedures. Implementation of the Protection Against Harassment of Women at the Workplace Act 2010 and gender sensitivity at work need to be strengthened. Knowledge and competence required for humanitarian coordination is also an area for improvement.

Knowledge Management

Publications and material development, knowledge archiving, sharing and institutional databases for emergency response management have emerged as areas for strengthening.

Monitoring and Evaluation

Processes are in place at an adequate level, however low responses regarding communication strategies for disseminating lessons learned requires further investigation.

Humanitarian Standards

There is adequate awareness and affiliation in the LNGO sector but needs improvement in the government sector.

Staff Security

This is an area of concern overall. Insurance coverage for staff that undertakes emergency response activities is low. There is no special coverage in the government sector and only 25% of LNGOs have insurance coverage for their staff. Only 23% have compensation for the employees working in hazardous areas.

Technical Capacity for Emergency Response

Staff adequacy to perform emergency response functions is low. However, addressing this issue is constrained by the availability of budget and budgetary allocations. Capacity building for emergency response in the government sector and among LNGOs is inadequate for both in types of training undertaken and numbers of staff exposed to capacity building initiatives. Government initiatives in this regard are higher than LNGOs. Male staff have had more opportunities for training and capacity building.

The responses demonstrate a need for immediate action to invest in capacity building in appropriate areas for emergency response.

Table 5 provides prioritized capacity building needs for the two sectors- government and LNGO.

Table 5

Prioritization of Perceived Capacity Building Needs

No.	Government Organizations	LNGOs
1	Rapid needs assessment Mass casualty management Emergency response management Early warning system Search and rescue	SPHERE standards Emergency response management Contingency planning First Aid Early warning system
2	Mental health and social psycho-social support Warehouse management SPHERE standards Evacuation assistance	Community actions for disaster response Evacuation assistance Camp management Rapid Needs Assessment
3	Contingency planning Public health management Leadership for coordination Incident command system	Disaster risk communication First responders training Collecting relief material Shelter and settlement
4	First responder training Disaster risk communication Hospital emergency preparedness and response Community actions for disaster response	Disaster management Mental health and social psycho-social support Mass casualty management Search and rescue
5	DRR First Aid Tsunami and cyclone management Shelter and settlement	Public health management Incident command system Warehouse management Collecting relief material Livelihood recovery

Stakeholder Coordination

Humanitarian actors seem vigilant and active to coordinate with each other during emergencies. However, the status of coordination between stakeholders at all levels requires substantial improvement before and after disasters. Humanitarian actors show a considerable level of understanding of the roles of each actor except the corporate sector, academia, and the media. However, regular reviews of humanitarian coordination architecture by NDMA and P/F/GB/S DMAs are needed to further improve and strengthen it. During FGDs, academia showed a willingness to conduct research on humanitarian coordination. There is a significant difference in coordination among stakeholders before and during disasters. Comparatively, coordination appears low before the disaster. Coordination with the corporate sector and the media appears to be low and requires significant enhancement.

Corporate Sector and the Media

FGDs revealed that the corporate sector is not aware of the humanitarian needs, priorities, and actors and their roles. There is a considerable variance in the involvement of the media in emergency response fundraising.

Recommendations

Research on Humanitarian Coordination

It is recommended to facilitate research studies in academia to document a range of potential models for coordination, particularly at the subnational and inter-cluster level, which includes case study examples.

Strengthening Coordination

It is recommended that NDMA, P/F/GB/F DMAs, UN agencies, PHF, NHN, Academia, Federation of Pakistan Chamber of Commerce and Industry and PEMRA could come together to agree on common standards for “coordination capacity” and work together to establish a training and capacity-building program to address these gaps.

Awareness of Humanitarian Coordination

It is recommended that a short course on humanitarian coordination be formulated for the government, LNGOs, the media and corporate sector, and a Training of Trainers (ToT) be conducted to replicate training district-wise for government and non-government organizations. Ideally the training participation should include

a range of stakeholders to allow for informal networking opportunities.

Review of the Cluster Approach

It is recommended that NDMA, with the support of UN, PHF, and NHN, agree on criteria for participation in clusters.

Development of a Comprehensive Emergency Response Database

A national to local comprehensive Emergency Response Database should be established/ improved that aligns with the National Monsoon Contingency Directive 2015.

Enhance Capacity Building of All Stakeholders

It is recommended to reach consensus with all stakeholders on the curriculum needed to improve preparedness for response and compile standardized capacity building and training manuals to be used by all stakeholders to facilitate their application through a series of Provincial ToTs as relevant.

Development of a training package on humanitarian principles and values, role of the media in emergency preparedness, and response and humanitarian reporting is recommended. Media officials should be trained on this package at the divisional, provincial and national levels.

Awareness-raising material for the corporate sector about emergency preparedness and response and role of the corporate sector is recommended. A conference/seminar can be organized to sensitize the corporate sector, in collaboration with the chamber of commerce and industry.

Ensure Availability of Trained Staff for Humanitarian Response

It is recommended to ensure the provision of sufficient/adequate staff to perform emergency response, through the development of an intern/volunteer policy and to collaborate with academia.

Knowledge Management

It is recommended to enhance the capacity of stakeholders in the compilation of knowledge products to embed lessons learned in order to enrich sharing through the Asian Preparedness Partnership Web Portal.

Integration of Disaster Risk Management and Humanitarian Leadership into University Curricula

It is recommended to convene and organize advocacy events for the Higher Education Commission (HEC) and Higher Education Department (HED) to integrate disaster risk management and humanitarian leadership into the university curricula.

Orientation of Policy Makers

It is recommended to arrange advocacy seminars and materials for policymakers on the need for emergency response and the creation of an enabling environment to achieve an adequate level of preparedness.

Indicators for Monitoring and Evaluation

Monitoring and Evaluation is an important process in the program planning to make sure the implementation of the program is on track and in line with the set objectives. It is important to use the information derived through the

baseline assessment to design project activities in each country with set targets within the program framework.

A results framework has been developed at the regional level to measure the progress of the project and achievements. Each country will contribute towards achieving the set objectives indicated in the results framework. For achieving that purpose, baseline data from each country will be used to define activities in their road maps towards strengthening emergency response capacities of local actors at national and local level which will be aggregated at the regional level for the program.

Program outcomes/impacts in each of the country is to be measured using three (3) common key measurement indicators (KMI) identified below:

KMI 1: Number of agencies with improved operational systems (admin processes, financial reporting system, KM, M&E, etc.), technical capacity and access to information to act effectively in disaster response and recovery phases			
Unit of Measure	Number of agencies	Disaggregated by	• Type of agency - • Govt./LNGO/ Private Sector • Level of the agency - National/Sub-national
Definition:	This indicator measures the agencies that have new or increased ability to respond to disasters effectively. ***Measuring institutional capacity in terms of administrative, financial, technical expertise, networks, etc. are important elements of enabling environment for ensuring effective response by those agencies.*** Indications with improved capacity to act effectively in disaster response and recovery include, but are not limited to: • Improving operational systems (proper administration policy guidelines, financial systems, knowledge management systems, M&E systems, etc.) of humanitarian agencies which are transparent and accountable • Building in-house relevant technical expertise which can be utilized during disaster response and recovery • Improved participation in disaster management coordination networks/ committees with identified role • Engaging with related stakeholders and building networks for sharing of information • Devoting greater resources (human/financial) for Disaster Risk Management activities		
Baseline as of 2017:	The baseline assessment conducted through the program showed the following level of capacities among local actors in Pakistan: • Low level of knowledge of humanitarian standards particularly in government sector • Inadequate staff to perform emergency response functions • Capacity building for emergency response is inadequate for both in types of training undertaken and numbers of staff exposed to such initiatives • Poor sharing of information among stakeholders		
Target 2019:	Through the program interventions, it is expected to have at least 3 institutions with improved capacity in terms of operational, technical and access to information to act effectively in disaster response and recovery phases		
Data Source	• Baseline report, Organizational Capacity Assessment survey results, evaluation reports		

KMI 2: Number of local rapid deployment teams established/strengthened with necessary capacity for better response			
Unit of Measure	Number of teams	Disaggregated by	N/A
Definition:	This indicator measures the established/strengthened local rapid deployment teams which can be utilized in disaster response quickly. Strengthening capacities includes skill trainings, networking, identified roles and responsibilities, and access in case of an emergency. Rapid deployment teams can assist disaster affected communities within hours which is key in effective emergency response. Rapid deployment teams consist of professionals such as search and rescue experts, fire fighters, medical staff, troops, etc. and/or volunteers who can help communities during first 48 hours of a disaster		
Baseline as of 2017:	The baseline assessment conducted through the program showed the need for a well-organized team of professionals who are technically qualified to carry out response functions within first 48 hours.		
Target 2019:	Through the program interventions, it is expected to form a group of professionals and volunteers attached with the government and build their technical capacity to carry out functions in first 48 hours after a disaster.		
Data Source	• Country reports		• Media reports

KMI 2: Number of active emergency coordination committees/forums comprising of actors such as govt., LNGO and private sector with identified roles for each			
Unit of Measure	Number of committees/ forums	Disaggregated by	• Level of the committee/forum - National / Sub-National
Definition:	This indicator measures the engagement of different stakeholders in emergency coordination which is important for effective response. Emergency coordination committees can be at national level as well as at sub-national level comprise of local actors such as government, LNGO, private sector with identified role for each. Active emergency coordination committee is a one which meets at least once in 3 months bringing all members to discuss about preparedness for response activities in countries		
Baseline as of 2017:	The baseline assessment conducted through the program showed the following in terms of the level of coordination: • Low level of knowledge and competence required for humanitarian coordination • Low level of coordination between stakeholders at all levels before and after disasters • Regular reviews of humanitarian coordination architecture are needed to further improve and strengthen • Role of private sector and media are not defined in response coordination		
Target 2019:	Through the program interventions, it is expected to improve the emergency coordination by engaging LNGO as well as private sector to the existing coordination mechanism with identified role for each actor.		
Data Source	• Government records • Media reports		• Coordination meeting minutes • Interviews

In order to monitor the activity progress in Pakistan a monitoring framework (Table 6) was developed, guided by the baseline data and the regional program results framework. It is expected that the country program team together with concerned stakeholders define targets considering short term, medium term and long term time frame for these indicators within the program framework. This framework will be a tool for monitoring the progress of activities and achievements towards set objectives while ensuring accountability and transparency of the progress of the country program.

Table 6

Indicators to measure progress

No.	Expected result/ Outcome	Baseline status	Recommendations	Indicators to measure the progress and impact
1	Strengthened emergency response coordination mechanisms and partnerships	• Knowledge and competence required for humanitarian coordination is an area for improvement • Coordination between stakeholders at all levels requires substantial improvement before and after disasters • Regular reviews of humanitarian coordination architecture are needed to further improve and strengthen • Role of private sector and media are not defined in response coordination	• Facilitate research studies in academia to document a range of potential models for coordination • Stakeholders to agree on common standards for "coordination capacity" and work together • Review of cluster approach for coordination	• Regular coordination meetings organized by national/local platforms involving all concern stakeholders • % of LNGOs and Private sector entities in government led coordination platforms • SoPs for emergency response coordination reviewed/ updated • National/Sub-National Emergency Operations/ Response Plans developed/ updated
2	Improved capacities on emergency response through priority training and learning actions	• Knowledge of humanitarian standards needs to be improved in government sector • Staff adequacy to perform emergency response functions is low • Capacity building for emergency response is inadequate for both in types of training undertaken and numbers of staff exposed to such initiatives	• Compile standardized capacity building and training manuals to be used by all stakeholders • Series of provincial ToTs to be conducted	• Priority training programs (ToTs) conducted • Number of people trained • Learning events, drills, simulations, and field visits/study tours facilitated
3	Learning and knowledge management systems on emergency response initiated and institutionalized	• Low level of Publications and material development, knowledge archiving, sharing and institutional databases for emergency response management • Low level of communication strategies for disseminating lessons learned	• A national to local comprehensive Emergency Response Database should be established/improved • Improve capturing and creating success stories • Awareness-raising material for the corporate sector about emergency preparedness and response and role of of the corporate sector	• Online platform at the national level for knowledge and information sharing • Knowledge products developed and available for public access • Experts/volunteers registered in a roster which can be accessed for emergency response

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