Needs & Concerns Of Groups Of Vulnerable Population Residing In The Most Disaster Prone Districts Of Pakistan



National Disaster Management Authority Prime Minister's Office, Islamabad

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Report Prepared for and Presented to

National Disaster Management Authority (NDMA)





Acknowledgements

First and foremost, we would like to thank the Chairman NDMA Major General Asghar Nawaz and member DRR Mr. Ahmed Kamal for their constant support and encouragement. We would also like to extend our gratitude to the Gender and Child Cell team namely Ms. Tania Humayun (Adviser to the Chairman/Programme Manager) and Dr Sarah Basharat (Consultant Programme Officer) for their invaluable inputs throughout the project. A profound thank you note to the entire Project Management Unit team specially the Director PMU Mr Ehtisham Khalid for the hard work. And finally, we would like to extend our gratitude to the consultants; Dr. Shehzad Ali Khan for his work with the qualitative study which is the first of its kind at NDMA.

Chairman's Message

The fact remains that women, children, aged and disabled persons are the soft targets and worst affected in any type of hazard. Vulnerable groups centered Disaster Risk Management in a disaster pron Country like Pakistan therefore needs its rightful importance. NDMA though its Gender and Child cell is pursing the said objective since the year 2010.

Formulation of National Policy Guidelines was the step in this direction followed by number of interventions to meet the dictates of GCC Framework.

The present undertaking of "Needs & Concerns of Groups of Vulnerable Population Residing in Most Disaster Prone Districts of Pakistan" is an enviable effort to contribute towards the DRM of vulnerable groups in the entire spectrum of Disaster Management. It is an incisive work done with a profession depth for which the efforts of all those involved is acknowledged with profound appreciation.

I will also like to thank our Development Partners UN-Women for their forthcoming support in development of this Document.



Major General Asghar Nawaz Chairman NDMA

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Acronyms

AJK Azad Jammu and Kashmir

BISP Benazir Income Support Program

DRM Disaster Risk Management

DRR Disaster Risk Reduction

UNESCAP UN-Economic and Social Commission for Asia and the Pacific

FATA Federally Administered Triable Areas

FGD Focus Group Discussion

IDI In-depth Interview

IDPs Internally Displaced Persons

KP Khyber Pakhtunkhwa

NDMA National Disaster Management Authority

NGO Non-Government Organization

PWD Persons with Disabilities

UN United Nations

IPCC Intergovernmental Panel On Climate Change

1. Introduction and Background

Globally disasters have continued to exact a heavy toll and, as a result, the well-being and safety of persons, communities and countries as a whole have been affected. Over 700 thousand people have lost their lives, over 1.4 million have been injured and approximately 23 million have been made homeless as a result of disasters. Overall, more than 1.5 billion people have been affected by disasters in various ways, with women, children and people in vulnerable situations disproportionately affected. The total economic loss was more than \$1.3 trillion. In addition, between 2008 and 2012, 144 million people were displaced by disasters. Disasters, many of which are exacerbated by climate change and which are increasing in frequency and intensity, significantly impede progress towards sustainable development.¹

It has been reported that 92 percent of disaster deaths all over the world have taken place in developing countries. These deaths have mainly occurred because of exposure of highly vulnerable population to multiple hazards of nature. More than 80 percent of disaster deaths during last 20 years occurred in only 20 mega disasters, with over 10,000 deaths each, most of them being geological disasters like earthquakes and tsunami. When assessed for the disasters faced and the risk of disaster, Asia was by far the most disaster prone continent, when accounted for total per cent of disaster events, total per cent of disaster deaths and total per cent of economic damages.

South Asia remained the most disaster prone region in Asia-Pacific.1 Asia and the Pacific accounts for more than 60 per cent of the world's hungry people. The annual report (2013) published by the United Nations Economic and Social Commission for Asia and the Pacific (UNESCAP) showed that disaster-induced deaths in the Asia-Pacific region rose more than three-fold within the past decade, largely due to a handful of extreme disasters. The report also stated that of the world's reported natural disasters between 2004 and 2013, 41.2 per cent or 1,690 incidences, occurred in the Asia-Pacific region, and the number of recorded deaths from natural disasters went up from 205,388 between 1994 and 2003 to 713,956 between 2004 and 2013, with 1.5

 $_{1}$ South Asian Disaster Knowledge Network. http://www.saarc-sadkn.org/trends.aspx. Accessed on the 7_{th} of October, 2015

billion people affected. This three-fold increase in the number of deaths was largely attributed to the effects of only a handful of catastrophic disasters, including the 2004 Indian Ocean earthquake and tsunami, the 2005 Kashmir earthquake in Pakistan, the 2008 Sichuan earthquake in China and Cyclone Nargis in Myanmar, as well as the 2010 heatwave in the Russian Federation.²

1.1. Global impact of climate change

Natural disasters - disasters resulting from natural hazards such as cyclones, droughts, floods, earthquakes, landslides and volcanic eruptions - are widespread and numerous in developing and middle-income countries. They can cause great loss of life and immense damage to communities, infrastructure and national economies. Ethical, humanitarian considerations oblige us to act to protect human life and prevent suffering. Many researchers and aid institutions have identified natural disasters as a major threat to sustainable development.

Global climate change has already had observable effects on the environment. Glaciers have shrunk, ice on rivers and lakes is breaking up earlier, plant and animal ranges have shifted and trees are flowering sooner. Effects that scientists had predicted in the past would result from global climate change are now occurring: loss of sea ice, accelerated sea level rise and longer, more intense heat waves. Scientists have high confidence that global temperatures will continue to rise for decades to come, largely due to greenhouse gasses produced by human activities. The Intergovernmental Panel on Climate Change (IPCC), which includes more than 1,300 scientists from the United States and other countries, forecasts a temperature rise of 2.5 to 10 degrees Fahrenheit over the next century. According to the IPCC, the extent of climate change effects on individual regions will vary over time and with the ability of different societal and environmental systems to mitigate or adapt to change. The IPCC predicts that increases in global mean temperature of less than 1.8 to 5.4 degrees Fahrenheit (1 to 3 degrees Celsius) above 1990 levels will produce beneficial impacts in some regions and harmful ones in others. Net annual costs will increase over time as global temperatures increase. The effects of climate change and global warming on Pakistan, the melting of glaciers in the Himalayas,

 $_2$ UN News Centre. http://www.un.org/apps/news/story.asp?NewsID=49642#.VhTyzfmqqko. Accessed on the $7_{\rm th}$ of October, 2015

threatening the volumetric flow rate of many of the most important rivers of Pakistan. In Pakistan, such effects are projected to impact millions of lives. As a result of ongoing climate change, the climate of Pakistan has become increasingly volatile over the past several decades; this trend is expected to continue. Climate Change Mitigation Pakistan's greenhouse gas (GHG) emissions are low compared to international standards. In 2008 Pakistan's total GHG emissions were 310 million tons of Carbon Dioxide (CO2) equivalent. These comprised: Carbon Dioxide 54%; Methane (CH4) 36%; Nitrous Oxide (N2O) 9%; Carbon Monoxide (CO) 0.7%; and Non-Methane Volatile Organic Compounds 0.3%. (Source: National GHG inventory 2008). The energy sector is the single largest source of GHG emission in Pakistan; it accounts for nearly 51% of these emissions and is followed by the agriculture sector (39%), industrial processes (6%), land use, land use change and forestry (LULUCF) (3%) emissions and waste (1%) (Source: National GHG inventory 2008). As such, the most important targets for mitigation efforts focused on reduction of GHG emissions are the energy and agriculture sectors. In the energy sector, integration of climate change and energy policy objectives is particularly important as today's investment will "lock in" the infrastructure, fuel and technologies to be used for decades to come. Similarly, the building and transport infrastructure put in place today should meet the design needs of the future. Therefore, greater attention must be paid to energy efficiency requirements in building codes and long-term transport planning.3

1.2. Pakistan and the Impact of Disasters

The earthquake of 2005 which hit the northern parts of Pakistan is regarded as one of the most disastrous natural calamities ever in the history of the country, killing almost 87,000 people and displacing millions. The response had contributions from major actors such as the Government of Pakistan, UN agencies and NGOs. The relief phase lasted nine months, until June 2006 and the subsequent rehabilitation phase lasted for one year. It was followed by the long-term reconstruction phase, which started from July 2007. The total resources dedicated as part of the earthquake response amounted to USD 5.8 billion.⁴ The floods of 2010 constituted an extreme event with substantial sociological consequences. At their height they submerged

³ Wikipedia

⁴ Khan, K. S., Shanmugaratnam, N. and Nyborg, I. L.P. (2015), Recovering from disasters: a study of livelihoods in post-quake villages in northern Pakistan. Disasters, 39: 339-361.

roughly 20% of Pakistan's area, killing and injuring nearly 5,000 people directly, and displacing as many as 20 million. Though influenced by additional factors (e.g., snowmelt and water management practices), the floods were closely tied to an unusually heavy rainfall event. The countrywide precipitation total during July-September 2010 was the highest since 1994 and the sixth highest in the last 50 years.5

1.2.1. Vulnerable Groups in Pakistan and the Impact of Disaster

People differ in their exposure to risk as a result of their social group, gender, ethnic or other identity, age and other factors. The "vulnerability" perspective in disasters is rapidly emerging as a dominant view in the field. A real disaster occurs when it strikes an underprivileged population. Another issue is the "differential vulnerability"; that is, different populations face different levels of risk and vulnerability. Vulnerability in disaster can be defined as "the diminished capacity of an individual or group to anticipate, cope with, resist and recover from the impact of a natural or man-made hazard". The concept is relative and dynamic. Consequently, policies aimed at addressing risk and vulnerability must also take into account these differential impacts and outcomes of disasters. Vulnerability is most often associated with poverty, but it can also arise when people are isolated, insecure and defenseless in the face of risk, shock or stress. Vulnerable groups include displaced populations, migrants, marginalized/destitute persons (including disabled persons), elderly, women and young children.6 Women's vulnerability to disasters is shaped by traditional gender roles, less power and privilege, low wages, and secondary responsibilities such as multiple house chores and child care. Despite literature that suggests women are more likely to recognize and respond to risk, women tend to be poorer relative to men and may not have the necessary resources to respond to and recover from disasters. Vulnerable groups suffer the most during disasters due to their

5Wang, S. Y. S., Davies, R., Huang, W. R., Gillies, R. R., & Yoon, J. H. (2012). Changes in Monsoon Extremes Affecting Climate Prediction—Example of the 2010 Pakistan Floods.

⁶ International Federation of Red Cross and Red Crescent Societies. What is Vulnerability.

https://www.ifrc.org/en/what-we-do/disaster-management/about-disasters/what-is-a-disaster/what-is-vulnerability/. Accessed on the 29_{th} of September, 2015.

during the 2005 earthquake, the death toll for children was estimated to be 73,000 out of which nearly 17,000 were school going children, around 42,000 children were orphaned and approximately 23,000 were disabled. Similarly the floods of 2010 affected over 10 million children.¹⁰

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 $_{10}$ Provincial Disaster Management Authority (KP). Technical Guidelines for the Inclusion of Vulnerable Groups in Disaster Risk Reduction.

1.3. Disaster Preparedness

Disaster Risk Management (DRM) though includes preparedness, prevention and mitigation, response, rehabilitation and recovery, the term generally applies to disaster preparedness, prevention and mitigation.

Disaster Risk Reduction (DRR) usually refers to the response to disaster and rehabilitation/recovery phases of DRM.

Disaster preparedness refers to measures taken to prepare for and reduce the effects of disasters. That is, to **predict** and, where possible, **prevent** disasters, **mitigate** their impact on vulnerable populations, and **respond** to and effectively **cope** with their consequences. Its purpose is to establish and **strengthen** capacities of communities to anticipate, cope and recover from the negative impacts of emergency occurrences and disasters.

Disaster preparedness provides a platform to design effective, realistic and coordinated planning, reduces duplication of efforts and increase the overall effectiveness of National Societies, household and community members' disaster preparedness and response efforts. Disaster preparedness activities embedded with risk reduction measures can prevent disaster situations and also result in saving maximum lives and livelihoods during any disaster situation, enabling the affected population to get back to normalcy within a short time period. It is a continuous and integrated process resulting from a wide range of risk reduction activities and resources rather than from a distinct sectoral activity by itself. It requires the contributions of many different areas—ranging from training and logistics, to health care, recovery, livelihood to institutional development.¹¹

1.3.1. Disaster Prevention and Mitigation

Disaster prevention and mitigation is to avoid hazards and mitigate their potential impacts by reducing vulnerabilities and exposure and enhancing capacities of communities.

¹¹International Federation of Red Cross and Red Crescent Societies. Preparing for Disasters. http://www.ifrc.org/en/what-we-do/disaster-management/preparing-for-disaster/. Accessed on the 5th of October, 2015

1.3.2. Disaster Response

Provide life preservation and meet the basic subsistence needs of affected population based on acceptable standards during or immediately after a disaster.

1.3.3. Disaster Rehabilitation and Recovery

Disaster rehabilitation and recovery is to restore and improve facilities, livelihood and living conditions and organizational capacities of affected communities, and reduced disaster risks in accordance with the "building back better" principle.

1.4. Rationale and Objectives of this Assignment

Considering these facts and figures, NDMA deemed it essential to conduct a study to assess the needs and concerns of vulnerable groups pertaining to disasters as voiced by them. Moreover, to further organize the process of prevention, rescue and rehabilitation in case of disasters in future, the existing data about the number of elderly, children, women and the disabled population needed to be disaggregated according to identified strata. The geographical scope for the study is the 25 districts of Pakistan considered the most hazard prone according to the NDMA ranking. To assess the needs and concerns of the vulnerable groups, a number of districts was chosen as a sample to conduct the study in. For the purpose of organization and disaggregation of data, all the 25 districts were included. Details of the methodology are provided in the next chapter.

1.5. Objectives

- 1- To assess the level of perceived and reported needs and concerns regarding impact of disaster in the vulnerable population of identified districts
- 2- To assess the level of perceived disaster preparedness in the vulnerable population of identified districts

2. Methodology

2.1. Study Design

This was a cross sectional study employing a mix of methodologies and comprising collection of primary (qualitative) data and analysis of secondary (quantitative) data.

2.2. Quantitative portion

During the quantitative portion of the study, secondary data analysis was performed on existing data about the distribution of vulnerable groups in the top 25 most disaster prone districts of the country. The data was disaggregated for all groups in accordance with the criteria presented later in the text.

Sr	Rank No.	Province	District
1	1(a)	Sindh	Karachi North
2	1(b)	Sindh	Karachi South
3	1(c)	Sindh	Karachi East
4	1(d)	Sindh	Karachi West
5	1(e)	Sindh	Karachi Malir
6	1(f)	Sindh	Karachi Korangi
7	2	A.J.K	Hattian
8	3	A.J.K	Muzaffarabad
9	4	Khyber Pakhtunkhawa	Nowshera
10	9	Khyber Pakhtunkhawa	Charsadda
11	10	Khyber Pakhtunkhawa	Sawat
12	12 (a)	Khyber Pakhtunkhawa	Mansehra Tor
13	12(b)	Khyber Pakhtunkhawa	Gharh
14	14	A.J.K	Neelum
15	18	Punjab	Rawalpindi
16	19	Sindh	Badin
17	20	Sindh	Dadu
18	21	Sindh	Hyderabad
19	24	Sindh	Thatta
20	Q 15	Balochistan	Jaffarabad
21	28	Khyber Pakhtunkhawa	Peshawar
22	31	Balochistan	Nasirabad D.
23	40	Khyber Pakhtunkhawa	I. Khan
24	3	Punjab	Rahim Yar Khan
25	46	Sindh	Kashmore

Table 1: List of top 25 hazard prone districts

2.2.1. Databases

The databases used to retrieve the data included:
Pakistan Bureau of Statistics (tables 4 and 34)

	Nadra (Citizen Database)
	Nadra (Citizen Damage Compensation Program)
	NDMA (rescue and relief data)
	BISP
	Pakistan Social and Living Standard Measurement Survey (April 2014)
2.2.	2. Vulnerable groups and data disaggregation methodology
	Children
	o Individuals <18 years of age
	o Segregation:
	○ 0-1 years
	$\circ > 1 - 5 \text{ years } \circ > 5 -$
	10 years $0 > 10 - 14$
	years 0 >14 - <18
	years
	Elderly
	$\circ \ge 65 \text{ years}$
Ш	Women
	Disabled
	o Segregation
	o Blind
	o Deaf/mute
	o Crippled
	o Insane
	Mentally retarded
	 Having more than one of the above

2.2.3. Data Analysis Plan

Gender Dissaggregated Data: The Index of Dissimilarity

The Index of Dissimilarity measures the evenness with which two mutually exclusive groups are distributed across the geographic units that make up a larger geographic entity; for example, the distribution of Males and Females across the census Admin that make up a metropolis.

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Suppose: M_i = the Male population of the i<sup>th</sup> areal unit, e.g. census Admin M = the total Male population of the large geographic entity for which the index of dissimilarity is being calculated. F_i = the Female population of the i<sup>th</sup> area unit, e. g. census Admin
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F = the total Female population of the large geographic entity for which the *index of dissimilarity* is being calculated

Then the index of dissimilarity measuring the segregation of Female from Male is

$$(1/2)$$
 SUM $(M_{1}/M - F_{1}/F)$

The summation is over the component areal units such as census Admin.

Segregation for Age Groups

Percentage segregation was used to develop tables depicting age wise segregation of data according to the criteria mentioned earlier in the text. The segregation is based on the 1998 census and the data has been projected to 2015.

Segregation for the Disabled Population

For segregation of data on the disabled population, the district wise population for each district has been taken from the District Census 1998 report at the Tehsil level.

This results were then extrapolated for 2015, using the following formula.

$$P_n = P_0 * (1+R/100)^n$$

Where \mathbf{P}_{n} = Current Population, \mathbf{P}_{0} = Baseline Population, R= Growth Rate and n= period

The PWDs population, has been calculated directly, from total projected population, by applying disability rate (%), determined in each district/Tehsil.

2.3. Qualitative portion

During the qualitative phase **Focus Group Discussions** (FGDs) were held with three groups of the vulnerable population; Women, Children (caregivers of children) and Elderly. Three **In-depth Interviews** (IDIs) were held with Persons with Disabilities (PWDs) in each district. IDIs were held with PWDs to save them the trouble of having to leave the comfort of their homes and gather at one place. **Two** districts each from **Sindh**, **KPK** and **Punjab** and **one** each from **AJK** and **Balochistan** were included in the sample making sure to select one rural and one urban district from each province where possible.

2.3.1. Sample Size and Sampling Methodology

For the **quantitative arm** of the study, all 25 districts were included and data from all the districts were retrieved, analyzed, organized, segregated and graphs and frequency tables were developed.

2.3.2. Sample of districts for the qualitative portion

A sample of 30% (8) out of the top 25 most hazard prone districts in Pakistan were selected. These eight districts are given in Table 2 below: -

Sr	District	Province	FGDs	IDIs
1.	Muzaffarabad	AJK	3	3333
2.	Mansehra	KPK	3	3333
3.	Nowshera	KPK	3	
4.	Karachi East	Sindh	3	
5.	Dadu	Sindh	3	
6.	Rawalpindi	Punjab	3	
7.	Rahim Yar Khan	Punjab	3	
8.	Jaffarabad	Balochistan	3	
	Total		24	24

Table 2: Sample of districts

2.3.3. Selection of individuals for FGDs

For the selection of females, lady health workers were engaged. Each lady health worker has a list of registered women in her catchment area with her. In each district, one area based on a history of disaster, was selected for the conduction of FGDs. With the help of lady health workers, potential respondents in the identified area were invited to participate. Inclusion into the FGDs was preceded by informed consent after explaining the purpose of the study.

Type of research technique	Total	Number of respondents	Age (Range)
FGDs of Care givers of children	08	85	18 to 55
FGDs of Women	08	88	19 to 48
FGDs of Elderly	08	84	60 to 80
IDI of Disable	24	24	16 to 39
Total Respondents		281	

3. Results

3.1. Needs and Concern of Women and Caregivers of Children

3.1.1. Dependency on others for saving their lives

Women and children are mostly dependent on the men of the household mostly this dependency increase manifold during emergency and disaster. If flood water hits during daytime they are alone at homes as men are away at work. Most of the Women said they wait for their men to come and taken care.

They find themselves faced with a situation they are not used to. Women have to find a safe place not only for themselves, but also for their children and family. Women and children reportedly felt helpless during disasters, Survival being their main concern in case of a calamity.

3.1.2. Cultural concern and Lack of Gender-sensitive Services

Cultural issue such as observance of purdah, difficulty in going outdoors during disaster, taking help from and interacting with strangers (even other women) is a cause of great apprehension. due to the cultural norms and practices which expect minimal interaction between males and females. They are unsure of themselves and unable to cope with the changed settings. They already have limited mobility outside their homes and during disaster basic needs such as accessing to washroom for women becomes a challenge. The relief work also is not reportedly gender-sensitive, as most relief workers are males and are untrained to deal with the concerns and issues of women and children.

"I became depressed when I thought about flood. My family was in open ground. There was no food and water. Our animals died. In our culture our women don't go out without parda. During flood we were sitting in open place. There were no arrangements for parda. It was very disturbing and embarrassing for us". (Woman, 28 years)

"My husband was at work (night shift) when the flood hit over area. I have two daughters. Elder was three years and younger eight months old. I lived in a rented room at first floor. I was afraid and could not sleep because the siren was ringing time and again since last two nights. I did not have time to save my things (TV and other household items)". (Woman, 21 years)

3.1.3. Immediate need for Shelter and Security for Women

The majority of the women said that there is general lack of women friendly and children friendly places, which translate into a lake of safe places for women and children during disaster. They only hope for immediate security comes from the community. There is a sense of belonging in rural communities and most people do not hesitate when it come to in helping and saving lives. There are no separate spaces/places for women in relief camps.

I took my two kids and ran upstairs to save our lives. We are lucky that we are living in this neighbourhood since long and landlord is my relative. I can trust them and had no hesitation in getting shelter in their home in upper story. We spend night with them. We all were scared, starving and worried prying for rain to stop". (Woman, 34 years)

"I still remember the dreadful incidence of last flood the water tide rises so rapidly that with in few minutes every thing was covered by water.

We had very little time for transporting women, children and elderly to rooftops. Our men were successful in doing so because we all were united and took care of each other. " (Woman, 34 years)

3.1.4. Food and water

During a disaster and for some time after there is a shortage of food. People have to leave their houses in haste to safe life and seek shelter. Either there is no food or a limited supply of it. The Majority of the respondents were of the opinion that the children, elderly and patients have special food requirements and therefore were the most affected by its lack/limited supply. The Lack of food and time to access help increases their vulnerability.

The Food and portable water was mentioned important requirement for both children and pregnant women. They also mentioned that its supply greatly affects in the initial days of disaster. The type of food provided is not at all appropriate for children and patients. Lack of food and time to get first help increases vulnerabilities.

"My kids were hungry and thirsty when we were stranded during flood. I was able to grab few rotis and a jug of milk only when we leave our home. We did not get any supplies for about two days. We survived on it till the help arrived. "(Women 35 years).

3.1.5. Lack of Life Skills in Vulnerable Women

Most women said they lack life skills, which are mostly taught to men. They were also uable to manage post disaster relief without help.

"Women cannot run fast, they cannot climb trees and they cannot swim; as these things are never taught to women in our region; only our men can do these" (Women 35 years)

Lack of training and knowledge among women to respond during disasters is a major concern. None of the participants reported having heard about drills /preparedness.

The only thing they could mention in terms of preparedness were the announcements and warnings regarding approaching flood water, and even the announcements were either too late or misleading.

3.1.6. Access to main roads for Women and Children is

Access to the main road is another big concern even for rescue services to reach the affected population especially the vulnerable groups. But this issue becomes more problematic for the women and children.

3.1.7. Mapping of Vulnerable Groups

There has to be a mechanism where the most vulnerable population is registered or mapped during normal times so that they can be managed during any disaster. It is required in each village with some committee of locals supervised by Government to ensure safety

3.1.8. Saving Lives

Saving life and finding shelter is the most important need mentioned by most participants. The majority of the participants mentioned that pregnant women need special attention and care. They mentioned experiencing a number of abortion cases after earthquakes due to falling down or due to getting horrified at the time of earthquakes and floods. Injuries and infections are quite common during disasters. Awareness rising is required for women to know how to respond in such situations and how to help other women including those who are pregnant

Disasters cause the self preservation instinct to kick in, making it all the more important to train and prepare women to defend and protect their own selves instead of relying solely on help

3.1.9. Lack of Maternal and Newborn health Services

Lack of Maternal Newborn and Child Health (MNCH) services often lead to delayed care of pregnant women. These include cases related to Gynecological and obstetric care, family planning, lactating women and post natal and post-abortion-care.

It was mentioned by majority of the participants that there is an increased demand and requirement of medical help and medicines during emergencies and disasters. people already unwell need their routine medicine and treatment. In addition to these Injuries and infections are common during such periods. Existing health services are already over burdened, and even more so during disasters.

3.1.10. Preferred Sources of Information During Disasters

TV, radio and mobile phones are the main source of information regarding disasters. These become useless because of power faiuler during disasters. Mobile networks overloaded and there is a need to have disaster related alarms. Some respondents from Rawalpindi and Karachi mentioned getting information from sirens and flood alerts. They were not aware of any public sector departments, or organizations working for rescue relief and rehabilitation. They are afraid of fake organizations of conning them. The respondents narrated multiple stories in which people collected money from them in the name for registration to help them.

They stressed for the need of a reliable disaster related alarm system. Some were of the view that interpersonal communication through available community volunteers; health and population workers can be used.

3.1.11. Psychological and Mental Health issues

Psychological issues are common in post disasters affecting greatly women and children. The loss of loved ones and valuable commodities is a trauma. This needs an effective mental health intervention following disaster.

3.1.12. Political influences during Relief

Political interference and affiliations are greatly hampering relief activities and inclining aid to non-deserving. They reportedly show up only when media attention is required. Majority of participants complain that those who have prior political affiliation get relief. Organizations work only for a limited time, there are no follow-up services. They drain flood water and mud from their homes. After the disaster when they return to their places they themselves have to rebuild their homes with little or no help from local authorities.

3.2. Needs and Concerns of the Elderly

3.2.1. Physical weakness and inability to move quickly

Physical weakness and inability to move quickly are factors increasing chances of getting hurt and surviving during disasters.

"I had abdominal surgery (Hysterectomy) just week before the flood hit our area. I was in great pain and discomfort after operation. When the siren blazed and water level rises rapidly. We were (women and kids) alone at home as all men were at work. My daughters (Two) and daughter in law first shifted the kids upstairs. My younger daughter stayed with the kids while my elder daughter and daughter in law had to dragged me upstairs, as they could not carry me. Water was all over the place in no time we could not saved our household items and valuable appliances. We lost everything (Tears in her eyes). My stiches got broken due to all that hassle and I am suffering from great pain and discomfort since then.

(Woman 45, while pointing at her protruded abdomen)

3.2.2. People take risk to save lives of elderly

Most of the Elderly were of opinion that due to limited mobility they are at a greater risk of get to sustain injuries during disaster and infection immediately after it. Their families and kids put extra effort in to protecting them during emergency and disaster.

"They usually insist on saving valuable household items and livestock along with the elderly, which at times put them in more vulnerability". (Male, 70 years)

People had to let go for their assets they took great pains to acquire. They described these loses with much grief and regret.

"The siren was continuously ringing. They were announcing and guiding people to go to rooftops as water was rising rapidly. Majority ran to save their lives. But few were trying to shift there valuables (TV, refrigerator, furniture etc.) item to roof tops to safe guard it from damage, my cousin was also one of those. He was struggling with the refrigerator in stairs that there was huge gush of water flooded the courtyard of their home. He was drowning. Lucky we had a large rope with us we through it towards him, he got hold of it and we lifted him and he was saved." (Male, 65 years)

"After disaster there was wreckages and dead animals. The stink was unbearable and it was reason of outbreak of many communicable diseases". (Male, 70 years)

They stressed the need for a community based system to keep their surroundings clean, to minimize the risk of outbreak of diseases after disasters. which end up claiming lives.

3.2.3. Elderly are already weak and are at a greater risk of diseases.

The non-availability and cost of treatment is also a major concern for people. They have to purchase medicines out of pocket due to the non-availability owing to the poor functioning of the government health facilities. They insisted that arrangements by the government for early handling of these issues after disasters should be in placed. All this puts elderly people in financial crises and this matter should be addressed through pension or some other schemes.

None of the respondents in any district reportedly had any information or knowledge about any organizations working for care of the elderly during or after disasters.

3.3. Needs and Concern of the Disabled

3.3.1. Disabled have higher Risks

PWDs and their caregivers mentioned that they are at a greater risk of mortalities, injuries and diseases during and after disaster. It is because of their reduced ability and a lack of preparedness. Their families put efforts to protect them during disasters without receiving any help from local authorities. People are not prepared but they are willing and motivated to help each other during disasters.

There is reportedly no discrimination faced by PWDs, in fact most of the families and communities take extra care of them.

3.3.2. No Ramps and other Structures to Facilitate Movements of Disabled

Over the year much modification have been incorporated into buildings for PWDs. However facilities such as ramps and other structures to facilitate them in routine activities are lacking received services from health facility become a challenge because of inaccessibility. The roads, infrastructure and facilities all are destroyed. No means of transport is available. It is impossible to reach there without the help of others due to wreckages and destruction of pathways

They requested that there should be some transport system for disables during disasters. Especially when there is widespread confusion and panic It's the responsibility of Govt. and the authorities to provide proper precautionary measures before a disaster to ensure safe evacuation of the people and their belongings.

Some PWDs claims to have received help from NGOs working in their area. The Majority said they heard that some organizations were working for the relief of disaster victims, but no one came to them.

3.3.3. Disaster preparedness for Disabled

None of them heard about preparedness or drills but they were interested in learning receive such skills, through drills and trainings if available. PWDs also lack the skills necessary for survival and seeking relief during disaster. They need specialized training and education in order to enable to survive during disasters.

"There was water everywhere my brother took me on his shoulder. I left my tricycle in home because we cannot take with us in floodwater. My brother and father evacuated my entire family with great difficulty and effort. We moved towards Jacobabad. We were in open. There was no place to sit. When floodwater

recedes my brother went back to see our house. It was devastating our animals were dead. All our belongings were destroyed. On his way back to Jacobabad he brought my tricycle.

Those who have mental disability have no options for relief and rehabilitative services during or after disaster. "(Male, 24 years, disabled)

When asked about the preferred sources of information, they also mentioned TV, radio and mobile phones as major source of information during disasters.

"We can leave her alone at any time of day. Her mother or I have to be with her to take care of her. During last floods she was so agitated and we have to calm her down with great difficulty. In normal routine day it is much easier to look after her. She missed her medicine and it complexes the situation. I was concerned for her safety and security more". (Grandmother of fifteen-year-old special girl)

3.3.4. Service providers have Limited Knowledge and Skills to Manage Needs of the Disabled

There are no services available for disable at relief campsites. Service providers have limited knowledge and skills to tend to the needs of PWDs. Supplementary services for handicapped are required to be provided at regional levels to address their needs and concerns in during disaster.

3.3.5. Registration of Disabled

There should be some registration mechanism for all PWDs according to each ward of the area. After a disaster shikes, recounting of people is required according to these lists.

4. Conclusion and Recommendations

4.1.Conclusion

- Women and children are mostly dependent on the men of the household, and this dependency increases manifold during emergencies and disasters.
- Women have to find safe place not only for themselves, but also for their kids and family.
- Most women believe they lack life skills which are mostly taught to men. Lack of training and knowledge among women to respond to disasters is also an issue. None of participants said to have heard about drills /preparedness for disasters.
- Cultural issues like purdah, going outdoors, talking help from or interacting with strangers, even with other women, creates great apprehension.
- Relief work is also not gender-sensitive, as most relief workers are males and are untrained to deal with women and children.
- Most women believe there is a lack of women friendly and children friendly places in normal routine days, a problem which is exaggerated during disasters.
- There are no proper separate spaces/places for women in relief camps.

 Women children, elderly and the invalid have special requirements of food, and are affected the most by lack of food during the post disaster period.
- Access to main roads and transport is big concern in rural areas, which becomes more of a problem for women and children.
- Lack of Maternal and Newborn Health (MNCH) services often leads to delayed care of many women with special needs.
- Psychological issues are common after disasters, affecting women and children the most, who need mental health intervention in post disaster period.
- TV, radio and mobile phones are the main source of information in normal routine, which become useless in disasters due to power failure. Respondents stressed the need for a reliable disaster related alarms system. Some were of the view that inter personal communication through available community volunteers; health and population workers can be used.
- Political interference and affiliations greatly hamper relief activities and most of the aid reach the non-deserving, the politician seem interested in showing up only when the media people are around
- Most of the Elderly were of the opinion that due to their limited mobility and weakness, they are at a greater risk of injuries disasters and also of infections immediately following a calamity
- Most of the elderly said their families and kids put extra effort to protect them during emergencies and disasters.
- The non-availability of treatment for elderly patient is a major concern for them Almost non of the respondents in any district said to have any information or knowledge about any organization working for elderly care during disasters.

- PWDs and their caregiver mentioned that they are at a greater risk of mortalities, injuries and diseases because of their disability and owing to a lack of preparedness. their families put effort to protect them during disasters without any help from local authorities.
- PWDs are not prepared but they are billing and motivated to help each other during disasters.
- There is no discrimination faced by PWDs instead most of the families and communities take extra care for them.
- There are no facilities for PWDs such as ramps and other structure to facilitate them. Getting of services from health facility is impossible because it is difficult to reach there.
- Majority of PWDs have heard that some NGOs are working for relief of disaster victims but no one came to them.
- Non of PWDs heard about preparedness or drills but they work interested in receiving such skills, drills and training if available.
 - Services providers have limited knowledge and skills to treat PWDs. supplementary services for
- PWDs are required to be provided at regional levels to address their needs and concerns in these difficult times.
- There should be some registration mechanism for all PWDs according to each ward of the area.

4.2. Recommendations

Based on the information gained through focus group discussions and interviews, the following recommendations can be made to address the needs and concerns of vulnerable groups in the most disaster prone districts of Pakistan.

- 1. Advocacy for providing life skill training to Women to reduce dependency on others for saving their lives.
- 2. Mapping of Vulnerable population groups through community based registration system
- 3. Ensuring gender balance in rescue teams to provide of Gender-sensitive relief services
- 4. Establishment of customized Shelter designed for Women children immediately post disaster period with necessary amenities
- 5. Community Involvement in relief work for vulnerable women, children, elderly and disabled population groups
- 6. Ensuring responsive Maternal and Newborn health Services immediately post disaster
- 7. Utilizing Preferred Sources of Information During Disasters for information sharing
- 8. Provision of immediate Psychological and Mental Health services to all vulnerable groups on priority basis
- 9. Ensuring mobility of disabled though Physical structures like ramps and slopes in building to move quickly
- 10. Elderly care needs proper geriatric services and making health services "Age-Friendly"
- 11 Sharing Knowledge about Organizations Working for Elderly and Disabled
- 12 Training Service providers Manage Needs of the vulnerable groups of elderly and disabled

Annex 1 - Topic Guide (FGDs)

Recruiting participants for the Focus Group Discussions involves identifying individuals who are:

Adult (18+) male and female;

Resident of target area since last 5 years.

Inviting the participants

Take the notes on note book

To assure an adequate number of participants for each focus group (e.g., 8-10), approximately 12-16 individuals should be invited. It is expected that some people who agree to participate will not show up. Thus, it is important to 'over-recruit'. It would not be productive to conduct a focus group with less than ten participants.

Senior member of the team will arrange the venue for FGD moderation in target villages. He/she along with FGD facilitators will visit each village a day advance of the FGD to select venue and participants.

/enue shall meet following requirements.
Quiet, well-aired, ell-lit, neat and easily accessible for participants.The venue can be a school, community center or the house of a local notable.
nstructions for FGD Moderators and Note takers:
☐ Welcome the participants and introduce yourselves
Share the purpose of discussion with the group before asking for their consent
Take verbal consent and record their data on the sign-in sheet
Let them know that we will learn from you and gather the information on topics
Ask participants to suggest/set some ground rules
Ask participants that we would like to tape the discussion so that we can make sure to capture al
the thoughts, opinion and ideas we hear from the group
Ask few warm-up questions e.g. about demography, history or the prevailing weather of the area
Start the discussion with lighter questions and give everyone a chance to speak. Do probe, but no in a leading manner.
Do not interrupt any speaker and listen carefully
Remain neutral
☐ Do not try to achieve consensus
☐ Don't have side conversations and manage time
Arrange some refreshment for the participants

Material and Supplies for an FGD:

- 1. Moderator's Guide/FGD Tool for facilitators.
- 2. Sign-in Sheet
- 3. Name tags (if necessary and allowed)
- 4. Recording device (if allowed)
- 5. Batteries for recording device
- 6. Extra tapes/memory cards for recording device
- 7. Camera for pictures.
- 8. Notebook for note-taking
- 9. Refreshments

Focus Group Discussion Guide

Date of FGD	
Place of FGD	UC/Tehsil/District
Focus Group	☐ Females ☐ Care Giver ☐ Elderly
Start Time of Discussion:	
End Time of Discussion:	
Audio Recording?	Yes No

Introduction:

Thank you for coming today. This discussion is being undertaken to assist National Disaster Management Society (NDMA) to assess the prevailing situation of your area related to natural disasters, healthcare and water and sanitation. Please be assured that your participation in this discussion is voluntary and your responses will be kept strictly confidential. You will not be identified in any way in the report. Would you mind if we record this discussion? The recording will only be used to help us remember what everyone has said exactly. We will not share it with anyone or use anyone's name in the report.

Shall we start the discussion?

	Discussion points	No. of responses
1.	When was the last disaster that hit this area? What kind of a disaster was it? What kind of disasters are common in your area?	
	Notes:	
2.	What do you remember about the disaster? Stories of events etc. What were the major damages?	
	Notes:	
3.	What do you remember about the condition of women/elderly in your area during the last disaster? (ask for stories) What did you do for your own safety?	
	Notes:	
4.	Do you think your community and local people are prepared for the next disaster? Please elaborate.	
	Notes:	

5.	Is your community/village connected with any external Source who can provide support and supplies in case of an emergency? What are the options available for any such support?	
	Notes	
6.	What is your major source of information/warning against an impending disas What is your main source of information during a disaster situation? (Give exam TV, Cable, Newspaper, LHW, Social worker)	
	Notes:	
7.	During the last disaster, as women/elderly, what problems did you face? What major concerns? (Trying to identify needs other than life preservation and saticultural issues and family obligations) Why are women, children elderly and dismore at risk during disaster? Discuss the reason and concerns	fety, such as
	Notes	
8.	What measures need to be taken specifically for women/the elderly to ensure during a disaster? (Ask the women's group measures necessary for pregnant wor	
	Notes:	

9	Are there any organizations working here that deal with the needs and conce women/elderly specifically? If yes, what do those organizations do?	erns of
	Notes:	
10	Have any of you ever undergone drills/mock exercises regarding disaster? If you tell more about it? If you haven't, would you be interested in such exercises and about access to information regarding disaster preparedness?	
	Notes:	
11.	What measures can be taken to ensure the safety of women/elderly in your a disasters?	rea during
	Notes:	
12.	What is the nearest health facility and how accessible is it for women/elderly? Of there during a disaster? What can be done to make health services more accessible during disasters?	
	Notes:	
13.	Do you have any more suggestions?	

Annex 2 - Topic Guide (IDI)

Recruiting participants for the IDI involves identifying individuals who are:
Adult (18+) and have any physical disability
Resident of target village since last 5 years.
Venue of IDI shall meet following requirements.
 Quiet, well-aired, ell-lit, neat and easily accessible for participant. The venue can be house of the respondent.
Instructions for IDI:
 □ Take verbal consent and record their data on the sign-in sheet □ Let them know that we will learn from you and gather the information on topics □ Ask respondent that we would like to record the discussion so that we can make sure to capture all the thoughts, opinion and ideas we hear from the group □ Ask few warm-up questions e.g. about demography, history or the prevailing weather of the area. □ Start the discussion with lighter questions and give everyone a chance to speak. Do probe, but not in a leading manner. □ Do not interrupt and listen carefully □ Remain neutral □ Don't have side conversations and manage time □ Arrange some refreshment for the respondent □ Take the notes on note book
Material and Supplies for an IDI:
1. IDI Tool for facilitators.
2. Name tags (if necessary and allowed)

3. Recording device (if allowed) 4.

Batteries for recording device

5. Extra tapes/memory cards for recording device 6.

Camera for pictures.

- 7. Notebook for note-taking
- 8. Refreshments

IDI- Guide

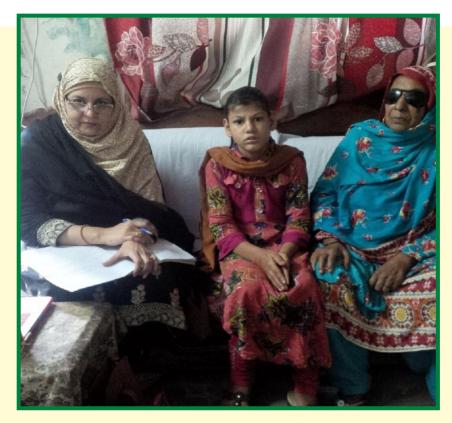
Date of IDI	
Place of IDI	UC/Tehsil/District
Start Time of Discussion:	
End Time of Discussion:	
Audio Recording?	Yes No

Discussion points		No. of responses
1.	When was the last disaster that hit this area? What kind of a disaster was it? What kind of disasters are common in your area?	
	Notes:	
2.	What do you remember about the disaster? Stories of events etc. What were the major damages?	
	Notes:	
3.	What do you remember about the condition of women, elderly and disabled in your area during the last disaster? (ask for stories) What did you do for your own safety?	
	Notes:	

4.	Do you think your community and local people are prepared for the next disaster? Please elaborate.	
	Notes:	
5.	Is your community/village connected with any external Source who can provide support and supplies in case of an emergency? What are the options available for any such support?	
	Notes	
6.	What is your major source of information/warning against an impending disaster? What is your main source of information during a disaster situation? (Give examples like Radio, TV, Cable, Newspaper, LHW, Social worker)	
	Notes:	
7.	During the last disaster, as disabled or handicapped, what problems did you face? What were your major concerns? (Trying to identify needs other than life preservation and safety, such as cultural issues and family obligations)	
	Notes	

8.	What measures need to be taken specifically for women, elderly and disabled populations to ensure their safety during a disaster?	
	Notes:	
9	Are there any organizations working here that deal with the needs and concern elderly or disabled populations specifically? If yes, what do those organization	
	Notes:	
10	Have any of you ever undergone drills/mock exercises regarding disaster? I you tell more about it? If you haven't, would you be interested in such exercises What about access to information regarding disaster preparedness?	
	Notes:	
11.	What measures can be taken to ensure the safety of women, elderly and disa area during disasters?	bled in your
	Notes:	
12.	Where is the nearest health facility and how accessible is it for women, eldedisabled? Can you reach there during a disaster? What can be done to make he more accessible especially during disasters?	
	Notes:	
13.	Do you have any more suggestions?	





































































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