# Right from the Communities People's Views on Disasters and their Reduction





# The Research Team

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# Acknowledgement

This report is entirely based upon the views of children, women and men who are residing at disaster prone locations in seven districts of Punjab and Sindh provinces of Pakistan. We are thankful to all of them for sharing with us the issues they are facing or have to face during disaster situations, and their recommendations to address them as well as to reduce the disaster risks.

The views of the communities for this report were collected by RDPI's field staff in Layyah, Muzaffargarh, Rajanpur, Ghotki, Khairpur, Mirpur Khas and Thatta as well as staff of RDPI's 28 partner organizations in these districts. We are thankful to all of them for volunteering their time, energies and resources for this cause.

Last but not least, we are grateful to Ms. Madhavi Malalgoda Aryabandu of UNISDR for her guidance and encouragement throughout the course of this exercise.

The Research Team



# Section 1: Introduction

# 1.1. Why this report?

In the year 2015, two important global initiatives- the Millennium Development Goals (MDGs) and the Hyogo Framework for Action (HFA) will be entering into the final year of their stipulated timeframe. From early 2013, the United Nations Development Group and UNISDR have simultaneously initiated a consultative process to come up with the post-2015 development agenda/sustainable development goals following the Rio +20 and a new DRR framework, respectively. The UN Development Group has selected Pakistan as one of the priority countries for the consultation process. Please see annex 5.1 for details.

UNISDR has requested all the national governments to consult all stakeholders within their countries for their input to post-2015 DRR framework. In this regard the agency encouraged National Disaster Management Authority Pakistan to organize such consultations at provincial and district levels. Meanwhile UNISDR also encouraged RDPI to capture the main issues and proposal coming directly from the communities living with the disaster risks so that the same could be incorporated in the broader consultation process. This report is a contribution of RDPI towards this end.

# **1.2.** The Inquiry Framework

UNISDR suggested three questions to be asked from the community members and groups:

- 1. What are the three most important problems related to disasters for you/for your community?
- 2. What are your suggestions to make your situation better to manage disasters affecting you/your community?
- 3. What would you like to propose/recommend to improve your situation/situation of your community in relation to disasters in the next 10 years?

UNISDR also recommended that while putting these question, the respondents should also be briefed about the background of this exercise i.e. that all the countries in the world, including Pakistan, are discussing together how to make the situation related to disaster better for communities in the next 10 years, and this situation is to convey their situation, experience and recommendations for improving their situation to the national and global leaders.

For this exercise, a short questionnaire was developed in Urdu (Pakistan's National Language) containing the three questions, an introduction to the exercise and guidelines for the enumerators.

# 1.3. Methodology

The views of the individuals and the groups have been collected through individual interviews and focus group discussions. The field teams conducted individual interviews with 37 boys and 31 girls (age group 10-23 years) and 57 men and 29 women (age group 24 and above). The FGDs were conducted with 33 groups of boys and 33 groups of girls (age group 10 to 23) and 32 groups of men and 34 groups of women (age group 24 and above); wherein 224 boys, 232 girls, 214 men and 241 women participated. These interviews and FGDs were conducted in 37 villages of seven districts of Sindh and Punjab Provinces. In District Mirpur Khas of Sindh, all the information was collected through individual interviews while in other six districts, interviews and FGDs were organized. In these districts, on average four FGDs were organized in each village with one each with girls, boys, men and women, and one interview with some notable individual. For details please see annex 5.1.

The sampled villages were selected, using the convenience sampling technique, from among the most vulnerable villages where RDPI along with its partners is implementing various DRR, relief, early recovery and reconstruction





programs. The information was collected by 29 two-member teams (one male and one female enumerator) which collected the information during February and March 2013.

## **1.4.** Structure of the Report

Besides this introductory section, there are four sections of the report. In Section 2 the issues/problems in relation to disasters highlighted by the respondents have been given. In Section 3, their suggestions to address these issues have been provided. In Section 4 community members/groups' recommendations to reduce the disaster risks have been recorded, while Section 5 comprises the annexures.



# Section 2: What Communities have to face in the face of Disasters?

The respondents were asked to briefly describe the three most important problems they were facing or had to face in relation to disasters. The received responses were clubbed under 14 broader categories. Here is a brief description of these:

# 2.1. Housing

Following issues were highlighted by the respondents:

- A considerable portion of housing stock in their villages is comprised of houses made of mud or other locally available materials. These houses appear extremely weak whenever a flood, torrential rains and strong winds strike the locality. Rampant poverty and lack of land entitlements restrict the dwellers of these houses to opt for construction of houses strong enough to withstand the disaster shocks.
- The destruction of houses in the hands of disasters and the time and resources required for their reconstruction are major issues which households have to suffer from.
- The poorer households do not have access to affordable house building finance and appropriate technologies which could enable them to construct permanent and resilient housing structures.
- In the aftermaths of cyclone Phet, 2010 (in Thatta), consecutive floods in 2010, 2011 and 2012 (in case of Sindh), 2010 in Punjab and later in 2012 in Rajanpur; government did not honor its commitment for compensating the affected households with sufficient cash to reconstruct their houses and people were left to resort to their limited savings, selling of livestock, and borrowing from local money lenders at exorbitant interest rates etc.; to generate cash for reconstruction of their houses. This situation has made them stand poorer than pre-flood days.
- Many households affected by floods, are still unable to reconstruct their houses and are forced to resort on makeshift arrangement for shelters.
- During emergency situation, appropriate arrangements were not made to shelter the displaced families. Due to this the affectees had to face many problems, including but not limited to staying in the roadside spontaneous camps erected by affectees themselves, to stay with the relatives etc. This situation has to be faced by the affectees in almost every disaster event.

63% boys and 52% girls (10-23 year of age), and 57% men and 46% women (23 year and above) highlighted housing related issues as the problems they are facing or have to face in the disaster situation. On the whole 79% respondents highlighted housing related problems in connection with disasters.

# 2.2. Epidemics

Epidemics or the spread of diseases in the aftermaths of the disaster situation was highlighted by the respondents, adding that eye ailments, diarrhea and skin diseases spread widely in the monsoon and especially in the flooding period. 30% boys, 34% girls, 25% men and 21% women highlighted epidemics or diseases as one of the major problems. On the whole, 27% respondents highlighted epidemics and diseases as one of their major problems.

# 2.3. Damage to Crops

The respondents mentioned that their crops were one of the most vulnerable assets during the disasters. They added that whenever there were floods, untimely or torrential rains, lack of rains, lack of irrigation water, pest attack, strong winds, heat and cold waves; their crops were affected. They added that normally the crop losses were not compensated by any agency and mechanisms like crop insurance etc. was not available to them. They said that crops were recurrently damaged due to changing or unpredictable weather conditions. They also told that with each crop failure or major damage, their reliance increases further on local money lenders or those providing agricultural input like seed, fertilizers, pesticides etc. on credit. Some respondents also added that with the damage to crops, options for agricultural labor also





reduce for the agricultural laborers. 34% boys, 14% girls, 39% men and 20% women respondents counted damage to crops as one of the major problems. As a whole, 27% respondents were found considering this as one of the main problems created by disasters.

# 2.4. Drinking Water

The respondents mentioned that lack of access to clean drinking water was an issue in their daily life, adding the problem became acuter during disaster situation. Some respondents also mentioned that after the floods the groundwater qualities had changed negatively while in Thatta the respondents told that ground water was brackish but they had no other water source available. The respondents said that due to contamination of drinking water especially during the floods, they had to suffer from various diseases. 28% boys, 23% girls, 26% men and 20% women considered their lack of access to clean drinking water especially during the disaster situation as one of the major problems. Aggregately 24% respondents counted unavailability of clean drinking water as a problem.

# 2.5. Mobility and Transportation

According to the respondents, their village roads and paths were unpaved and whenever there were floods or rains, their movement on these roads become a major problem. They added that during floods their mobility was severely curtailed creating problem in evacuation and taking the valuable assets and livestock to the safer locations. Especially the child respondents highlighted that they had to face problems in accessing their schools especially during floods and rains due to the unpaved roads. At some locations the respondents also mentioned that during floods the local bridges and culverts were damaged which also restricted their mobility and movement of animal drawn and motorized vehicles. Respondents also shared that during the disasters, the transport facilities squeezed to a great extent, and rent and fare of transport skyrocketed; making them unaffordable to the majority of the households. At some locations the respondents also added that transportation of sick, elderly and people with disability became a big issue during the floods. 59% boys, 20% girls, 69% men and 30% women mentioned mobility and transport related problems they had to face especially during the disaster situation. Together 44% respondents highlighted such issues.

# 2.6. Perishing of and Disease Outbreak among Livestock and Lack of Fodder for them

15% boys, 8% girls, 27% men and 18% women highlighted livestock related issues which they had to face during the disaster situations. These issues range from the death of livestock, disease outbreak and scarcity of fodder. They told that livestock made up an important component of their livelihoods and any damage to them severely affects their livelihood strategies. Some respondents complained that appropriate arrangements had not been made by the government for vaccination of livestock and in case of livestock loss in the hands of some disaster; they did not receive any compensation. 17% respondents considered these issues as one of the major problems.

# 2.7. Unhygienic conditions/Poor Sanitation

Poor sanitation in the shape of poor facilities for removal of garbage and waste water, dewatering of stagnant water etc. during and after the disaster were highlighted by respondents as a major problem. 19% boys, 24% girls, 27% men and 22% women highlighted sanitation related problems. In total, 14% respondents counted poor sanitation during disaster situation in their villages as wells as in the camps, as an issue.

## 2.8. Issues specific to girls and women

The issues specific to women including: erosion of protection and privacy, unavailability of health facilities for pregnant, menstruating and lactating women; difficult access to milk, clean water and food for infants and small children etc.; insensitivity towards women's specific needs in the camps and in provision of relief; were highlighted by the respondents while counting the problems related to disasters. 8% boys, 27% girls, 8% men and 27% women highlighted such issues. Aggregately 18% respondents mentioned these issues while sharing major problems.





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#### 2.9. Damage to agricultural lands

Some respondents opined that damage of agricultural lands due to floods and stagnation of water was a major problem. In Thatta the respondents told that sea intrusion had been eating up the agricultural lands and mangrove forests. 7% boys, 3% girls, 10% men and 5% women shared these concerns. On whole 6% respondents highlighted such issues.

#### 2.10. Food Insecurity

Disasters create food insecurity when crops are damaged, livestock perish, food stocks are damaged, agricultural lands are ruined, sea intrudes and labor opportunities squeeze. These were the views of a large number of respondents while they were pointing out the problems in relation to disasters. 41% boys, 30% girls, 30% men and 25% women shared these views. As a whole, 32% respondents mentioned food insecurity as one of the major problems.

#### 2.11. Children's Education

Discussing the problems, the respondents told that continuity of children's education became a problem during the disaster situation as:

- School buildings were damaged
- Teachers were not coming to schools
- Paths leading to schools were damaged
- Parents affordability affected
- Children's education was traded off with labor to contribute to family incomes
- Educational material was damaged
- Water remained stagnating for many months in school buildings (especially in Sindh)

17% boys, 10% girls, 7% men and 6% women voiced these concerns. 10% respondents, in total, counted discontinuity of education during the disasters as a problem.

#### 2.12. Unemployment

'Disasters limit the income earning opportunities and people get either unemployed or underemployed', voiced many respondents. They added that poverty was already high in their area and many people were out of job. The consecutive floods, they continued, have made the situation worse. 12% boys, 8% girls, 17% men and 6% women expressed somewhat similar views. In total, 11% respondents thought that unemployment or underemployment caused by disasters was a major issue for them.

#### 2.13. Disruption of utilities

Some respondents told that disruption of electricity due to damage caused by floods, rains, cyclones (in case of Thatta), or strong winds to electricity distribution and transmission infrastructure, was a major issue. They shared that during floods electricity supply remained suspended for many months due to which the routine life was badly affected. 1% boys, 5% girls, 3% men and 3% women respondents shared these or similar views. 3% respondents on whole highlighted the disruption of utilities, especially electricity, as a problem during disaster situation.

#### 2.14. Flooding is a problem in itself

Some respondents considered flooding as the main problem as its causes all other problems. Around 2% respondents were found to be of this view.



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# 2.15. Ranking of the Problems

In this subsection, the problems' ranking on the basis of the percentage of respondents is mapped using simple graphs.

# 2.15.1. Ranking based upon aggregate percentages

Rank	Problems	Aggreg.	10	20	30	40	<b>50</b>	60	70	80	90	100
		%	%	%	%	%	%	%	%	%	%	%
1	Housing	79 %										
2	Mobility and Transport	44 %										
3	Food Insecurity	32 %										
4	Epidemics/disease outbreak	27%										
5	Damage to crops	27%										
6	Lack of access to clean drinking water	24%										
7	Women specific issues	18%										
8	Damage to livestock	17%										
9	Poor sanitary conditions	14%										
10	Unemployment	11%										
11	Disruption to children's education	10%										
12	Damage to agricultural lands	6%										
13	Disruption to electricity supply	3%										
14	Flooding itself is a problem	2%										

# 2.15.2. Ranking of problems made by boys (male children and youth aging 10 to 23 years)

Rank	Problems	Aggreg.	10	20	30	40	50	60	70	80	90	100
		%	%	%	%	%	%	%	%	%	%	%
1	Housing	63 %										
2	Mobility and Transport	59 %										
3	Food Insecurity	41 %										
4	Damage to crops	34 %										
5	Epidemics/disease outbreak	30 %										
6	Lack of access to clean drinking water	28 %										
7	Poor sanitary conditions	19 %										
8	Disruption to children's education	17 %										
9	Damage to livestock	15 %										
10	Unemployment	12 %										
11	Women specific issues	10 %										
12	Damage to agricultural lands	7%										
13	Flooding itself is a problem	3%										
14	Disruption to electricity supply	1%										



2.15.3. Ranking of problems made by girls	(female children and youth aging 10 to 23 years)
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Rank	Problems	Aggreg.	10	20	30	40	50	<b>60</b>	70	80	90	100
		%	%	%	%	%	%	%	%	%	%	%
1	Housing	52 %										
2	Epidemics/disease outbreak	34 %										
3	Food Insecurity	30 %										
4	Women specific issues	27 %										
5	Poor sanitary conditions	24 %										
6	Lack of access to clean drinking water	23 %										
7	Mobility and Transport	20 %										
8	Damage to crops	14 %										
9	Disruption to children's education	10 %										
10	Damage to livestock	8%										
11	Unemployment	8 %										
12	Disruption to electricity supply	5 %										
13	Damage to agricultural lands	3 %										
14	Flooding itself is a problem	3 %										

# 2.15.4. Ranking of problems made by men (aging 24 and above)

Rank	Problems	Aggreg.	10	20	30	40	50	60	70	80	90	100
		%	%	%	%	%	%	%	%	%	%	%
1	Mobility and Transport	69 %										
2	Housing	57 %										
3	Damage to crops	39 %										
4	Food Insecurity	30 %										
5	Damage to livestock	27 %										
6	Poor sanitary conditions	27 %										
7	Lack of access to clean drinking water	26 %										
8	Epidemics/disease outbreak	25 %										
9	Unemployment	17 %										
10	Damage to agricultural lands	10 %										
11	Women specific issues	8%										
12	Disruption to children's education	7 %										
13	Disruption to electricity supply	3 %										
14	Flooding itself is a problem	3 %										



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# 2.15.5. Ranking of problems made by women (aging 24 and above)

Rank	Problems	Aggreg.	10	20	30	40	50	60	70	80	90	100
		%	%	%	%	%	%	%	%	%	%	%
1	Housing	46 %										
2	Mobility and Transport	30 %										
3	Women specific issues	27 %										
4	Food Insecurity	25 %										
5	Poor sanitary conditions	22 %										
6	Epidemics/disease outbreak	21 %										
7	Lack of access to clean drinking water	20 %										
8	Damage to crops	20 %										
9	Damage to livestock	18 %										
10	Disruption to children's education	6 %										
11	Unemployment	6 %										
12	Damage to agricultural lands	5 %										
13	Disruption to electricity supply	3 %										
14	Flooding itself is a problem	3 %										





# Section 3: Solutions and Demands of Communities

# 3.1. Housing/Shelter

The respondents suggested that the poor families and flood affected households should be provided:

- Safe locations to build their houses
- Resources to build houses on the higher grounds
- Financial and technical resources to construct houses using permanent structures strong enough to sustain floods, winds, cyclones and strong winds.
- Transition shelter
- During emergency situation, safe and appropriate cooking places (to the displaced and affected population.)

The respondents also suggested that at times when families have to get displaced during disaster situations, especially women and children should be provided safe places to stay.

# 3.2. Water and Sanitation/Improving Hygiene and Health Conditions

The respondents suggested:

- Awareness sessions should be organized to sensitize people about improving the hygiene conditions and control epidemics.
- Government should take steps to improve the sanitary conditions in their villages.
- Sewerage and drainage systems should be improved for the safe disposal of waste and flood/rainwater.
- Especially children should be vaccinated against epidemics.
- Health facilities should be made available at convenient distances.
- Steps should be taken to provide safe drinking water in normal times in general and during disaster situations, in particular.
- Mosquito repellents should be provided and during the monsoon season fumigation campaigns should be launched by the government.
- Households should be given financial and technical support to construct latrines.

# 3.3. Mobility and Transport

The respondents suggested that:

- The dirt tracks should be paved. Member of National and Provincial assemblies and local government should utilize their funds for this purpose.
- Boats should be provided during flooding for safe and timely evacuation.

# 3.4. Food Security , safety of crops and livestock

The respondents suggested that:

- Government and nongovernment agencies should provide food assistance to disaster affected families.
- The livestock department should vaccinate the animals on regular basis and especially during monsoon and flood seasons.
- Government and nongovernment agencies should provide fodder for livestock during monsoon season and especially during the disaster situation.
- Farmers should be provided agricultural input and technical support to restart agricultural activity and grow disaster resistant crop varieties.
- Compensation should be provided for the damaged crops.
- Training sessions should be organized for the farmers to improve agricultural techniques.



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# 3.5. Flood Protection/Disaster Risk Reduction

The respondents suggested that:

- Flood protection embankments should be constructed to save the vulnerable villages and towns and arrest flooding.
- Awareness raising sessions should be organized for communities on disaster risk reduction and management.
- Early warning should be given at appropriate time.
- Government should take steps to control river erosion.
- Government should take steps to improve drainage system.

## 3.6. Education

The respondents suggested that:

- Flood affected schools should be rehabilitated/reconstructed.
- Schools should be constructed at safer locations
- Education facilities should be provided for the children
- Steps should be taken so that the education of children continue even during the disaster situation

## 3.7. Employment

The respondents recommended that:

- Employment opportunities should be created by the government for the flood affected households who have lost their livelihood options and resources.

#### **3.8.** Improving living conditions

For improving the living conditions, the respondents suggested that:

- Electricity should be provided (in villages where facility is not available)
- Government should overcome the electricity outage problem
- Electricity should be generated using solar technologies
- Natural gas should be provided especially during the flood season and to the displaced population for cooking and heating purposes.

# Section 4: Reducing the Disaster Risks- Recommendations by the Communities

In this sections the recommendations given by boys and girls (10-23 years) and those by men and women (24 and above) have been summarized.

# 4.1. Recommendation by Children and Youth

# 4.1.1. Safe Schools/Education

- The flood affected/displaced households should be sheltered in purpose built camps instead of schools as schools stop serving their intended purpose and children's education is disturbed.
- Provide playgrounds for children.
- School buildings must be constructed of safer material and at safer locations.
- Every village should have a school.
- The paths leading to schools must be paved so that children could easily move to and from schools.

# 4.1.2. Employment

 Provide employment opportunities to unemployed youth so that they could contribute in household incomes and reducing poverty. Once the poverty is reduced people's vulnerability will also be reduced.

## 4.1.3. Water and Sanitation

- Government should install water filtration plants so that people could access safe drinking water. The safe drinking
  water will help reduce the water borne diseases. These plants should be installed at safer locations so that they
  could remain functional even during the floods.
- Provide dewatering pumps/machinery to villages.
- Help households to build latrines to minimize epidemics.

# 4.1.4. Protection against Flooding/Disaster Risk Reduction

- All the water channels including river, streams, drains and canals should be appropriately embanked. These
  embankments should be regularly maintained.
- Special measures should be taken for the protection of communities who are residing in close proximity to river banks and water channels.
- The flood prone communities should be provided boats for routine mobility and especially for safe and timely evacuation.
- Communities should be given early warning before any hazard and facilitated to transfer their valuables and livestock to safe places.
- Communities should be made prepared to face any disaster situation by providing training sessions especially to children and youth.
- Women committees should be formed and give them awareness and training regarding hazards and disasters. If women are trained they can help others and address many problems related to disasters.
- Communities should be provided infrastructure, facilities and support to protect their crops and livestock.
- Communities should be helped to overcome their internal conflicts.
- Provide mosquito repellents to households.

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# 4.2. Recommendation by Women and Men

#### 4.2.1. Disaster Management/Preparedness

- Government should provide training sessions to people to cope with hazards and disasters.
- Government should take measures to control river erosion.
- Trainings should be given to children and youth to deal with disaster situation.
- Houses should be built on higher grounds or raised platforms.
- Provide safe places to store food.
- Provide proper food in relief camps.
- Provide appropriate emergency shelter to flood affected people.
- Provide shelter on urgent basis to those whose houses were destroyed in floods.
- Animals should be vaccinated during the disasters.

# 4.2.2. Safe Schools

- Provide boundary-wall around the school building which were damaged during floods.
- Schools should be built on raised platforms and at safer locations.

## 4.2.3. Improving the Health Conditions

- Government should provide health facilities located at easily accessible locations so that especially women could easily access them.
- Children should be vaccinated.
- Improve sanitary conditions in every village.
- During normal times and especially during disasters, establish free medical camps.

## 4.2.4. Poverty Reduction

- Govt should provide employment especially to women and youth to reduce poverty.
- Improve law & order in flood affected communities.
- Govt should build paved roads and provide transport facilities.
- Provide electricity to villages where this facility is not available.
- Provide financial help to flood affected households.



# 5.1. Details of the Surveyed Locations and Respondents

						Individual	Interviev	WS	Fo	ocus Group	Discuss	ions
Provin	District	Tehsil	UC	Village	М	ales	Fer	males	М	ales	Fer	nales
се					10 to 23	24 & above						
Sindh	Khairpur	Sobodero	Sigyon	Dev Kalhora		1			6	12	12	6
		Khaipur	Soori	Dost Muhammad Jatoi		1			7	6	6	8
		Kingri	Kot Mir Muhammad	Karim Baksh Katbar		1			8	6	6	7
		Kingri	Hadel Shah	Kot Mir Muhammad		1			9	6	8	12
		Sobodero	Sagiyon	Mehmood Channa		1			7	12	6	6
	Ghotki	Ghotki	Qadirpur	Abul Khair Chachar		1			21	11	7	5
		Ghotki	Qadir pur	Ali Anwer Chachar		1			6	8	7	6
		Ghotki	Qadir pur	Dost Muhammad Chachar		1			6	6	6	6
		Ghotki	Hussain Baili	Fasial Chachar		1			6	6	6	6
		Ghotki	Qadir Pur	Raees Ikhtiar Chachar		1			9	11	7	13
	Mirpur Khas	Degree	Sufan Shah	Sufan Shah	32	33	31	29				
	Thatta	Jati	Kothi	Abdullah Jat	1				6	6	6	6
		Jati	Baigna	Ali Muhammad					6	6	12	6
		Jati	Kothi	Dongar Jat	1				6	6	12	6
		Jati	Jati	Haji Ishaq Thaheme	1				6	6	6	6
		Jati	Jati	Long Abro	1				6	6	6	6
Punjab	Layyah	Layyah	Shadu Khan	Basti Jarh Tahir Wali	1				6	7	6	6
		Layyah	Lohanch Nasheb	Chah Nahal Wala		1			8	11	9	13
		Layyah	Lohanch Nasheb	Mohana		1			6	6	6	6
		Layyah	Kotla Haji Shah	Basti Mohana Chah Bhatte Wala		1			9	6	7	7
		Layyah	Bikhri Ahmed Khan	Mozza Bait Dewan		1			6	6	6	6
	Rajanpur	Rojhan	Rojhan City	Basti Ayub Wah		1			6	6	6	6
		Jampur	Haji pur	Basti Jan Muhammad Klasra		1			6	6		
		Rojhan	Rojhan Sharqi	Basti Muhammad Ramzan		1			6	6	6	6



			Grand Total				10	65			
				37	57	31	29	224	214	232	241
	Alipur	Seetpur	Qazian		1						
	Muzaffarg arh	Thatta Quershi	Supper # 4, Katchi Sedo Khan		1						
	Muzaffarg arh	Jagatpur	Gamonwala							6	
	Alipur	Seetpur	Gaigo Wala Araeen					6	6	6	6
	Muzaffarg arh	Jagatpur	Basti Thalywala						6		
	Kot Addu	Bait Qaimwala	Basti Shaikhan		1			6	6	6	6
	Kot Addu	No 6 Hanjrai	Basti Mohaney Wali		1			6	6	6	6
	Muzzfarga rh	Thatta Quershi	Basti Kharak					6			6
Muzzafar garh	Muzzafarg arh	Taliri	Balochwala/Jhok Hussain Wala		1			6	10	9	10
	Rajanpur	Mithan Kot	Khuda Baksh		1					28	20
	Rojhan	Umer Kot	Javed Manjhani		1			6	12	6	6
	Jam Pur	Haji pur	Jan Muhammad Kalasra							6	6
	Rajanpur	Mithan Kot	Hazoor Baksh					20			20



# 5.2. Questionnaire



# آفات کے خطرات میں کمی کا نیاعالمی خاکہ: مقامی آبادیوں سے مشاورت

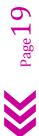
# تعارف

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دنیا کے تمام ممالک، بشمول پاکستان؛ آفات کے خطرات کی زدمیں واقع مقامی آبادیوں کوان مکنہ خطرات سے محفوظ رکھنے اور آفات سے متاثرہ آبادیوں کی پائیدار بحالی اورتر قی کے لئے ایک نئے دن سالد خاکہ کی تیاری کے لئے بات چیت کررہے ہیں۔ اس سروے کا مقصد پاکستان میں ایسی آبادیوں کے کینوں؛ بشمول بچوں، بچیوں، خواتین، مردوں، معذوری سے متاثرہ اور معمر افراد کی آراء، تجربات، خدشات اور تجاویز کومکلی اور بین الاقوامی سطح پر آفات میں کمی کے لئے جاری گفتگو میں شامل نمائندگان تک پہنچانا ہے۔ اس سروے کے لئے پالیسی ادارہ برائے دیم پی تر قی ( آرڈی پی آئی) اقوام متحدہ کے ادارہ برائے تخفیفِ آفات کو معاونت فراہم کر رہا ہے۔

		Day Month	1- تاريخ Year
		Indivio) سے پو پیھھ جارہے ہیں تو	2- اگرىيىوالا <b>ت</b> كىقرد(dual
	2.2- جواب د ہندہ کی عمر:		2.1- جواب د ہندہ کانام:
	2.4- جواب د ہندہ کا پیشہ:		2.3- جواب د ہندہ کی جنس:
	ېيں ټو :	ں گروپ ڈسکٹن کے ذریعے ) سے پو بیچھ جارہے	3- اگرىيەوالات كىسى گروە ( نو تى
		ں شامل افراد کی تعداد :	3.1-     گروه/فو کس گروپ ڈ سکتن می
	د معمر مرد معمر تورتیں	ررتیں 📃 مرد 📃 معذوری سے متاثرہ افرا	3.2- بچ بچيال
گےدرج خانوں میں ( <b>س</b> ) کانشان لگادیں )	( گروہ میں شامل افراد کے آ	: <u>-</u>	4- مقامی آبادی کہاں رہائش پذ <i>ہ</i>
ضلع	_ بخصيل		گاؤں رمحکّہ
	کاسامناہے؟	آپ کی مقامی آبادی کوکون سے نتین بڑے مسائل	سوال نمبرا: آفات کی وجہ ہے آپ کویا
			مستلة نمبرا
			مستله نمبر ۲

سوال نمبر۲: آپکے خیال میں ان مسائل کو کیسے حل کیا جا سکتا ہے؟ حل مسَلَهُ مُبرا حل مسّله نمبر ۲ حل مسّله نمبر ۳. سوال نمبر ۳: آپ کے خیال میں آ کچی مقامی آبادی کوستفتل میں آفات کے خطرات اوران سے ہونے والے مکنہ نقصانات سے کیسے حفوظ بنایا جاسکتا ہے؟



# 5.3. Profiles of Surveyed Districts

Layyah, Muzaffargarh, Rajanpur, Ghotki, Khairpur and Thatta were among the districts worst affected by catastrophic floods in 2010. Mirpur Khas was one of the severely affected districts in floods 2011. Ghotki, Khairpur and Rajanpur were also affected by floods in 2012. Earlier in June 2010, Thatta was hit by Cyclone Phet.

The following information is excerpted from a report titled Neighboring Risk: An alternative approach to understanding and responding to hazards and vulnerability in Pakistan. The report was accompanied by detailed profiles of the above mentioned districts except Mirpur Khas. It was published by RDPI in 2009.

#### 5.3.1. District Layyah:

Layyah is part of Thall desert and is traditionally called the Sindh Sagar Doab as it lies between two great rivers -Indus in the west and Jehlum in the east. However Layyah is not touched by Jehlum, while Indus forms its western border separating it from district Dera Ismail Khan in NWFP and Dera Ghazi Khan in Punjab. Layyah is home to a multitude of hazards and has a history of disasters, especially floods and droughts. Thall is one of the four desert regions of Pakistan but it is unique in a sense that underground water is easily accessible. The underground water in the desert zone is brackish but local communities drink it and also use it for irrigation as it supports selected crops.

Layyah was one of the most affected districts in 2010. Earlier in 2005, due to heavy rains and flooding in river Indus 88 villages; 67, 970 persons; and crops on 159, 992 acres of land were affected. More than 6, 000 houses were partially and 8, 005 houses were completely destroyed (Federal Flood Commission, Punjab Relief Department). According to the Layyah District Flood Fighting Plan, (11) 2008, 64 villages in tehsil Layyah and 25 villages in Karor are vulnerable to flooding in river Indus. Roughly 1/3rd portion of its 2 out of 3 tehsils - Karor Lal Easan and Layyah - lies on the left bank of river Indus. The central part of the district covering rest of Karor and Layyah is irrigated by canals. River erosion is a common phenomenon in the riverine area and has so far swallowed large bulks of agricultural lands. Frost is also common in the riverine and canal-irrigated zone during the months of December and January affecting people's health, crops and vegetables. The third tehsil, Chobara, that forms some 44% of the district is largely desert and is very thinly populated. Tehsil Chobara suffers from drought conditions, deforestation (razing of natural vegetation) and leveling of sand dunes to make way, especially for the cultivation of gram that has become a major cash crop of this area but remains a bit of a gamble as it depends on timely and sufficient rains. Given the changing weather patterns and climate variability, the rain pattern is unpredictable, making locals' livelihood vulnerable. Dust storms are common in the desert zone during summer.

## 5.3.2. District Muzaffargarh

District Muzaffargarh resembles the shape of a peg with its top in the north where it borders Layyah and Jhang districts and apex in the south at the confluence of river Indus and river Chenab (Panjnad) approaching from west and east respectively to meet each other. The Thal desert terminates by creeping into the district from its north. Muzaffargarh can broadly be divided into four zones. The northern zone bordering Tehsil Chobara of District Layyah is part of Thal desert. The strips lying along River Indus and River Chenab are flood plains; the area lying in the south or at the bottom of the district is crisscrossed by the branches of River Indus and resembles Indus Delta. Between these three zones placed is the canal irrigated zone. Two of its southern Tehsils Ali Pur and Jatoi are severely affected by floods in Indus and Chenab. It is home to a multitude of hazards namely recurrent flooding in Chenab and Indus, water logging and salinity, drought and deforestation especially in the northern part (tehsil Kot Addu) that form part of Thal desert, technological risks posed and environmental pollution caused by thermal power plants in Muzaffargarh tehsil. Muzaffargarh is one of those few districts in the Indian subcontinent where irrigation through flood canals was started in the natural drainage pattern by canals, roads and railway lines are some of the major hazards for Muzaffargarh. The district is also distinct in a way that it is placed between two great rivers and a number of spurs have been constructed to save the major towns. However the construction of these spurs has aggravated the river erosion. Muzaffargarh was the most affected district of Punjab during floods 2010.





## 5.3.3. District Rajanpur

Rajanpur is located at the bottom of Punjab and forms a point of confluence for Punjab, Balochistan and Sindh provinces. Like DG Khan the district is bounded on its west by a long stretch of tribal area separating the district from Balochistan while on the eastern side river Indus separates it from Rahim Yar Khan and Muzaffargarh. Flooding in river Indus from east and havocs caused by numerous hill torrents from west sandwich the residents of this poor district. According to the Rajanpur District Disaster Management Plan, 76 villages, in Tehsil Rojhan, 38 villages in Tehsil Jampur and 83 villages in Tehsil Rajanpur are vulnerable to flooding. The same document notes that in 1973, 1975, 1978, 1984, 1986, 1989, 1992, 1993, 1994, 1995, 1996, 1997, 1998, 1999, 2005, and 2006, the heavy rains caused flooding by hill torrents. It also enlists following hazards, besides floods that are prevalent in the district: Earthquakes, pollution, urban and forest fires, transport accidents, sectarian violence, terrorist activities, drought, hostage taking, civil unrest and sabotage accidents. Besides these hazards, heavy rains, salinity, canal closure, brackish ground water, soil erosion and frost are some of the other environmental hazards being face by Rajanpur. Rajanpur was the second most affected district of Punjab in floods 2010 and later in 2012.

#### 5.3.4. District Ghotki

District Ghotki together with Jacobabad welcome Indus as it enters Sindh from Punjab. River Indus flows in the upper part of the district from north towards west. The lower portion of the district is under sand dunes. The district can be divided into three distinct parts, Indus flood plains, central plains irrigated by canals and the desert region. Ghotki is home to a number of famous industrial installations and strategic mining sites including Pak Fauji Fertilizers, Engro Chemicals Pakistan, Qadirpur and Mari Gas fields etc. According to the Flood Relief Plan, 2008 of Ghotki, River Indus flows for 86 kilometers along the north western border of the district. The river Indus has been contained by protective embankments. The eastern embankment falls in District Ghotki. According to the same document some 50,000 population resides between the Indus and its protective bund. This population is affected by floods as the areas lying along the Indus are inundated when the river starts overflowing its banks. The distance between two protective bunds varies from 10-25 km at various points. Droughts are the recurrent phenomenon especially for the desert zone of the district which makes part the eastern desert zone of Pakistan. This area was severely affected by the country's worst drought in 1999-2002. Ghotki is facing another extremely severe manmade hazard. The saline water pumped from Rahim Yar Khan has been and is being drained into Ghotki that has caused water logging and salinity over thousands of acres in district's desert zone.

#### 5.3.5. District Khairpur

Khairpur is the third vastest districts of Sindh and second most populous district following Karachi. It has a variety of geographical characteristics including a riverine tract along Indus, central canal irrigated zone, the lower/south eastern desert zone and a hilly zone extending from Rohri Taluka of Sukkur that runs for 45 kilometres in Khairpur. The desert portion of the district is very extensive and covers 73% area of the district. The western boundary of Khairpur, Kingri, Sobhodero and Gambat Taluka is formed by the river and is thinly covered with forests. According to the District Flood Relief Plan, 2008, about 120,000 people live in the riverine areas of the district and is prone to flooding. Khairpur's desert zone forms the great Nara desert and forms part of Pakistan's eastern desert zone. This zone faces recurrent droughts and was one of the most severely hit areas during the 1999-2002 droughts.

#### 5.3.6. District Thatta

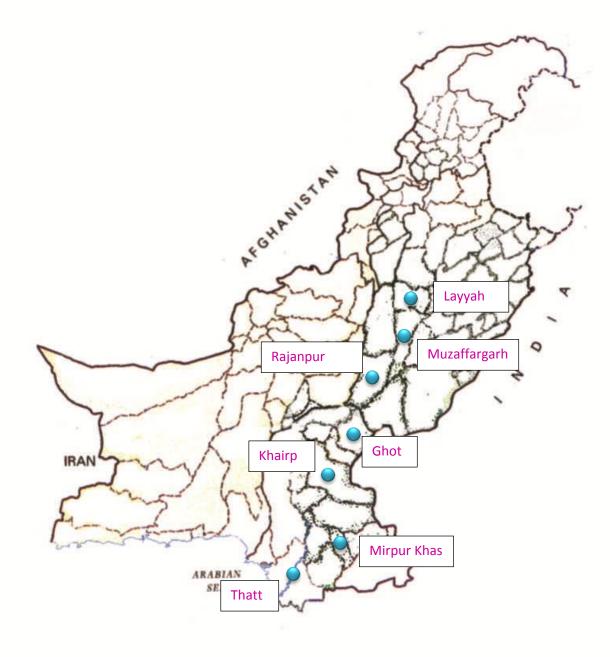
Thatta is the last destination of Indus before it joins the Arabian Sea. Before entering the sea, Indus forms a huge delta comparable to those of all great rivers of the world. The delta region spreads over an area of some 8000 sq. km in the district. Besides this most important geographical zone, Thatta is home to all the major geographical characteristics of Sindh i.e. a Kohistan tract/Kirthar range in north west, delta and sand dunes in south, irrigated plains etc. Thatta can be termed a wonderland in terms of biodiversity and physical features. 17% area of the district is still covered by the mangrove forests. Thatta is vulnerable to cyclones, Tsunami and sea level rise, pollution of country's one of the most important fresh water lakes, and can be termed a huge environmental challenge. The degradation of the Indus delta owing to reduced flow of fresh water in the Indus is one of the biggest environmental challenges Pakistan faces. The reduced fresh water flow in Indus after the construction of dams and barrages on the Indus and diversion of water upstream, has not only degraded the Indus delta, but has also made room for sea to intrude and eat up or render huge lands unfit for agricultural activity. Hundreds of thousands of people from coastal communities who were earlier involved either in the inland river transportation, agriculture





or livestock have migrated to neighboring towns or have switched to fishing. The delta region of Indus has so far shrunk to 10% of its original size.

# 5.3.7. Location of the surveyed districts





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