

DISTRICT DISASTER MANAGEMENT PLAN 2022

Division: Gujranwala
District: Hafizabad



IDP Camp in 2009



Earthquake



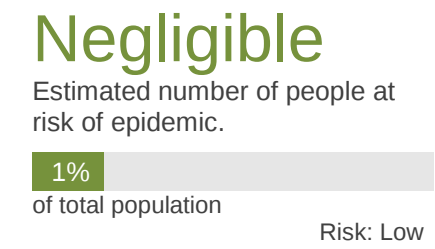
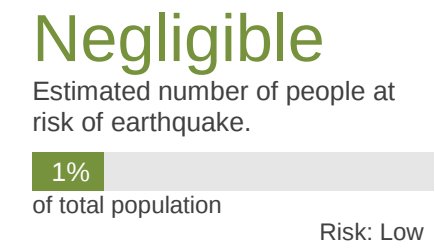
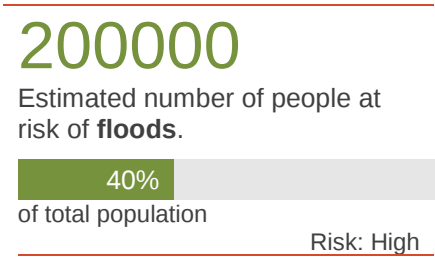
Floods in 2014



Fire incident at Lahori Gate, Lahore – Jan 2016

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EXECUTIVE SUMMARY

The river Chenab in the wake of torrential rains swallowed. More than 09 lac cusecs of water passed through Qadirabad Barrage in 2014. Consequently around 2,00,000/- lac population disturbed, crops standing upon about 01 lac acres destroyed. More than 5000 houses damages reported. Infrastructure, i.e. roads, buildings of schools, RHCs and BHUs were hit.

- | | | |
|----|--------------------------------------|---------------------|
| 1. | Village Affected. | 167 |
| 2. | Area Affected Around 1,70,202/-Acres | |
| 3. | People affected. | 2,10,000/- |
| 4. | Crops affected. | Upon 50,870/- Acres |
| 5. | House damages. | 4688 |
| 6. | Persons died. | 16 |
| 7. | Cattle lost / perished. | 175 |
| 8. | Relief Camps. | 06 |

AIM AND OBJECTIVES

The plan is aimed to manage emergencies by putting in place requisite mitigation measures and a well-coordinated and integrated response at district level.

The main objectives of the plan include:

- To develop a plan of action for the District Disaster Management Authority and other district stakeholders to set priorities and provide directions for disaster management;
- To define the roles of various stakeholders in disaster management in all the phases pre, during and after disaster;
- To raise awareness of stakeholders about disaster risks and the requirements for disaster management;
- To introduce coordination mechanism for immediate response and rehabilitation at district level;
- To enhance the effectiveness and timeliness of emergency response through the clarification of goals, strategies, roles and responsibilities;
- To strengthen response coordination between government departments and humanitarian organizations (UN agencies, I/NGOs);

DISTRICT PROFILE

Socio-Economic Indicators (Average)

S.No.	Particulars	Numbers
1.	Population	11,56,954
2.	No. of Tehsils	2
3.	No. of UCs	46
4.	No. of Revenue Estates	422
5.	Population Density (people per km ²)	488.8/km ²
6.	Family Size	7.1
7.	Pop Growth Rate	2.28%
8.	PCI	
9.	District GDP/Annual Income	
10.	Poverty Rate	
11.	Patient/Doctor Ratio	
12.	AMR	
13.	IMR	60
14.	MMR	180
15.	Literacy Rate	40.7%
16.	Global Acute Malnutrition (GAM) rate	
17.	Severe Acute Malnutrition (SAM) rate	
18.	Percentage of population having access to clean drinking water	96%
19.	Annual Crime	8,251

Population

Total	Male (above 18)	Female (above 18)	Minor (M) (less than 18)	Minor (F) (less than 18)	Transgender	Vulnerable People (PLWs, disabled, aged)
11,56,954	322,785	323,419	261,883	248,769	98	6,047

Source/Note: Census 2017

Number of Dwelling Units	Kaccha (Mud/clay)	Pakka (Bricks& Morter)
1,17,354	40,260	77,094

Source/Note: Bureau of Statistics

Area (in acres)

Total Area of District in Km ²	Area under cultivation	Cultivation in Settled Area	Cultivation in Baid Area
2,367	465,029	487,000	47,000

Literacy Rate

Overall	Rural		Urban		Total	
	Male	Female	Male	Female	Male	Female
40.7%	%	%	%	%	51.8%	28.7%

Source/Note: Literacy Department

Government Schools

Schools		Enrollment	
Total/ Overall		733	152411
Boys	Primary	259	28107
	Middle	45	11512
	High	46	34789
Girls	Primary	282	34069
	Middle	66	16118
	High	36	27791
Co-Education	Primary	0	0
	Middle	0	0
	High	0	0
Special Education		3	412

Private Schools

Schools		Enrollment	
Total/ Overall		260	75881
Boys	Primary	10	37424
	Middle	90	11306
	High	50	4989
Girls	Primary	9	16072
	Middle	79	4238
	High	22	1852
Co-Education	Primary	0	0
	Middle	0	0
	High	0	0
Special Education		0	0

Higher/Technical/Professional Education (Public & Private)

Particulars	College	Universities	Professional	Technical	Commerce	Total
No of Institution	19	0	2	1	2	24
No of Students	7,000	0				

Health Facilities

Particulars	Primary	Secondary	Tertiary	Private Hospital	Total
No. of Facilities	39	2	0	5	41
Annual OPDs	967,620	415,583	0	0	1,383,203
No of beds	204	180	0	0	384
Doctors Available	52	175	0	5	227
Paramedical staff	284	235	0	0	519
Ambulances available	All the ambulance under the control of 1122				
Mobile Medical Units					1

Livestock: Small Animals (goats, sheep etc.): 4,85,319

Big Animals (cows, buffalos, camel etc.): 5,16,377

Main source of livelihood of the community?(in percentage)

Agriculture	Livestock	Poultry	Fish Farming	Services (Public & Pvt)	Business	Expatriates	Industrial Labor	Skilled Labor	Unskilled Daily Labor	General Labor
76%	77%	5%	1%	5%	2%	2%	20%	25%	18%	28%

Disaster History - Floods (since 1970)

S#	Year	No. of people affected	No. of deaths	No. of Revenue Estates affected	Houses Damaged (Partially)	Houses Damaged (Fully)	Compensation Paid (Rs.)	Financial Impact (including infrastructure damaged)
1								
2								
3								
4								

Disaster History – Other disasters (since 1970)

S#	Year	Disaster Type	No. of people affected	No. of deaths	Remarks
1	1973	Flood (Super High)			
2	1975	Flood (Super High)			
3	1976	Flood (Super High)			
4	1981	Flood (Very High)			
5	1988	Flood (Super High)			
6	1992	Flood (Super High)			
7	1995	Flood (Super High)			
8	1996	Flood (Super High)			
9	1997	Flood (Super High)			
10	2014	Flood (Super High)	210,000	16	
11	2015	Flood (High)			
12	2016	Flood (Very High)			

General Information

Particulars	Detail
Neighboring districts and their vulnerabilities	Madni Baha ul Din, Gujranwala, Sheikhpura, Cheniot, Jhang, Sargodha
Topographical Features	-
Weather/Climate pattern	e.g. max. and min. temperature, annual precipitation, storms, heat waves, snow fall etc. July to November flood season
Major Rivers	Name of river, passing through areas along with length in the district Major Barrages and their Flood levels River Chenab
Major Nullahs / Streams	River Chenab 43.50 KM
Motorway/Highway	Talib Wala Pattan Road, Motorway-M2 and Band Road
Railways	Vulnerable points of Railway Nil
Geological features	e.g. fault line, mountainous areas etc. Nil

Dams (including small dams)

Name of Dam	Location	GPS Coordinates	Capacity	High Flood Level	Critical Points, if any	Remarks
Nil		X: Y:				

Major Embankments/Bunds

Name of Embankment	Length (km)	Starting Point (Revenue Estate /Tehsil Name)	Ending Point (Revenue Estate /Tehsil Name)	Name of Critical/ vulnerable Points	GPS Location of Critical/ Vulnerable Points	Remarks
Pindi Bhattian wagh Band	43	Channi sultan	Thathi Behlol	RD 19+20 Bagh Kohna, RD 42+43 Jasowala Pind, RD 101+102 Khanna Bhattian	X: 73.286211 Y: 31.933764 X: 73.334035 Y: 32.001535 X: 73.435748 Y: 32.115532	

Breaching Section

Name of Bund/ Embankment	Name of Breaching Section	Location with GPS Coordinates	Likely Affected Population			Likely Affected Revenue Estate	Remarks
			Male	Female	Children		
Chenab	Qadirabad Barrage	X: 73.685138 Y: 32.322252	60,000	80,000	70,000	167	

Power Houses/Grid Station/Oil Depot/other sensitive installations

Name	Capacity	GPS Coordinates	Name	Capacity	GPS Coordinates
Jalalpur Grid Station	132 KV	X: 73.406150 Y: 32.064760	Pind Bhattian Grid	132 KV	X: 73.248009 Y: 31.879265
Chak Chattha Grid, Hafizabad	132 KV	X: 73.737844 Y: 32.076883			X: Y:
Hafizabad-II Soling Awan Grid	132 KV	X: 73.643009 Y: 32.066487			X: Y:

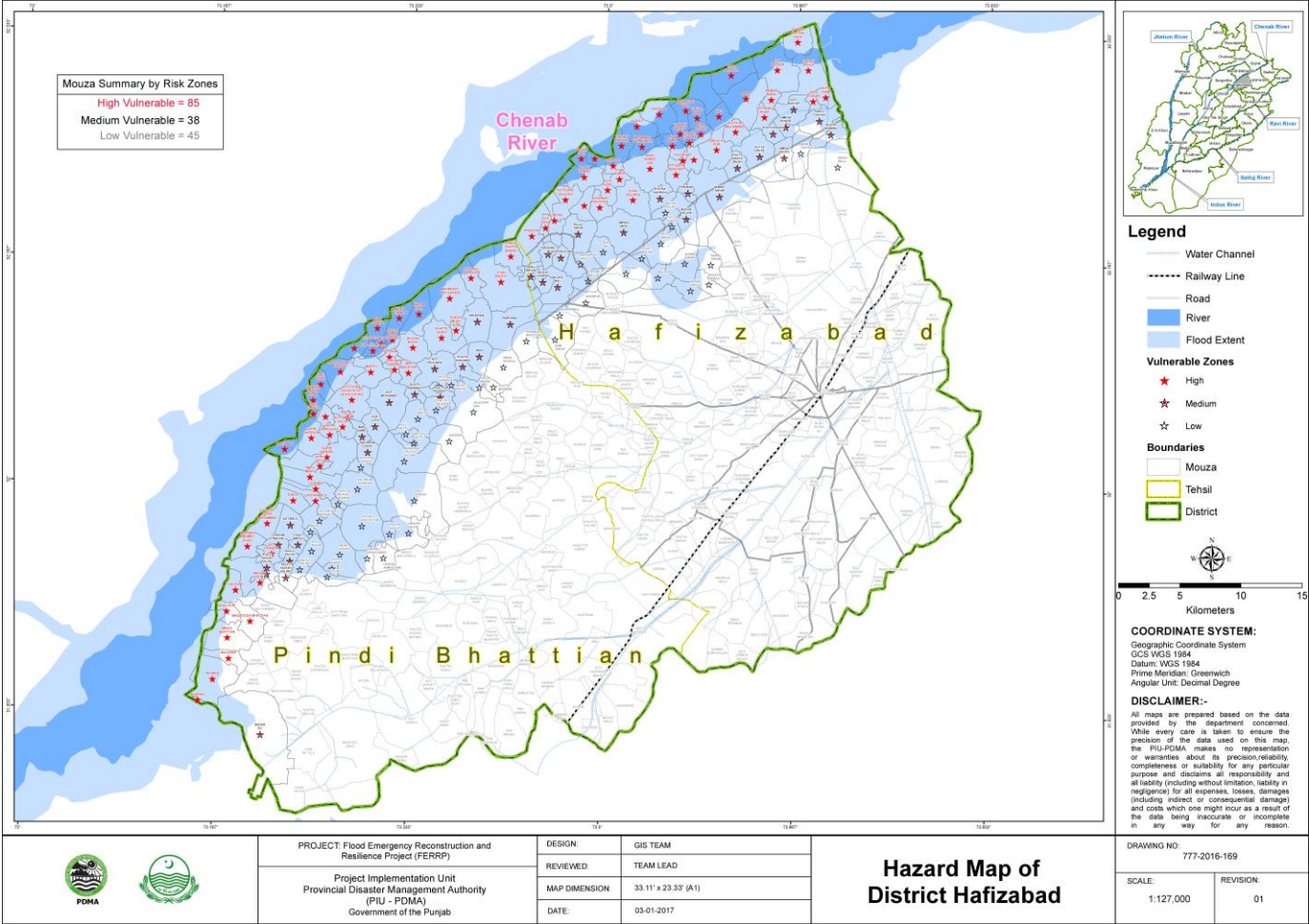
Airport / Landing Strips

Type	Area Name	GPS Coordinates	Type	Area Name	GPS Coordinates
Chandar Airbase	Iqbal Nagar, Gujranwala Road Hafizabad	X: 73.787764 Y: 32.079138			X: Y:

Govt. storage facilities/warehouses in the district

Facility Type	Capacity	Location with GPS Coordinates	Facility Type	Capacity	Location with GPS Coordinates
DDMA Warehouse Hafizabad	50*100 feet	X: 73.716916 Y: 32.072238			X: Y:

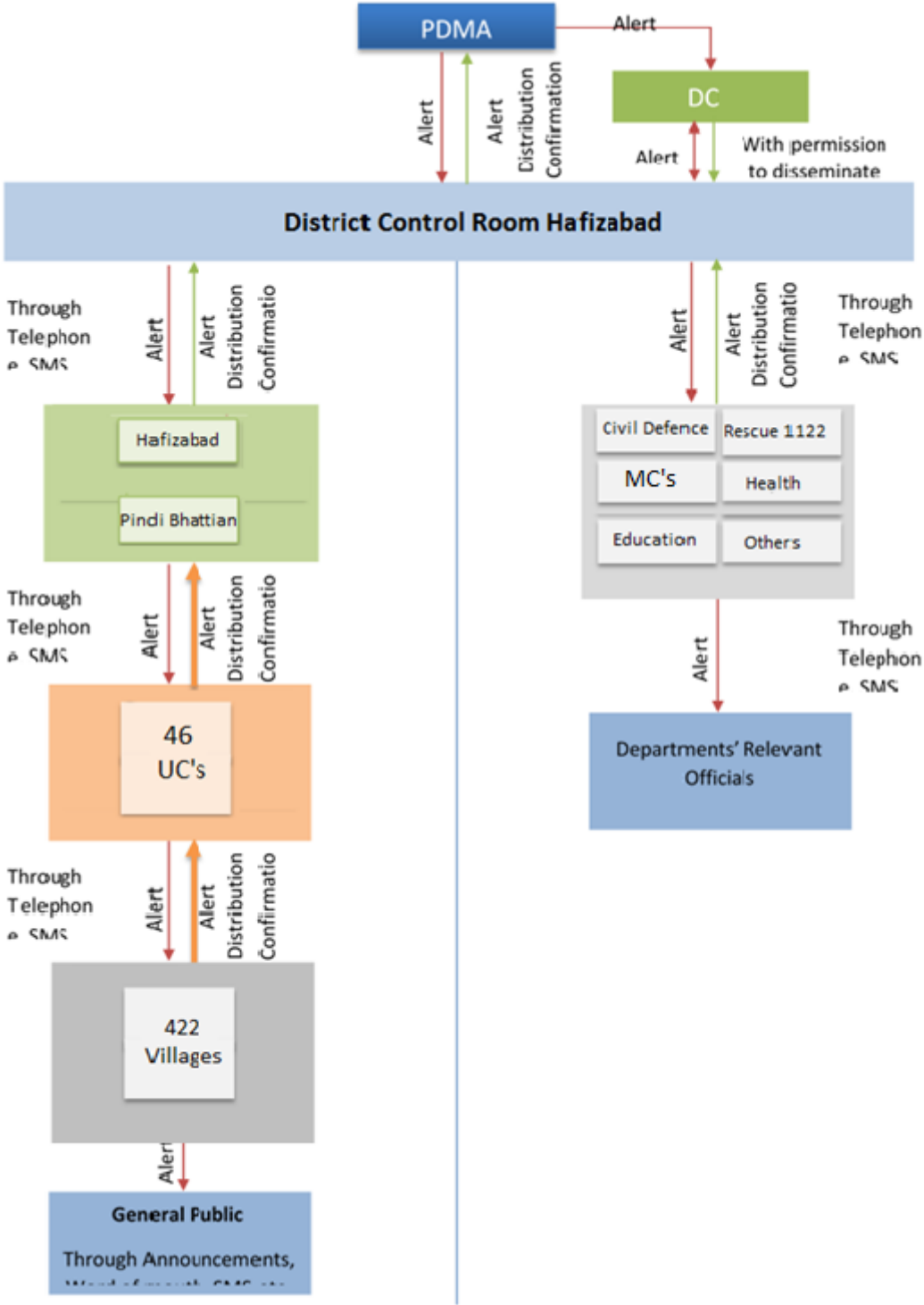
District baseline/reference map



Source: PIU-PDMA, Punjab

COORDINATION MECHANISM

Coordination Organogram (including Sector lead agencies/departments,Military, NGOs and Volunteers)



Powers and functions of District Disaster Management Authority under NDM Act 2010:

The District Authority shall be as the district planning, coordinating and implementing body for disaster management and take all measures for the purposes of disaster management in the district in accordance with the guidelines laid down by the National Authority and the Provincial Authority.

Without prejudice to the generality of the foregoing provisions, the District Authority may:

- a) prepare a disaster management plan including district response plan for the district;
- b) coordinate and monitor the implementation of the National Policy, Provincial Policy, National plan, Provincial Plan and District Plan;
- c) ensure that the areas in the district vulnerable to disasters are identified and measures for the prevention of disasters and the mitigation of its effects are undertaken by the departments of the Government at the district level as well as by the local authorities;
- d) ensure that the guidelines for prevention, mitigation, preparedness and response measures as laid down by the National Authority and the Provincial Authority are followed by all departments of the Government at the district level and the local authorities in the district;
- e) give directions to different authorities at the district level and local authorities to take such other measures for the prevention or mitigation of disasters as may be necessary;
- f) lay down guidelines for preparation of disaster management plans by the departments of the Government at the districts level and local authorities in the district;
- g) monitor the implementation of disaster management plans prepared by the departments of the Government at the district level;
- h) lay down guidelines to be followed by the departments of the Government at the district level;
- i) organize and coordinate specialized training programmes for different levels of officers, employees and voluntary rescue workers in the district;
- j) facilitate community training and awareness programmes for prevention of disaster or mitigation with the support of local authorities, governmental and non-governmental organizations;
- k) set up, maintain, review and upgrade the mechanism for early warnings and dissemination of proper information to public;
- l) prepare, review and update district level response plan and guidelines;
- m) coordinate with, and give guidelines to, local authorities in the district to ensure that pre-disaster and post-disaster management activities in the district are carried out promptly and effectively;
- n) review development plans prepared by the departments of the Government at the district level, statutory authorities or local authorities with a view to make necessary provisions therein for prevention of disaster or mitigation;
- o) identify buildings and places which could, in the event of disaster situation be used as relief centres or camps and make arrangements for water supply and sanitation in such buildings or places;
- p) establish stockpiles of relief and rescue materials or ensure preparedness to make such materials available at a short notice;
- q) provide information to the Provincial Authority relating to different aspects of disaster management;
- r) encourage the involvement of non-governmental organizations and voluntary social-welfare institutions working at the grass root level in the district for disaster management.
- s) ensure communication systems are in order and disaster management drills are carried out periodically; and
- t) perform such other functions as the Provincial Government or Provincial Authority may assign to it or as it deems necessary for disaster management in the district.

District Plan:

- a) There shall be a plan for disaster management for every district of the Province.
- b) The District Plan shall be prepared by the District Authority having regard to the National Plan and the Provincial Plan.
- c) The District Plan shall be reviewed and updated annually.

Additional Powers of District Authority:

For the purpose of assisting, protecting or providing relief to the community, in response to any disaster, the District Authority may:

- a) give directions for the release and use of resources available with any department of the Government and the local authority in the district;
- b) control and restrict vehicular traffic to, from and within, the vulnerable or affected areas;
- c) control and restrict entry of any person into, his movement within and departure from, a vulnerable or affected area;
- d) remove debris, conduct search and carry out rescue operations;
- e) provide shelter, food, drinking water and essential provisions, healthcare and services;
- f) establish emergency communication system in the affected area;
- g) make arrangements for the disposal of the unclaimed dead bodies;
- h) direct any department of the Government of the Province or any authority or body under the Government at the district level to take such measures as are necessary in its opinion;
- i) require experts and consultants in the relevant fields to advise and assist as it may deem necessary;
- j) procure exclusive preferential use of amenities from any authority or person;
- k) construct temporary bridges or other necessary structures and demolish structures which may be hazardous to public or aggravate the effects of the disaster;
- l) ensure that the non-governmental organizations carry out their activities in an equitable and non-discriminatory manner; and
- m) take such other steps as may be required or warranted to be taken in such a situation.

Revenue Department (Functions and Responsibilities)

In case of any disaster or calamity the head of the revenue department in the district i.e. the DC/DC should ensure that the following measures and steps have been taken:

- Taking everyone on board is perhaps the most important thing to do. Regular meetings of DDMA should be held to clearly highlight the roles and duties of DPOs, EDOs, XENs etc.
- Pre-flood meeting should be held and duties of all concerned officers and departments should be clearly defined and assigned.
- A district disaster management plan should be prepared using the set template and updated regarding any disaster or emergency that may strike the district.
- A focal person for the disaster or calamity should be nominated and his/her number should be communicated to all concerned departments.
- Proper stock taking should be done regarding available stocks of food and rations. Similarly stock regarding machinery and equipment should also be taken and inventories should be prepared. Out of order machinery should be repaired or replaced.
- Committees should be formed and constituted which will deal with various functions during a flood or emergency. Purchasing of food items, food, and machinery should all be done through committees.
- Identification of Low lying, medium and high vulnerability levels with flood level
- In case of evacuation the district administration should be very clear about the places where the relief camps or shelters will be established. Teams should be formulated which will look after these camps and will be in-charge for provision of tents, food, water and maintaining general law and order. Provision of cooked food is also to be ensured.
- Proper ware houses and stores should be made available for storing of aid and donated items that may be received from authorities such as PDMA, WFP etc. A committee should be constituted to look after the record of all the items in the store.
- Proper crop surveys or girdawaris should be conducted through the revenue officials so that crop damage assessment can be made after disaster or flood affects the district. These surveys will also help in determining the identity of the true owners as well.

- Post damage assessment should be carried out by joint teams constituted of patwaris, teachers, and agriculture field assistants. Technology should be involved and android sets should be used to gather accurate data.
- Round the clock active control rooms should be set up and the numbers be circulated to all concerned. The control rooms should be equipped with wireless, telephones and computers. All info gathered or received should be conveyed to the concerned. The control room should have representatives of concerned departments such as police, health, 1122, and revenue.
- Early warning is critical in saving lives. The local revenue officials along with local police should be deployed to warn the people against the oncoming disaster and to urge them to vacate the disaster prone areas and villages. Loudspeakers, mosque speakers and word of mouth should be used. Banners and posters can also be used.
- Data collection is of prime importance and the senior network administrator should be declared as the focal person for collection of relevant information such as number of casualties, damages to infrastructure, injured, perished livestock etc. for onward submission to PDMA etc.
- Mock exercises should be carried out along with all concerned departments specially 1122, Police, civil defence and Pakistan army regarding the action plan during any emergency or flood. This will give a fair idea about the preparedness of the district.
- Availability of vehicles should be ensured for use during any emergency especially off road vehicles like jeeps.
- Suitable locations should be identified for accommodating armed forces like the Pakistan army. Normally schools, colleges or stadiums are allocated for the armed forces

Checklist for Revenue Department:

- ☐ Survey of entire District (Preparation of Village level information by Patwari)
- ☐ Identification of Low lying, medium and high: vulnerability levels with flood level
- ☐ Liaison of Patwari with Numberdars of their respective villages
- ☐ Contacts of all revenue staff posted near river belts and their output in floodprone areas
- ☐ List of Numberdars with their contacts, volunteer from low lying settlements with contact numbers
- ☐ Prepare list of vulnerable villages and make an estimate of likely affected population in such villages in the event of flood
- ☐ Name and contact numbers of private boat owners and operators Announcement of Flood Warning at settlement level – Patwari responsible Forced evacuation with police
- ☐ Rapid assessment for relief goods and ration provision Coordination and reporting
- ☐ Carry out survey of entire flood affected areas to assess losses in collaboration with Agriculture, Livestock and Education Department
- ☐ Conduct crop damaged/ house damaged surveys

Municipal / Town Committees (MCS)

- Tehsil / Town Municipal (MCS) plays an important role of providing municipal services in the district including clean drinking water, sanitation facilities, maintenance of parks and removal of encroachment etc.
- Municipal/ Town Committees MCS will provide assistance to the District Government for setting up and management of relief camps/ operations.
- MCSs are responsible for provision & restoration of water and sanitation facilities in their municipalities besides disposal of waste or rain water/sewerage.
- MCSs are equipped with trucks, water bowsers, tractors, dewatering sets, bulldozers, loaders and dump trucks. All of these equipment are utilized to restore proper sanitary facilities, ensure the delivery of clean water and remove debris or excess water.
- MCSs sanitary workers can be employed for cleaning relief camps, or other such areas which has been affected by any disaster.

- MCSs employ de-watering sets to remove excess water. All MCSs are required to ensure the maintenance of all dewatering sets prior to the monsoon season. The MCS maintains a list of all the choking points where rainy water accumulates as a result of heavy storms which can cause urban flooding.
- MCS should ensure supply of clean drinking in overhead reservoirs and ensure supply to the affected areas or relief camps through water bowzers. Clean drinking water is a major issue and requirement during any disaster.
- In case of any disaster that requires people to be relocated, the MCS under the concerned Administrator i.e ADC/AC will assist in the migration of the affected people.
- During the relief effort and subsequent rehabilitation effort the, the local MCSs manpower can be effectively used for the distribution of food and essential commodities among evacuated people or any other relief activity such as provision of cash compensation.

District Disaster Management Authority (DDMA)

- DDMAAs are created under the NDM Act 2010 under Chapter IV Section 18 and the law defines their composition and also outlines their functions, duties and powers.
- District Disaster Management Authorities are the first line of defense and the implementing arm of the government policy and plans. Within the district there are three to four key players/departments that have to put up a joint and coordinated effort in order to fight with and handle any disaster under the leadership and coordination of the DC. The office of the DC fully supported by the DPO and line departments such as Health, Agriculture, Livestock, Civil Defence, 1122, MCSs and the Revenue Department form the main disaster management team within any given district. This plan is an effort to highlight their sets of responsibilities followed by the role of provincial departments.
- All district administrations had prepared a detailed contingency plan to face any disaster or hazard specially floods which until recently have become an annual affair for some districts.
- The district administration will divide the area as per district division with the Assistant Commissioner as in charge of his/her tehsil. All disaster related activities in a said tehsil will be coordinated through the concerned AC and the MCSs.
- On receipt of a flood warning, immediate warning will be conveyed to all the concerned officers. Immediate action will be taken in each sector / sub sector for evacuation of the population from risk prone areas to safer places or to Relief Camps. An Assistant Commissioner will ensure that announcements are made through loudspeakers of the mosques utilizing the services of the Revenue department. Each Patwari will inform the Numbardar, Headmaster of the School, Imam Masjid and councillors to make announcements etc.
- The tactical operations would be headed by the Additional District Collector (ADC). The ADC would be responsible for coordinating and supervising the disaster control and relief measures in the district.
- Provincial government had notified the following composition of DDMAAs for whole of the province:

1.	Deputy Commissioner, Hafizabad.	Chairperson
2.	District Police Officer, Hafizabad.	Member
3.	Ch. Shaukat Ali Bhatti MNA	Member
4.	Mamoon Jafar Tarar MPA	Member
5.	Ahsan Ansar Bhatti MPA	Member
6.	Additional Deputy Commissioner (Revenue), Hafizabad.	Member
7.	Additional Deputy Commissioner (F&P), Hafizabad.	Member
8.	District Emergency Officer, Rescue-1122, Hafizabad	Secretary
9.	Executive Engineer (Building Division) Hafizabad.	Member
10.	Executive Engineer (Highway) Hafizabad.	Member
11.	Executive Engineer (Public Health) Hafizabad.	Member
12.	Executive Engineer (Irrigation) Qadirabad Barrage, Qadirabad.	Member

13.	Chief Executive Officer (Education), Hafizabad.	Member
14.	Chief Executive Officer (Health), Hafizabad.	Member
15.	The Deputy Director (Social Welfare), Hafizabad.	Member
16.	Assistant Commissioner, Hafizabad & Pindi Bhattian.	Member
17.	Deputy Superintendent of Police, Hafizabad & Pindi Bhattian.	Member
18.	Civil Defence Officer, Hafizabad.	Member
19.	Deputy Director (Public Relations), Hafizabad	Member
20.	Deputy Director (Agriculture & Live Stock), Hafizabad	Member
21.	Chief Officer Municipal Committees (Hafizabad, Jalalpur Bhattian, Pindi Bhattian & Sukheki)	Member
22.	Medical Superintendent, DHQ, Hafizabad	Member
23.	Medical Superintendent, THQ, Pindi Bhattian	Member
24.	District Disaster Management Coordinator, Hafizabad.	Member/ Coordinator
25.	District Manager, SNGPL, Hafizabad	Member
26.	District Engineer, PTCL, Hafizabad	Member
27.	Secretary, DRTA, Hafizabad	Member
28.	System Network Administrator, Hafizabad.	Member
29.	Col (R) Ali Ahmad Awan	Member
30.	President, Petrol Pumps Association, Hafizabad	Member

- DC must establish a Disaster / Flood control room at the DC's office, the numbers of which will be circulated to all concerned. The Disaster / Flood Control Room has to maintain updated information regarding the threat of disaster and statistics post disaster. The center will maintain a regular communication with the Flood Forecasting Division or the dam authorities up stream in case of a flood.
- The DC would immediately mobilize the equipment needed to tackle the challenges created by a disaster. The District Governments will provide a comprehensive list of flood fighting equipment to PDMA as part of their flood contingency plans.
- CEO (Health) will ensure the availability of adequate medicines for treatment of common issues, particularly for snake and dog bite cases and general vaccines at each relief camp.
- Livestock would arrange fodder and feed supplement for livestock and animals displaced.
- District Regional Transport Authorities (DRTA) in all 36 districts of Punjab are managed by Secretaries who would coordinate with local transporters to arrange for arranging transport required for evacuation of people from affected areas. In case of shortfall in transport in a particular district, the adjoining district would mobilize the transporters in his district to assist with the evacuation of people.

Pre-disaster Check list for DDMA

- ☐ Meeting of DDMA held
- ☐ Identification of vulnerable areas
- ☐ Identification of Safe places
- ☐ Preparation of contingency plan
- ☐ Bunds and encroachments visited
- ☐ Sites identified for relief camps Evacuation routes/plan
- ☐ Safe custody of Government records and essential equipment and their shifting to safer areas on receipt of flood warning
- ☐ Enlistment of department wise available resources
- ☐ Preparation of list of required relief goods/ items
- ☐ Involvement of Volunteers, NGOs and other CSOs
- ☐ Designation of Focal Person
- ☐ Preparation of District vulnerability map with varying degrees of floods
- ☐ Evacuation well in time from vulnerable areas

- ☐ Establishment of Camps – All services under one roof
- ☐ Flood warning and weather forecast: Loudspeakers announcements
- ☐ Establishment of control rooms
- ☐ Cancellation of all type of leaves of all employees Designation of Focal Persons
- ☐ Assignment of duties and responsibilities of all officers for flood emergency
- ☐ Preparation of Telephone Directories with the cell numbers of all the members of DDMA's and volunteers
- ☐ No leave during flood days; No official will leave station

Disaster Emergency Control Room (functions and responsibilities)

Flood Warning/Control Centers

Sr. No.	Name of flood warning Centre	Officer Incharge	Office Location	Contact
1	District Emergency Operation Center	SNA, Hafizabad	DC Office	0547-920111
2	Tehsil Control Centre Hafizabad	AC Hafizabad	AC Office Hafizabad	0547-523536 0321-9450485
3	Tehsil Control Centre Pindi Bhattian	AC Pindi Bhattian	AC Office Pindi Bhattian	0547-531294 0345-0785231

District Flood Control Cell / Warring Centre.

This Cell would function under the general supervision/guidance of Deputy Commissioner and under the direct control of the District Flood Relief Officer. It would remain operational throughout the year and would deal with all correspondence relating to flood matters specifically for coordinating flood relief activities of all government and voluntaries in the district and would be responsible for dissemination of instructions/guidance received from higher quarters.

Checklist for Control Room:

- ☐ Dedicated Staff as per magnitude of the disaster
- ☐ Duty roaster of the staff
- ☐ 2 Dedicated telephone lines
- ☐ Dedicated Fax
- ☐ Wireless
- ☐ Internet and Email or any other source of communication
- ☐ Power backup

Checklist for Relief Camp Incharge:

- ☐ List of staff displayed with name and department teams will work in shifts
- ☐ Presence of representatives of all service providers i.e. Health, livestock, Rescue 1122, Civil Defence etc.
- ☐ No movement without the permission of Centre Incharge
- ☐ Each shift in-charge to contact District Control Room on arrival and then on departure
- ☐ In-charge will keep close liaison with SHO of the respective area
- ☐ No of affectees in camp (sick, aged and children) shall be communicated daily
- ☐ Availability of at least one emergency vehicle at center be ensured
- ☐ Keep record of private boat owners and their contacts details
- ☐ List of Doctors and private hospital in the vicinity
- ☐ List and contact of philanthropists in the vicinity
- ☐ Keeping record of donations coming directly to Centre and report the same to Tehsil and District Incharge.
- ☐ Centre Incharge shall ensure vaccination of animals and humans against Communicable diseases
- ☐ List of missing persons must be displayed at all Relief Camps

Role of Health Department

The public sector health delivery system comprises of four tiers and as such will continue to provide services at these four tiers during and after any disaster:

Outreach and Community Based Activities, which focus on immunization, sanitation, malaria control, maternal and child health, and family planning. Primary care facilities include BHUs, RHCs. THQs and DHQs provide inpatient and outpatient care. Tertiary care hospitals located in the major cities for more specialized care.

In case of any disaster or calamity the health department will ensure that the following measures are in place;

- To provide first aid to the injured people and arrange evacuation of patients for further assistance.
- Medical camps and mobile health teams should be arranged for prevention and control of communicable diseases, immunization and provision of essential drugs.
- Health department would make a roster of all medical officers and paramedics that would be deployed to these camps and teams.
- Drugs and other medical equipment should be available at all these camps and with mobile teams. The medicine should be for relevant flood related issues, **particularly Anti-snake venom, Anti-rabies.**
- The shelters or relief camps established by the district administration should have medical centers with ambulances and special facilities for women and children.
- An emergency control room will be established in the office of Directorate General Health Services and a representative of this emergency control room would be designated to PDMA's control room.
- A list of essential medicines would be prepared by the Health department and it would ensure that medicines and other resources are present in sufficient stocks in hospitals in disaster hit areas.
- Medical colleges may be involved to create Emergency Response teams
- Health department would also coordinate with international organizations such as WHO and UNICEF.
- Extensive disease surveillances in the disaster hit areas should be carried out warnings if needed be issued through the Disease Early Warning System.

- Medical teams and paramedic staff should be mobilized and deployed for rapid assessment and quick response in the affected areas.
- A contingency plan will be prepared and submitted regarding preparedness for any disaster or calamity.
- The National Disaster Management Authority has designated WHO as the key organization that will fill the gaps in the supply of medicines, rapid diagnostic kits, and vaccinations etc.
- The department would employ female health workers in emergency areas specially, for spreading awareness regarding health risks in a disaster and for any vaccination or immunization programme that may be needed during any emergency.
- A Health and Nutrition Cluster for overall management and oversight of Health department's disaster response would be formed at the Directorate General Health office.
- In case the medicine stocks or even the infrastructure is damaged due to floods, the department would draw up a plan for early recovery of health infrastructure and service delivery.

Civil-Military Coordination Mechanism

operations would depute an officer who would remain in regular contact with the District Flood Relief Officer in order to remain aware about the flood situation and about the requirements of the Civil Administration. The specific role of Army will be to assist in the evacuation of flood victims in coordination with the District Administration to assist the Irrigation Department in bund protection.

Requisition of Army.

Relying upon the flood warnings and needs intimated by concerned Assistant Commissioners, Pakistan Army will be requisitioned as per details below.

Water Discharge at Qadirabad	Army to be requisitioned
3,50,000 Cusecs	01 Unit
6,50,000 Cusecs	02 Unit
More than 6,50,000	01 Brigade
	04 Helicopters

Request in this regard will be forwarded to the Commanding Officer, 30 Corps, Gujranwala Cantt. alongwith intimation to Home Department and Commissioner Office.

Volunteer Network

E.g. how many registered volunteers, how to activate them, who will coordinate with them etc.

Civil Defense

The Civil defense Officer will be responsible to keep the entire volunteer Civil Defense Force in state of alert throughout the season. He would be responsible for supervising the role of this agency in assisting the evacuation or any other relevant activity. All the equipments available with the department should also be in an operational state. The agency would function under the general supervision of the ADC who is the chairman of the resources committee (as given in para 4.7 above). The department will be responsible to operate the available motor boats.

RISK ANALYSIS

1. Potential hazards of the district

Hazards	Likelihood (Score 1-5)	Impact (Score 1-5)	Risk
Floods	4	5	20
Urban Flooding	1	1	1
Flash Floods	2	2	4
Hill Torrent			
Glacial Lake Outburst Flood (GLOF)			
Landslide			
Tornado			
Earthquake	2	1	2
Drought			
Epidemic	1	2	2
Fire Incidents	1	2	2
Other Major Accidents (Building Collapse, road traffic accidents, train accident, Stampede, plane crash)	1	2	2
Environmental Hazards (industrial accidents, severe pollution etc.)	2	1	2

Risk = Impact x Likelihood

Low : 1-7
 Medium : 8-14
 High : 15-25

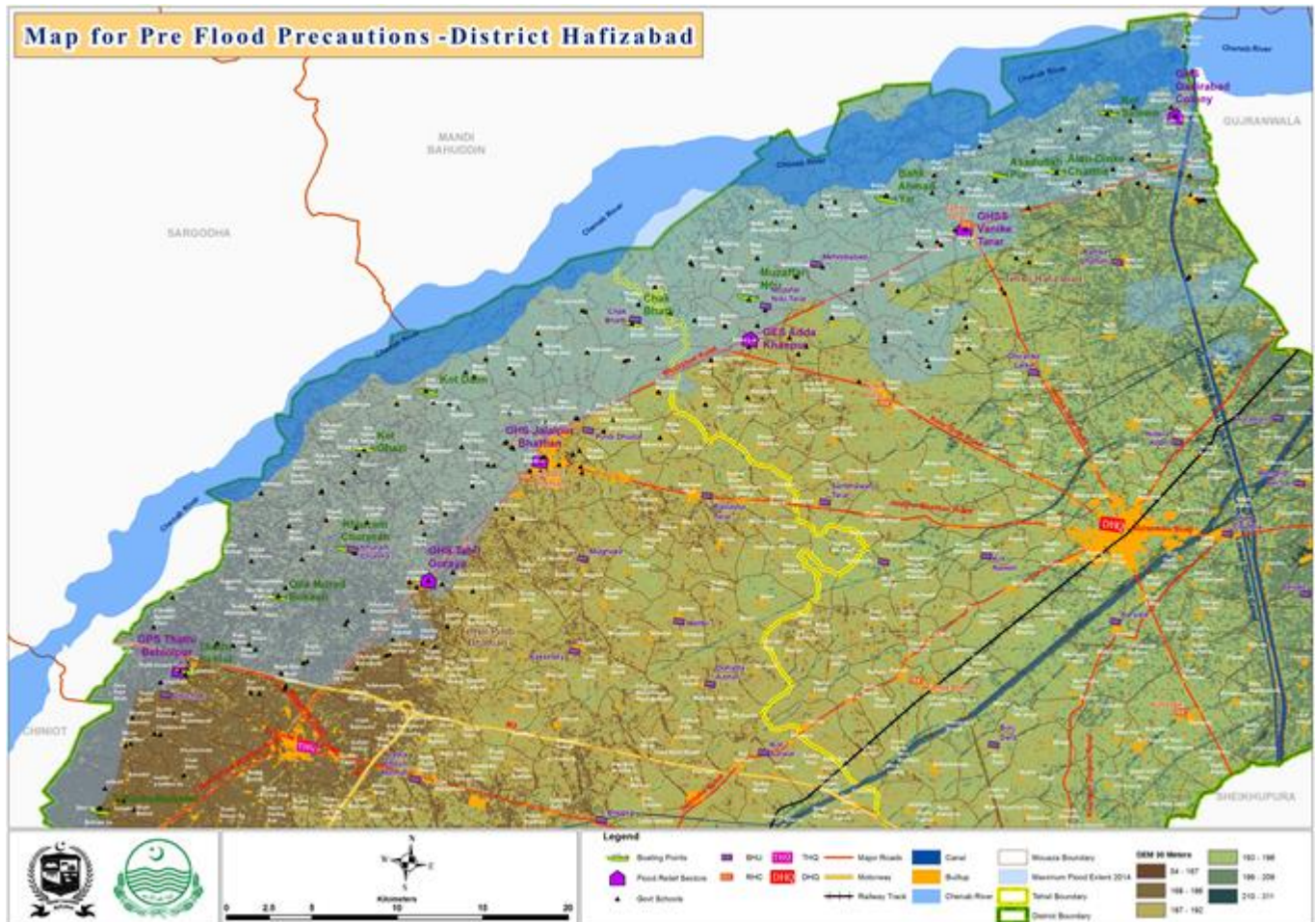
2.Hazards

- *Disasters occurred over the past two to three decades and their impact on communities and development sectors*
- *Provide a brief description of the hazards being planned for (medium and high risks), including potential location that could be affected;*
- *Briefly outline the triggers*

Irrigation Department

The Irrigation Department will ensure the safety and security of the flood protection bund prior/during/after the flood season. The Department would also ensure that effective patrolling is done during the actual flood season on the protection bund in order to detect any possible danger to the strength of the bund at the earliest possible. Another important function to be performed by the department is the timely and regular collection of information regarding the discharge of water at Marala-Headworks in case of River Chenab and Qila Soba Singh on Daik Nalla and its timely relay to all the concerned speciall

District detail map with vulnerable points, hazards, planned camps, health facilities, warehouses etc.



Source: District Government Hafizabad, Punjab

3. Response & Operational Capacity

Briefly describe the existing response capacities in District (including government and NGO partners)

President / Vice Chairman Name & Contact No. General Secretary

1. Urban Development Support Program Hafizabad.DC, Hafizabad 0547-521784 Sheikh Muhammad Ishaq Sheikh Muhammad Nafees
2. Pattan Rabia Ghani, Project Manager, Mouza Bahadur Pur Bosan Road, Multan & House No.5 Street No.58, F.10/3, Islamabad.061-4745801,061-6009033, 061-4745672,051-2211875, 051-2299494, 051-2291547, 0345-9555438
3. Rural Development Support Program, Hafizabad.Shaheen Atiq-ur-RehmanNaseer Ahmad
4. Anjuman Naujawanan Hafizabad.Abdul Jabbar Ansari 0300-6527008Asghar Ali Syed Ghulam Abbas
5. Anjuman Falah Behbood-e-Marizan, Hafizabad. Dr. Muhammad Sadiq 0547-524403
Dr. Muhammad Yaseen
6. Anjuman Shehrian, Hafizabad. - - -
7. Anjuman Islah Tamir-o-Tarqqi, Hafizabad. - - -
8. Awami Welfare Trust. - - -

4. Strategic Reserves

Items	Available	Functional	Non-Functional	Extra Demand
Boats	48	46	2	
OBM	48	45	3	
De-watering sets	24	16	8	
Navigators				
GIS devices				
Life Jackets	577	577		500 100 (Child)
Life Ring	144	144		
Life Lines	12	12		
Scuba diving suit with complete accessories	4	4		2
First Aid Kits	11	11		200
Rescue Bag				
Safety Harnesses				
Ambulances	13	13		
Fire Brigade	3	3		
Water Tanks / Bouzers	1	1		1
Extendable Ladders	1	1		1
Hydraulic Cutter				2
Sonar Rader				1
Jumping Sheet				3
Dumpers				3
Excavators				2
Cranes				1
Bulldozer				2
Boat Carrier/Trolleys	5	5		
Pickups/Jeeps/4x4 vehicles/Mini Trucks	1	1		2
Searchlight	20	20		100
Tent	1824	1824		
Mosquito Net				1000
Plastic Mat	988	988		1000
Blanket				2,000
Any other main relief/rescue equipment				
Generator Sets	4	3	1	06
Gas-Cutters				01
Sonar Radars				01
Scuba Diving Set				02
Navigator/GPS Tracker				10
Hydraulic Cutter				01
Floating Rope				50

5.Gaps and Constraints

- Briefly outline the capacity gaps in the provision of rescue and response;
- Describe major obstacles to providing humanitarian assistance (security, access constraints, administrative obstacles, logistics, etc.)

MITIGATION STRATEGY

- ✓ Briefly describe what measure could be taken to reduce the impact of the potential disasters.
- ✓ Strategic pre-positioning of available relief stocks
- ✓ Public education and community awareness

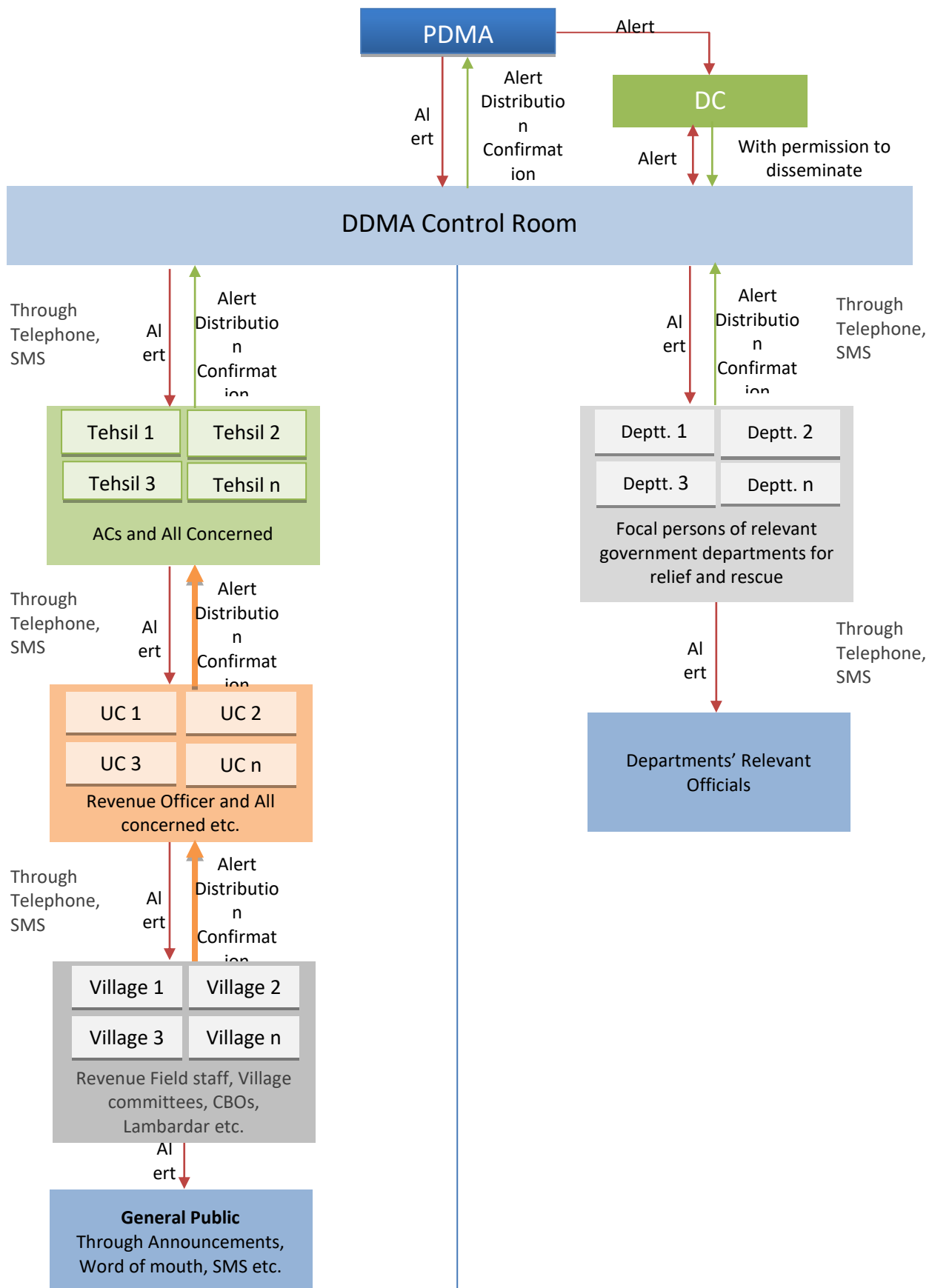
Hazards	Mitigate Actions	Responsible Department
Floods		Revenue & Rescue 1122 All line Depts
Urban Flooding		Municipal Committees
Flash Floods		MCs
Hill Torrent		
Glacial Lake Outburst Flood (GLOF)		

Landslide		
Tornado		
Earthquake		Revenue & Rescue 1122 All Line Departments
Drought		Revenue & Rescue 1122 All Line Departments
Epidemic		Health Dept. All Line Departments
Fire Incidents		Rescue 1122
Other Major Accidents (Building		Rescue 1122

Collapse, road traffic accidents, train accident, Stampede, plane crash)		
Environmental Hazards (industrial accidents, severe pollution etc.)		Environment Department

EARLY WARNING

Information Flow Diagram



Alertness Levels

Following four levels alertness have been established:

Level-D
(Disaster threat
is perceptive)

DDMA shall conduct monthly meetings besides atleast 2 mock exercises as per DDMP, well in time, to make the concerned officers/officials understand their role and responsibility for better coordination and testing of rescue and relief equipment. DDMA shall also ensure the physical presence of concerned staff deputed and availability of equipment/resources for all designated vulnerable sites within given time frame during disaster. Vulnerable site's inspections and necessary works/action shall be carried out as mitigation measures.

Level-C
(Alert)
(Warning issued
but likelihood of
occurrence is
less than 100%)

Activities to be undertaken in level D

+

DDMA shall issue **"alert"** to all concerned for the vulnerable area. DDMA and LDMA (tehsil level) control rooms be made operational 24/7 and ensure availability of all required (available and additional) resources for on call mobilization and monitor the situation 6 hourly. Only DC and DPO shall grant leave according to the situation.

Level-B
(High Alert)
(Disaster threat
is imminent)

Activities to be undertaken in level C

+

DDMA shall issue EW to all stakeholders and **"High Alert"** for the district to ensure that all additional HR and material resources including volunteers has reported to their assigned duties, and all resources for evacuation and disaster management have been mobilized as per DDMP. All emergency (health, fire, rescue 1122, MCS etc) facilities shall work 24/7 with full staff strength. DDMA shall monitor the situation on hourly basis.

Level-A
(Red Alert)
(Disaster is
materialized)

Activities to be undertaken in level B

+

DDMA shall respond to the emergency immediately and shall carry out rescue and relief operation as defined in DDMP and shall continuously monitor the situation. Resources of adjoining districts shall be mobilized and Army may be called keeping in view the magnitude of the disaster.

Early Warning

Briefly describe how the early warning will be received from provincial level?

Who is the focal person at district level?

Functions of District/Tehsil Emergency Control Rooms in early warning

How the early warning will be communicated to relevant departments for different disasters? What actions each relevant department should take after receiving the early warning e.g. evacuation.

How the early warning will be communicated to the relevant population? E.g. through Patwaris, SMS, Announcements, Media etc.

ACs to ensure that the relevant information is immediately disseminated through Sector Officers to the areas likely to be affected by flood. In the areas likely to be inundated by flood, people will be informed through Imam Masjid and notables list of their telephone numbers is attached. In order to ensure effective operation of the chain of communication mentioned above, it is imperative that, besides utilizing telephone and police wireless, the sector Officers should have a group of special messengers, having independent means of conveyance, readily available throughout the flood season, who could personally spread out in the areas likely to be affected to warn the people well in advance. The police and revenue staff is also to be utilized for this purpose.

The principal means of communication among different officers/agencies would be telephone and wireless. The list of telephone numbers of offices/departments concerned with flood duties. All the 10 Police Stations in the district have facility of wireless communication. Any message meant to be communicated to a distant place within the district can be communicated to the nearest police station on telephone from where it can be transmitted through wireless.

RESCUE STRATEGY

- *What actions will be taken as an immediate response to the situation? E.g. Evacuation, medical assistance*
- *Who does what and when? Responsible departments/agencies*
- *How and when Pakistan Army will be requested to support the rescue activities*
- *Camp sites identified? List at Annex I.*

Types of Evacuation.

There are three types of evacuation:-

- **PRE-IMPACT:** moving people as a safety measure. This is only possible if there has been a warning. Studies show that if the risk has been properly assessed, contingency evacuation plans prepared, and people are warned effectively, then they will move in an orderly fashion. It is wrong to assume that people will act irrationally.
- **POST-IMPACT:** when there has been no warning and people are moved during the impact or as part of the rescue or rehabilitation effort.
- It is possible through early warning. When the flow of water is confirmed by Irrigation Department, the population in the effected flood hit area is sensitized through loudspeakers by local Imams, Masjids, notables etc. However, people usually do not take the wake up calls seriously and they remain stationed until flood water encroaches them.
- It is to rescue people when they do not pay heed to early warnings. Following procedure is adopted. District Flood Control Room informs ACs/SDPOs/all incharges of relief centers.
- The incharge of Relief Center coordinates with Rescue 1122 and private boat owners.
- People are rescued first to relief camps and then they move towards their kith and kin as there is no tendency here to stay in relief camps.
- Boats, Trucks, Helicopters if army is requisitioned, tractor Trolleys are used in the evacuation.
- Available government buildings/schools out of flood area are best for evacuation purpose.

HUMANITARIAN ASSISTANCE

- *How damage and losses data will be collected and communicated to higher level?*
- *How the priority needs (e.g. food, shelter, health etc.) will be determined?*
- *What activities will be carried-out to provide assistance to the affected population and by whom?*
- *What assistance will be provided?*
- *Standardization of different packages/kits e.g. food, tents*
- *Humanitarian Assistance monitoring mechanism – to avoid duplication and identify gaps*
- *Minimum standards for camps, if camps are established*
- *What is the current capacity in the district? Enough for how much caseload?*
- *Explain how protection, gender and age, environment and other relevant cross-cutting issues that will be addressed or mainstreamed into the humanitarian assistance strategy*

The key elements of Evacuation Plan will be as under:

a.	Legal authority	DC / District Collector
b.	Risks	Loss of lives, animals & properties etc.
c.	Warning measures.	Wireless, Telephone, Loudspeaker.
d.	Routes.	As ACs and SDPOs decide.
e.	Safe areas	Govt. Buildings out of the flood area.
f.	Admn. Arrangements	As decided in plan
g.	Control	District Coordination Committee and District Flood Relief Officer
h.	Communications	Wireless, Telephone
i.	Outline Plan for Return	As per requirements.

ANNEX I: IDENTIFIED SITES FOR DISPLACED PERSONS

S#	Location	No. of persons which can be accommodated	GPS Coordinates	S#	Location	No. of persons which can be accommodated	GPS Coordinates
1	Qadirabad Colony	500	X: 73.683006 Y: 32.290809	16			X: Y:
2	Vanike Tarrar	500	X: 73.581568 Y: 32.216701	17			X: Y:
3	Muzaffar Nou	200	X: 73.478393 Y: 32.142752	18			X: Y:
4	Jalalpur Bhattian	500	X: 73.378356 Y: 32.064558	19			X: Y:
5	Tahli Goraya	500	X: 73.329647 Y: 31.993906	20			X: Y:
6	Thathi Behlol Pur	200	X: 73.207782 Y: 31.928143	21			X: Y:
7			X: Y:	22			X: Y:
8			X: Y:	23			X: Y:
9			X: Y:	24			X: Y:
10			X: Y:	25			X: Y:
11			X: Y:	26			X: Y:
12			X: Y:	27			X: Y:
13			X: Y:	28			X: Y:
14			X: Y:	29			X: Y:
15			X: Y:	30			X: Y:

ANNEX II:LIST OF HAZARD PRONE VILLAGES/REVENUE ESTATE (NAMES REQUIRED)

Hazards	Tehsils	UCs	Names of Revenue Estates	Names of Villages
Floods	Hafizabad & Pindi Bhattian	46	-	Channi Sultan, Kot Saleem, Channi Gulla, Hardo Bagh, Burj Alayan, Kala, Uncha Kala, Malah Wala, Kakshal, Jaggo, Channi Peer Shah, Ameer Kot, Faraq Pur, Noshara, Burj Bhaya, Bahri, Kot Peer Muhammad, Chowk Khurad, Channi Mehra, Kot Kameer, Peer Kot, Mehmood Pur Sharqi, Kot Mian Khan, Kot Hassan, Kot Buksh, Asad Ullah Pur, Kot Jan Muhammad, Channi Chor, Kot Qadir Buksh, Bahak Ahmad Yar, Chak Kayara, Kot Fazal, Bhak Maquid Din, Jahanian Kathrian, Rajja, Pharoki, Hardo Thatha Bhama, Kotli Diam, Amrao Khurad, Thatha Pinah, Nakki Chattha, Thathi Anok Sing, Alloudin Kay, Khokhar, Nahra, Gujjar Kay, Kot Jaffar, Chak Sajjda, Punj Gharye, Balake Nou, Muzaffar Khona, Muzaffar Nou, Chak Balaqi, Triggra, Amro Kalan, Behri Chattha, Vanike,Rabbar, Balake, Kot Ishaq, Bukan Khurad, Bukan Kalan, Dhariwal, Mehdi Abad, Malik Wala, Akkawala, Jhamb Tarrar, Tahtha Ahsan, Rago Sayadan, Chanay Wali, Khan Pur, Seray, Rakh Vanikay, Sawan Pura, Thatha DeukaChak Bhatti, Bhoon Fazal, Burj Rehman, Burj Jawaya, Bhoon Yara, Bhoon Ratta, Kot Diam,Channi Rehmat Khan, Channi Sher Gondal, Buraj Chorara, Channi Thathlan, Mehmood Pur, Bazari, Marth, Malah Wala Gondal, Burj Fathu, Channi Sultan Shah, Burj Umari, Khuram Lodhi, Ghari Androon, Mahi Wala, Khuram Jawaya,

				Ghari Golla, Kot Hussain, Thathi Asiash Kalan, Thathi Asiash Khurad, Kot Ghazi Kalan, Kot Ghazi Khurd, Ghari Abdullah, Burj Masti, Channi Noor Muhammad, Chah Mirza, Channi Rehan, Burj Ghos, Chaddran wala, Kot Muhabat, Kudlathi, Kot Alam Khurd, Tunpur, Kot Alam Kalan, Ghari Gondal, Ladhra, Rakh Qila Murad Buksh, Lundian Wala, Dingga, Kot Bela, Qila Murad Buksh, Dolu Kalan, Dolu Khurd, Kot Nizam, Mona Ma Thatha Salabat, Balocha Watto, Kala Watto Sheikh Musa Dad, Khutay Shah, Thatha Rehman, Narrowal, Khanna, Nissowal, Mahlo, Saddoke, Jag Bhatti, Thatha Sikandar, Bahudin Kay, Kotla Andan, Pisswawala, Ameer Mukhtar, Kot Palwan, Pindi Dhudhal, Thatha Umar, Bagh Khohna, Khurram Chorara, Bagh Nou, Jalapur Nou, Jalalpur Kohna, Thatha Kanjawan, Wah, Pindi Bhattian, Shahpur, Baharkay, Tahirkay, Charka, Choudo Khuda Yar, Choudo Ahmad Yar, Choudo Bahadar Key, Thatha Ashalat, Tali Goraya
Urban Flooding	-	-	-	-
Flash Floods	-	-	-	-
Hill Torrent	-	-	-	-
Tornado	-	-	-	-

Earthquake	-	-	-	-
Drought	-	-	-	-
Epidemic	-	-	-	-
Environmental Hazards (industrial accidents, severe pollution etc.)	-	-	-	-

ANNEX III:LIST OF HEALTH FACILITIES AND THEIR VULNERABILITY TO HAZARDS

S#	Name and Location	GPS Coordinates	Health Facility Type (Primary, Secondary, Tertiary)	Name and Contact No of Focal Person	Hazard Vulnerability (Floods, Earthquake etc.)
1	BHU, MEHDIABAD	X: 73.506926 Y:32.186125	Primary	Dr. Faizan Akbar, MO, 0324-6070123	Flood
2	BHU, MUZAFFAR NOA	X: 73.483871 Y: 32.160383	Primary	Dr. Syeda Tanzeela, WMO, 0303-5470214	Flood
3	ZCD, BEHAK AHMAD YAR	X: 73.538121 Y: 32.227638	Primary	Muhammad Azam, Dispenser, 0324-6754958	Flood
4	GRD KOT ISHAQ	X: 73.545978 Y: 32.179961	Primary	Tanveer Ahmad, Dispenser, 0346-6316707	Flood
5	MCH, KOT ISHAQ	X: 73.545978 Y: 32.179961	Primary	Farkhanda Jabeen, LHV, 0343-0144415	Flood
6	RHC VANIKE TARAR	X: 73.582292 Y: 32.217938	Primary	Dr. Muhammad Umar, MO, 0320-3812020	Flood
7	ZCD, KOT SALEEM	X: 73.684416 Y: 32.322898	Primary	Rizwan Bashir, Dispenser, 0300-7525482	Flood
8	BHU, CHAK BHATTI	X: 73.417303 Y: 32.143616	Primary	Dr. Sidra Tul Muntaha, WMO, 0316-4704653	Flood
9	BHU, CHUCHAK	X: 73.201691 Y: 31.913055	Primary	Dr. Umer Tariq, MO, 0313-9391095	Flood
10	BHU PINDI DHUDAL	X: 73.400928 Y: 32.08249	Primary	Dr. Muazzam Lal Shehbaz, MO, 0300-4500060	Flood
11	BHU, KHURAM CHORERA	X: 73.28758 Y: 32.002799	Primary	Dr. Ali Hassan Chattha, MO,	Flood

S#	Name and Location	GPS Coordinates	Health Facility Type (Primary, Secondary, Tertiary)	Name and Contact No of Focal Person	Hazard Vulnerability (Floods, Earthquake etc.)
				0300-4535642	
12	RHC, JALALPUR BHATTIAN	X: 73.372118 Y: 32.053636	Primary	Dr. Imtiaz Hussain, MO, 0342-7992443	Flood
13	THQ, PINDI BHATTIAN	X: 73.278041 Y: 31.895988	Secondary	Dr. Attar Majeed, MS, 0300-6521844	Flood
14	GRD BLOCH WATWAN	X: 73.333412 Y: 32.030309	Primary	Mr. Muhammad Aslam, Dispenser, 0322-6507161	Flood

ANNEX IV: LIST OF VULNERABLE EDUCATIONAL INSTITUTIONS

S#	Name	Institute type (School, College etc.)	GPS Coordinates	Enrolment	Incharge Name	Contact Number
1	Qadirabad Colony	GHS	X: 73.683006 Y: 32.290809	560	Imran Ali Rana(SST IT)	0301-5645139
2	Sooian Wala	GHS	X: 73.703088 Y: 32.249465	293	Muhammad Afzal	0300-7797911
3	Vanike Tarrar	GHSS	X: 73.637114 Y: 32.141857	1560	Muhammad Mushtaq	0346-6520077
4	Ramke Chatha	GHS	X: 73.663959 Y: 32.213124	604	Muhammad Riaz Ul Qadeer	0321-4649819
5	Jalalpur bhattian	GHS	X: 73.378403 Y: 32.064621	1384	Abid Hussain	0333-8513520
6	Kot Bela	GHS	X: 73.241309 Y: 31.966200	285	Muhammad Arshad (SST)	0300-7710185
7	Tehli Goriya	GHS	X: 73.329322 Y: 31.993872	738	Faid Bin Ashiq	0322-5154751

ANNEX V:LIST OF INDUSTRIES WITH THEIR RISK LEVEL

S#	Industry Name	Location	GPS Coordinates	Risk Type (Chemical, Biological, Radiological, Nuclear)	Name and Contact of Focal Person	Risk Level (low, medium, high)	Prone to Hazard? Fire/ Floods/Earthquake
1	Nil		X: Y:				
2			X: Y:				
3			X: Y:				
4			X: Y:				
5			X: Y:				
6			X: Y:				
7			X: Y:				
8			X: Y:				
9			X: Y:				
10			X: Y:				
11			X: Y:				
12			X: Y:				
13			X: Y:				
14			X: Y:				

ANNEX VI:LIST OF NGO WORKING IN THE DISTRICT

S#	NGO Name	NGO Type (Local, National, International)	Location where they are working	Sector/Cluster of work (e.g. WASH, Health, Education)	Focal Person Name	Contact No.
1	Ijtimai taraqiati Council	Local	Hafizabad City	Women Development	Begum zubaida zulifqar	0547-520157 0547-521815
2	Usman Welfare Society	Local	Hafizabad City	Community Development	M.Shafique Rahi	0300-7529206
3	Saifullah Memorial Welfare Council	Local	Kolo Tarar	Women Development	Zubaida salman Tarar	0547-554099 0321-4698497
4	District T.B. Association	Local	Hafizabad City	Health	Dr. Muhammad Yasin	0547-525666 0300-6521093
5	Anjuman Behbood-e-Marizan	Local	Hafizabad City	Health	Dr.Muhamad Sadiq	0547-524403 0321-7335062
6	Anjuman Falah-e-Insaian	Local	Hafizabad City	Health	Haji Muhammad Ishaq	0547-522352
7	Bunyard Literacy Community Council	Local	Hafizabad City	Education	Muhammad Aslam	0345-6653311
8	Urban Dev. sport Program	Local	Hafizabad City	Education	Sheikh Muhammad Ishaq	0547-525135
9	Dehi Taraqiati Council	Local	Ali Abad	Women Development	Rashid Ahmad Bhatti	0300-6528713
10	Public Welfare Society	Local	Sakhi Hafizabad	Health, Women Development	Muhmmad Raiz S/O Noor Muhmmad	0333-4541254
11	Alma Be Welfare Society	Local	Chak No. 474 Pindi Bhattian	Health, Sports, Education	Muhammad Jameel	0547-412221 0321-6611392
12	Mahak Welfare Society	Local	Naw Shair, Pindi Bhattian	Women Development	Tariq Rasheed Sajid Iqbal	0300-7523912
13	Anjuman Islah-ul-Muslimin	Local	Pindi Bhattian	Education, Health, Library	Tanveer Ahmed Sheikh	0301-4478441
14	Haqooq-e-Insaniat Welfare Society	Local	Sukheki Mandi, Hafizabad	Health Welfare, Youth Welfare	Muhammad Aqeel-Rashid Pervaiz	0301-4334671 0344-6934251

S#	NGO Name	NGO Type (Local, National, International)	Location where they are working	Sector/Cluster of work (e.g. WASH, Health, Education)	Focal Person Name	Contact No.
15	Dehi Taraqiati council	Local	Sukheki Mandi, Hafizabad	Literacy, Women welfare	Qamar Ullah Shaheen	0547-530103 0300-4802374
16	Fatima-Tu-Zahra Welfare Society	Local	Pindi Bhattian	Women Development	Dr. Aqsa Zaman(president)	0322-7150981 0300-0430773

ANNEX VII: CONTACT LIST OF MAIN STAKEHOLDERS/ DEPARTMENTS

S#	Department	Designation	Person Name	Telephone (Office)	Telephone (Residential)	Mobile
1	Revenue	Focal Person for Disasters	Imran Asmat	0547-920017		0301-8665636
2	DC	DC	Muhammad Asif Raza	0547-920011		0304-0920069
3	Police	DPO	Bilal Sheikh	0547-920131-2		0321-8166661
4	Unit Hafizabad	CO	Ikramullah sandhu	0547-640464		0300-7522396
5	Unit Pindi Bhattian	CO	Qamar	0547-531412		0302-6626382
6	Unit Jalalpur Bhattian	CO	Ansar Mehmood	-		0306-6223519
7	Unit Sukheki	CO (Addl. Charge)	Ansar Mehmood	-		0306-6223519
8	ADC (G), Hafizabad.	ADC (G)	Hamid Nasar Goraya	0547-640061		0346-6626663
9	AC, Hafizabad	AC	Murad Hussain	0547-920005		0348-2103503
10	AC, Pindi Bhattian	AC	Mudassar Mumtaz	0547-531294		0300-3308267
11	Rescue 1122	DEO	Engr. M Naeem Akhtar	0547-920120 0547-920119		0300-8074275
12	Highways	XEN	Shadis Parvez	0547-640437		03007280910
13	Health	CEO	Dr Rehan	0547-525567		0300-7521154
14	Education	CEO	Javed Iqbal Babar	0547-920071		0301-8418339
15	GEPCO Hafizabad	XEN	Mohsin Ali	0547-583515		0318-3992240
16	GEPCO Jalalpur Bhattian	XEN	Salman Azmat	0547-581008		0318-3992250
17	Irrigation	XEN	Ghulam Rasool	0547-550490		0300-8699570

S#	Department	Designation	Person Name	Telephone (Office)	Telephone (Residential)	Mobile
18	Social Welfare	Deputy Director	Tasleem Zahira	0547-920081		0300-4534926
19	Civil Defence	DO	Ali Imran	0547-920079		0300-4806002
20	Live Stock	Addl. Director	Dr. Mudassar Hussain	0547-525138		0300-7969430
21	SNGPL	Incharge	Masood Khalid	0547-640068		0322-4356045
22	PTCL	Business Manager	Shamas Uddin Mumtaz	0547-523311		0334-4563366
23	DRTA	Sec. DRTA	Aadil Suhail	0547-540596		0335-4046728
24	Food	Dist. Food Controller	Usman Cheema	055-920045		0345-8653596

ANNEX VIII: LIST OF VOLUNTEERS

S#	Volunteer Name	CNIC	Address	Contact Number and Email	Blood Group	Time Required to be on-board
1.	منصب علی ولد محمد عباس					
2.	فضل احمد ولد محمد انور					
3.	ساجد علی ولد محمد بوٹا					
4.	خالد محمود ولد محمد صدیق					
5.	صفیہ بی بی زوجہ محمد یونس					
6.	شہناز بیگم زوجہ سیف اللہ					
7.	احمد علی ولد محمد صادق					
8.	ظہور احمد ولد محمد ولایت					
9.	نصر اللہ خان ولد محمود خان					
10.	جعفر علی ولد سلطان احمد					
11.	غلام عباس ولد عبدالغفور					
12.	عبدالوقاص ولد رحمت علی					
13.	ذوالفقار علی ولد محمد صدیق					
14.	بارون صالح ولد صالح مسیح					
15.	عثمان نواز ولد محمد نواز					
16.	محمد شہباز ولد احمد دین					
17.	عامر شہزاد ولد محمد صدیق					
18.	طیب ولد احمد نواز					
19.	عمیر شفیق ولد محمد شفیق					
20.	محمد آصف ولد محمد شہباز					
21.	محمد اسلم ولد قمر دین					
22.	مقصود عالم ولد محمد رمضان					
23.	نعمان ظہیر ولد ظہیر احمد					
24.	صداقت امداد ولد امداد حسین					
25.	عثمان ولد سائیں اللہ دتہ					
26.	رمضان احمد ولد احمد					

S#	Volunteer Name	CNIC	Address	Contact Number and Email	Blood Group	Time Required to be on-board
27.	محمد احتشام الحق ولد محمد ادريس					
28.	ارشاد احمد ولد محمد ارشد					
29.	قاسم علي ولد مشتاق احمد					
30.	شاهد عمران ولد نذر محمد					
31.	محمد عثمان ولد امان الله					
32.	حسنين اسلم ولد محمد اسلم					
33.	مظهر علي ولد محمد علي					
34.	اعجاز علي ولد بشير احمد					
35.	مزمّل حسين ولد عبدالرزاق					
36.	عماد جمشيد ولد جمشيد احمد					
37.	فيضان عرفان ولد خالد عرفان					
38.	محمد عدنان ولد عبدالرزاق					
39.	حميد الله ولد ظفر اقبال					
40.	ابرار قادر ولد غلام قادر					
41.	ابرار احمد ولد محمد عنايت					
42.	ذیشان احمد ولد ذوالفقار					
43.	جابر خان ولد مهدي خان					
44.	عبدالعزیز ولد سلطان محمد					
45.	حيدر ولد جاويد اسلم					
46.	محمد شهزاد ولد مشتاق احمد					
47.	نبيل فياض ولد فياض احمد					
48.	محسن حسن خان ولد نذر محمد					
49.	تبسم حسين ولد پرويز اقبال					
50.	محمد عثمان ولد محمد رمضان					
51.	محمد عمران ولد خان محمد					
52.	حافظ محمد نعمان ولد محمد نواز					
53.	محمد افضال ولد محمد شريف					

S#	Volunteer Name	CNIC	Address	Contact Number and Email	Blood Group	Time Required to be on-board
54.	عامر وقاص ولد نذر محمد					
55.	عامر شہزاد ولد لیاقت علی					
56.	سیطین الحسن ولد امجد علی					
57.	غلام حسنین ولد محمد اقبال					
58.	محمد امین ولد کالا خان					
59.	عبدالرحمن ولد خبیب عالم					
60.	محمد جمیل ولد سلام دین					
61.	خرم شہزاد ولد منظور احمد					
62.	اضرار احمد ولد افتخار حسین					
63.	اظہر علی ولد محمد علی					
64.	زابدہ بی بی زوجہ صابر علی					
65.	منیر احمد ولد محمد شریف					
66.	طاہرہ بی بی زوجہ ظفر عباس					
67.	ثاقب لطیف ولد محمد لطیف					
68.	ثاقب زابدول سلطان احمد					
69.	امداد حسین ولد غلام صفر					
70.	غلام رضا ولد غلام رسول					
71.	عثمان علی ولد محمد اکرم					
72.	محمد عامر ولد محمد سلیم					
73.	عدنان بشیر ولد بشیر احمد					
74.	محمد صفر ولد محمد سلیم					
75.	رستم علی ولد مشتاق احمد					
76.	سعد علی ولد جاوید اسلم					
77.	محمد یوسف ولد عبدالغفور					
78.	محمد ریاض ولد احمد خان					
79.	مجتبی شیرازی ولد ریاض حسین					
80.	شوکت حیات ولد شان خان					
81.	غلام جعفر ولد سلطان احمد					
82.	عاطف بشیر ولد بشیر احمد					

S#	Volunteer Name	CNIC	Address	Contact Number and Email	Blood Group	Time Required to be on-board
83.	امداد حسین ولد مظہر حسین					
84.	محمد مسلم ولد منیر احمد					
85.	محمد اشرف ولد نذر محمد					
86.	تتویر حسین ولد محمد منشا					
87.	قاسم ولد مہدی حسن					
88.	آصف علی سفیرا					
89.	ذیشان عمر ولد عمر دراز					
90.	آفتاب شہزادہ ولد مختار حسین					
91.	اکبر علی ولد خان محمد					
92.	شاہد علی ولد محمد ارشد					
93.	وارث علی ولد شمس الدین					
94.	نصر عباس ولد جہان خان					
95.	آصف علی ولد احمد علی					
96.	محمد افضال ولد منور					
97.	ممتاز حسین ولد اللہ دتہ					
98.	امان اللہ ولد غلام رسول					

ANNEX IX: POLITICAL CONSTITUENCIES

National Constituencies				Provincial Constituencies			
Name of constituency	Name of Sitting Parliamentarian	Portfolio	Contact Number	Name of constituency	Name of Sitting Parliamentarian	Portfolio	Contact Number
NA-87	Shokat Ali Bhatti	MNA	03008460012	PP-69	Muhammad Mamoon Tarar	MPA	03009469731
				PP-70	Muzaffar Ali Sheikh	MPA	03217467464
				PP-71	Muhammad Ahsan Jahangir	MPA	03227979171

ANNEX X: LOCAL GOVERNMENT

District and Tehsil Level

S#	Designation	District/Tehsil Name	Name	Contact Number	Mobile Number
1	District Chairman				
2	District Vice Chairman				
3	Tehsil Chairman				
4	Tehsil Vice Chairman				
5	Tehsil Chairman				
6	Tehsil Vice Chairman				
7	Tehsil Chairman				
8	Tehsil Vice Chairman				
9	Tehsil Chairman				
10	Tehsil Vice Chairman				
11	Tehsil Chairman				
12	Tehsil Vice Chairman				
13	Tehsil Chairman				
14	Tehsil Vice Chairman				

UC Level

S#	Tehsil	UC	Chairman	Chairman Contact	Vice Chairman	VC Contact
1	Hafizabad	KOT SAID MUHAMMAD	Rab Nawaz Tarrar	0321-6267187	Rai Muhammad Parvez Kharal	
2	Hafizabad	KOT ISHAQ	Mohsan Shoaib Tarrar	0345-4407905	Mansoor Ahmed	
3	Hafizabad	VANIKE TARRAR	Major Waqar Bashir Tarrar	0300-6529308	Riaz Ahmed Tarar	
4	Hafizabad	ALLA UD DIN KE	Abid Ihsan Chatha	0300-6529472	Waqas Afzal Tarar	
5	Hafizabad	SUIANWALA	Basharat Ali Chatha	0300-6527129	Muhammad Imran Khan	
6	Hafizabad	RAMKEY CHATHA	Muhammad Bakhsh Tarrar	0345-6961122	Toseef Nabi Chatha	
7	Hafizabad	DHERANKE LALKE	Tasawwar Hussain Tarrar	0337-7576000	Mudassar Ahmed Tarar	
8	Hafizabad	KOLO TARRAR	Muhammad Mamoon Tarar	0300-9469731	Muhammad Nasar	
9	Hafizabad	SANDHWAN	Muhammad	0344-8446497	Muhammad	

S#	Tehsil	UC	Chairman	Chairman Contact	Vice Chairman	VC Contact
		TARRAR	Hayat Tarrar		Sohail	
10	Hafizabad	PINDI BAWERAY	Muhammad Ashraf Bora	0300-7522838	Amjad Ali	
11	Hafizabad	CHAK KHARAL	Rana Zaigham Rasheed	0321-7973255	Saif Ullah	
12	Hafizabad	SAGAR KALAN	Khizer Hayat Chatha	0345-6987371	Sultan Ali	
13	Hafizabad	MANGAT NICHHA	Rana Atif Abbas	0333-4342800	Tariq Mehmood	
14	Hafizabad	DHUNNI	Rana Sajid Wakeel	0300-6529472	Muhammad Azam	
15	Hafizabad	CHAK CHATHA	Qaiser Abbas Chadhar		Irshad Ullah	
16	Hafizabad	VINNI	Rau Amjad Farooq		Khalid Mehmood	
17	Hafizabad	SOLANGI AWAN	Muhammad Iqbal Hanjra	0345-0459495	ADNAN AFZAL HANJRA	
18	Hafizabad	GEEGAY	Rai Muhammad Irfan Kharal		SYED SAQLAIN ABBAS SHAH	
19	Hafizabad	KARYALA	Faisal Hayat Bhoon	0343-6560215	MALIK WAQAS ASLAM AWAN	
20	Hafizabad	KASSOKI	Rana Zubair Akram	0300-6920968	MUHAMMAD SADIQ	
21	Hafizabad	KOT HASSAN KHAN	Malik Waheed Awan	0345-6653724	Muhammad Riaz	
22	Hafizabad	NAHRIANWALA	Muhammad Akram Bhatti		Rizwan Zulfiqar Bhatti	
23	Hafizabad	NANAUNA	Ch. Sikander Nawaz Bhatti		Ghulam Murtaza	
24	Hafizabad	KALEKI MANDI	Muhammad Afzal Arain	0300-6529211	Rai Fakhar Uz Zaman	
25	Hafizabad	UDDOKI	Rai Qamar Zaman	0300-6529977	Rai Muhammad Ali	
26	Pindi Bhattian	NOUTHIEEN	Rai Bashir Ahmed		Mustasar Hussain	
27	Pindi Bhattian	KOT SARWAR	Ihsan Ullah Bhatti	0333-7742211	Sikander Hayat	
28	Pindi Bhattian	NAWAN MANIKA	Sultan Ahmed Bhatti	0340-6215124	Shah Nawaz	
29	Pindi Bhattian	MATTEKI	Rai Sultan Safdar Ali	0343-2020111	Sahid Irfan	

S#	Tehsil	UC	Chairman	Chairman Contact	Vice Chairman	VC Contact
30	Pindi Bhattian	RASULPUR	Ch.Muhammad Bakhsh Tarrar	0300-6524122 0321-2355188	Jahan Khan Tarrar	
31	Pindi Bhattian	SOLANGI KHARRAL	Muhammad Shoukat Kharral	0322-3535335	Muhammad Waleed Khan	
32	Pindi Bhattian	KASSISAY	Rai Muhammad Zaman	0343-4340087	Afzal Khan	
33	Pindi Bhattian	BHOBHRA	Fida Hussian Bhatti		Ch. Saif Ullah Bhatti	
34	Pindi Bhattian	WIJHWAN	Rai Muhammad Ishaq	0345-4629604	Sadiq Hussain Shah	
35	Pindi Bhattian	THATTA KHAIROO MAMCSL	Sardar Babar Sohail		Saif Ullah Khan	
36	Pindi Bhattian	KOT NAKKA	Qamar Javed Gujjar		Gulzar Hussain Bhati	
37	Pindi Bhattian	MUSTAFA ABAD	Haji Muhammad Ashraf	0321-8637183	Mansab Ali	
38	Pindi Bhattian	BADAR ALI	Fateh Shair Kharral	0345-7904830	Irshad Ullah	
39	Pindi Bhattian	THATTA KARIM DAD	Hafiz Mubassar Hanif		Sana ullah	
40	Pindi Bhattian	BEHLOLPUR	Mian Babar Hussain	0345-8412125 0301-4471214	Ghulam Hussain	
41	Pindi Bhattian	BAGH KOHNA	Mian Azhar Abbas Bhatti		Muhammad Khan	
42	Pindi Bhattian	TAHLY GURAYA	Zafar Ullah Goraya	0300-7520358	Saif Ullah	
43	Pindi Bhattian	KHURRAM CHORAIRA	Syed Zafar Hussain Shah	0300-4490945	Jahangir Khan	
44	Pindi Bhattian	SADHOKI	Azhar Zaman Bhatti	0342-6498846	Aman Ullah	
45	Pindi Bhattian	PINDI DHODAL	Qadar Bakhsh Bhatti	0300-8453186	Mian Nasir Iqbal	
46	Pindi Bhattian	CHAK BHATTI	Aman Ullah Bhatti	0321-7521111	Gulzar Hussain	

ANNEX XI: DATA COLLECTION PERFORMAS

P1: House Damage Assessment

District: _____

Date: _____

S#	Name	Father Name	CNIC	Address	Revenue Estate	Union Council	Tehsil	Partially/Completely	Katcha/Pakka	%age of Damage	Contact No.	GPS Coordinates	Picture Taken (Y/N)
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P2: Deceased Person Reporting Performa

District: _____

Date: _____

S#	Name of deceased	Father's name	Address	Domicile	Gender	Age	CNIC	Cause of death	Date of death	Place of death	Marital status	Next of kins (Name and Contact and CNIC etc.)	Verifying Officer (Name, Designation and Contact)	Compensation Paid or not
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P3: Injurd Person Reposrting Performa

District: _____

Date: _____

S#	Name of injured	Father's name	Address	Domicile	Gender	Age	CNIC	Cause of injury	Date of injury	Injury Type (Permanent or Temporary)	Compensation Paid or not
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P4: Cattle Head Perished

District: _____

Date: _____

S#	Name of Farmer	Father Name	CNIC	Mauza	Tehsil	Type of Animals	Number of Animals (Cow, sheep etc.)	Vaccinated/Unvaccinated	Witness 1 name and contact No.	Witness 2 Name and Contact No.
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P5: Crop Damages

District: _____

Date: _____

S#	Tehsil	Qanoongoi	Union Council	Mauza	Farmer Name	Land owner/Tenant	CNIC of farmer	Contact number	Type of Crops	Total land affected (acres)	% of mauza affected
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P6: Relief Distribution Tracking Performa

District: _____

Date: _____

S#	Location/ Destination	Arrival Date and time	Items	Quantity	Items short (if any)	Items sent by	Driver name	Received by	Bilty no
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P7: Private Machinery (Boats, Bulldozers, cranes etc.)

In case of mega disaster that overwhelms the resources of the Government in certain area, the equipment of private owners are engaged to continue with evacuation, rescue or relief services. The following template is filled to maintain a record of boat owners that might be engaged at the time of a disaster.

District: _____

Date: _____

S#	Name of boat owner	Father name	Contact Number	Age	CNIC	Location of boat/Machinery	Type of Machinery (Boat, Bulldozers, Cranes etc.)	Engine type	Boat capacity	Equipment Condition	Number of Machinery
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P8: Relief camp registration Performa

New entrants in the relief camps should be documented on a weekly basis by utilizing the following template:

District: _____

Date: _____

S#	Nationality	Domicile	Male	Female	Age	Children Under 12	Infants under 3	Sick	Injured	Pregnant

P9:NGOs registration performa

All the Non-Governmental Organizations operating in the disaster affected areas should register themselves at PDMA's website. The following template has been developed for NGOs assisting the Government in disaster response.

District: _____

Date: _____

S#	Name of NGO	Local /INGO	Relief activity	Relief camp if any	Focal person in the district	Registered with PDMA	Foreigners to be visiting or not.

P10: Control Room

PDMA requires all districts to setup a control room at the incidence of a disaster. This control room would plan and execute a well-knit Governmental disaster response by bringing together all representatives of the various Governmental departments. This control room would be operational around the clock and PDMA must be informed about its operation and in-charge by filling the following template:

District: _____ Focal Person: _____ Date: _____

S#	Location of control room	Shift I Incharge Name and Contact	Shift II Incharge Name and Contact	Shift III Incharge Name and Contact	Phone Numbers	Fax Numbers	E- Mail Address

ANNEX XII: CAMP MANAGEMENT SOPS

- Camps would be established in areas accessible by metalled roads so that provision of essential facilities is not difficult
- Basic facilities such as food, clean drinking water, health, hygiene and sanitation should be available at these shelters.
- Proper registration mechanism should be in place to differentiate between those actually affected and cunning opportunists
- Proper security system should be in place in coordination with the local police as the presence of police always acts as deterrence for criminals who may be attracted to such places.
- Emergency medical care should be available as well as a proper firefighting system as fire out breaks are common in such tents
- Proper camp management should be announced and notified and there should be a complaint cell as well
- A proper distribution mechanism should be in place to ensure that the needy get what they deserve.
- Scattered camps should be catered for and encouraged to join the main camp.
- At times shallow hand pumps are not safe for drinking as the water underground has been affected. In such cases clean medicated water should be provided through water bowsers.
- Vector control is an essential part of the camp management and steps should be taken to remove rats, snakes and mosquitoes etc.
- Un-accompanied and missing children shall be placed separately with proper care and fulfilment of their physical and psycho-social needs.
- Needs of women as per local and cultural environment shall be considered for establishing separate relief camps for ladies with provision of proper security and light arrangements.

Land	3.0-4.5 square meter per person
Shelter	3.5 square meter per person
Water	15-20 liters per person per day
Food	2100 kcal per person per day
Toilet	One per family of 6-10 persons
Health Centre	One per 20,000 persons
Child Friendly Spaces	2-4 year olds- 15 children:2 facilitators
	5-9 year olds-20 children : 2 facilitators
	10-18 year olds- 30 children :2 facilitators
Hospital	One for as many as 200,000 persons

ANNEX XIII: FLOOD BUNDS

INFORMATION REGARDING FLOOD BUND CATEGORY A

SR:#	NAME OF DIVISION	NAME OF EMBANKMENT / BUND	LENGTH (ft)
SARGODHA ZONE			
1	Rasul Head works Division	Right Guide Bund	2,121
2	-do-	Left Guide Bund	3,360
3	-do-	Right Guide Spur	2,762
4	-do-	Left Marginal Bund	17,170
	Total in feet.		25,413
	Total in Miles.		4.81
PMO BARRAGES			
1	Kalabagh H/Works Division	Jinnah Barrage	25,080
-	Total in feet.		25,080
-	Total in Miles.		4.75
FAISALABAD DIVISION			
1	Khanki Division	Left Marginal Bund	21,000
2	-do-	Right Marginal Bund	29,000
3	Jhang Division	Jhang Flood Protection Bund	43,875
4	Qadirabad Barrage Division	Left Marginal Bund	20,000
5	-do-	Right Marginal Bund	20,000
	Total in feet.		133,875
	Total in Miles.		25.36
BAHAWALPUR ZONE			
1	Punjnad Head works Division	Right Marginal Bund	15,000
2	-do-	Left Marginal Bund	15,000
3	-do-	Colony Protection Bund	15,000
4	Khanpur Canal Division	Minchin Flood Bund	10,000
	Total in feet.		55,000
	Total in Miles.		10.42
MULTAN ZONE.			
1	Trimmu Division	Right Marginal Bund	20,000
2	-do-	Left Marginal Bund	20,000
3	Sulemanki Division	Left Marginal Bund	10,000
4	-do-	Right Marginal Bund	10,000
5	Shuja Canal Division	Right Bank of Shujabad Branch	10,000
6	-do-	Akbar Flood Bund	10,000
	Total in feet.		80,000
	Total in Miles.		15.15
D.G.KHAN ZONE			
1	Taunsa Barrage	Right Guide Bund Upstream	15,000
2	-do-	Left Guide Bund	20,000
3	-do-	Shahwala Groyne	10,000
4	Muzaffargarh Canal Division	Muzaffargarh Flood Bund	50,000
5	-do-	Doaba Flood Bund.	5,000
6	-do-	Khargarh Flood Bund	5,000
7	-do-	Khanwah Flood Bund	5,000
8	Jampur Construction Division	Jampur Flood Bund	5,000
9	-do-	Rojhan Flood Bund	20,000
	Total in feet.		1,35,000
	Total in miles		25.57

LBDC(IP)			
1	Balloki Head works Division	Left Marginal Bund	15,000
2	do	Right Marginal Bund	15,000
	Total in Feet		30,000
	Total in miles		6
LAHORE ZONE			
1	FLOOD Bund Division Narowal	Jassar Highway Bund	10,000
2	do	Rayya flood Bund	5,000
3	Pasrur Link Division Sialkot	City Flood Protection Bund along Aik Nullah	7,340
4	do	Hajoipur Flood Protection Bund along Aik Nullah	86,00
5	do	Left Flood Protection Bund over deg Nullah from defence embankment to Zafarwala Kingra road	10,000
6	Marala Division UCC	Left Marginal Bund	50,000
7	do	Right Marginal Bund	10,000
8	Lahore Drainage Div.	Shahdara Flood Protection Bund	15,000
	Total in Feet		115,940
	Total in miles		22
	Grand total in miles		114

INFORMATION REGARDING FLOOD BUND CATEGORY B

S#	Name of Division	Name of Embankment / Bund	Length (ft.)
SARGODHA ZONE			
1	Rasul Headworks Division	Important / Vulnerable Reaches	10,000
2	Bhakkar Division	-do-	10,000
3	Layyah Division	-do-	10,000
4	Jhelum Division	-do-	5,000
	Total in feet.		35,000
	Total in miles		6.63
FAISALABAD ZONE			
1	Khani Division	-do-	20,000
2	Jhang Division	-do-	50,000
3	Qadirabad Barrage Division	-do-	60,000
4	Burala Division	-do-	35,000
	Total in feet.		165,000
	Total in miles		31.25
BAHAWALPUR ZONE			
1	Punjnad Headworks Division	-do-	90,000
2	Khanpur Canal Division	-do-	100,000
3	Bahawalpur Canal Division	-do-	50,000
4	Rahimyar Canal Division	-do-	50,000
	Total in feet.		290,000
	Total in miles		54.92
MULTAN ZONE			

1	Trimmu Division	-do-	80,000
2	Suleimanki Division	-do-	50,000
3	Shujabad Canal Division	-do-	60,000
	Total in feet.		190,000
	Total in miles		35.98
D.G.KHAN ZONE			
1	Taunsa Barrage	-do-	80,000
2	Kot Adu Canal Division	-do-	90,000
3	Muzaffargarh Canal Division	-do-	180,000
4	River Diversion Division	-do-	80,000
5	Jampur Construction Division	-do-	140,000
6	D.G.Khan Construction Division	-do-	60,000
	Total in feet.		630,000
	Total in miles		119.32
LBDC (IP)			
1	Balloki Headworks Division	-do-	40,000
2	Okara Division	-do-	40,000
3	Sahiwal Division	-do-	20,000
	Total in feet.		100,000
	Total in miles		18.94
LAHORE ZONE			
1	Flood Bund Division Narowal	-do-	40,000
2	Pasrur Link Division Sialkot	-do-	10,000
3	Chakbandi Division	-do-	20,000
4	Marala Division UCC	-do-	50,000
5	Lahore Drainage Division	-do-	80,000
6	Kasur Division	-do-	80,000
7	Gujranwala UCC	-do-	100,000
8	Rachna Drainage	-do-	42,000
	Total in feet.		422,000
	Total in miles		79.92
PMO BARRAGES			
1	Jinnah Barrage	-do-	20,000
	Total in feet.		20,000
	Total in miles		3.79
	Grand Total (in miles)		350.76

ANNEX XIV: RIVER DISCHARGE RATES

River	Gauge Site	Designed Capacity (lac Cs)	Flood Limits in Lac Cs.				
			Low	Med:	High	Very High	Exp. High
INDUS	Kalabagh	9.5	2.5	3.75	5	6.5	8
	Chashma	10	2.5	3.75	5	6.5	8
	Taunsa	10	2.5	3.75	5	6.5	8
JHELUM	Kohala	12	1	1.5	2	3	4
CHENAB	Mangla	10.6	0.75	1.1	1.5	2.25	3
	Rasul	8.5	0.75	1.1	1.5	2.25	3
	Marala	11	1	1.5	2	4	6
	Khanki	8	1	1.5	2	4	6
	Qadirabad	9	1	1.5	2	4	6
	Trimmu	6.45	1.5	2	3	4.5	6
	Punjnad	7	1.5	2	3	4.5	6
RAVI	Jassar	2.75	0.5	0.75	1	1.5	2
	Ravi Syphon	4	0.4	0.65	0.9	1.35	1.8
	Shahdara	2.5	0.4	0.65	0.9	1.35	1.8
	Balloki	2.25	0.4	0.65	0.9	1.35	1.8
SUTLEJ	Sidhnai	1.5	0.3	0.45	0.6	0.9	1.3
	G.S.Wala	10 ft.	19.5	21.5	23.3	25.3	
	Suleimanki	3.25	0.5	0.8	1.2	1.75	2.25
	Islam	3	0.5	0.8	1.2	1.75	2.25
	Mailsi Syphon	4	0.75	1.1	1.5	2.25	3

ANNEX XV: LIST OF BASIC TERMS

Acceptable risk

The level of loss a society or community considers it can live with and for which it does not need to invest in mitigation

Biological hazard

Biological vectors, micro-organisms, toxins and bioactive substances, which may cause the loss of life or injury, property damage, social and economic disruption or environmental degradation.

Capacity

A combination of all the strengths and resources available within a community, society or organization that can reduce the level of risk, or the effects of a disaster.

Capacity may include physical, institutional, social or economic means as well as skilled personnel or collective attributes such as leadership and management. Capacity may also be described as capability.

Capacity building

Efforts aimed to develop human skills or societal infrastructure within a community or organization needed to reduce the level of risk. In extended understanding, capacity building also includes development of institutional, financial, political and other resources, at different levels of the society.

Climate change

The climate of a place or region is changed if over an extended period (typically decades or longer) there is a statistically significant change in measurements of either the mean temperature or variability of the climate for that region.

Coping capacity

The means by which people or organizations use available resources and abilities to face a disaster. In general, this involves managing resources, both in normal times as well as during crises or adverse conditions.

Disaster

A serious disruption of the functioning of a community or society causing widespread human, material, economic or environmental losses which exceed the ability of the affected community or society to cope using its own resources. It results from the combination of hazards, conditions of vulnerability and insufficient capacity to reduce the potential negative consequences of risk.

Disaster risk management (DRM)

The comprehensive approach to reduce the adverse impacts of a disaster. DRM encompasses all actions taken before, during, and after the disasters. It includes activities on mitigation, preparedness, emergency response, recovery, rehabilitation, and reconstruction.

Disaster risk reduction/disaster reduction

The measures aimed to minimize vulnerabilities and disaster risks throughout a society, to avoid (prevention) or to limit (mitigation and preparedness) the adverse impacts of hazards, within the broad context of sustainable development.

Early warning

The provision of timely and effective information, through identified institutions, to communities and individuals so that they could take action to reduce their risks and prepare for effective response.

Emergency management

The management and deployment of resources for dealing with all aspects of emergencies, in particularly preparedness, response and rehabilitation

Forecast

Estimate of the occurrence of a future event (UNESCO, WMO). This term is used with different meanings in different disciplines.

Geological hazard

Natural earth processes that may cause the loss of life or injury, property damage, social and economic disruption or environmental degradation. For example earthquakes, tsunamis, volcanic activity and emissions, landslides, rockslides, rock falls or avalanches, surface collapses, expansive soils and debris or mud flows.