

DISTRICT DISASTER MANAGEMENT PLAN 2022

Division: Multan

District: Multan



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Flood

Estimated number of people at risk of **floods** in 2018



Risk: High

Hill Torrent

Estimated number of people at risk of Hill Torrent in 2018



Risk: Low

Earthquake

Estimated number of people at risk of **earthquake** in 2018



Risk: High

Epidemic

Estimated number of people at risk of **epidemic** in 2018



Risk: Low

EXECUTIVE SUMMARY

Multan's history ways back 5000 BC. It was ruled by various ancient empires i.e. Indo-Greek Kingdom, Kushan Empire, Gupta Empire, White Huns, Kushano-Hephthalites and Shah Kingdom. During Muslim era, Dehli Sultnate and Mughal Empire also ruled here. British came here in 1849 and established system of Administration and Transportation Network. It is a center of Islamic teachings and many Sufi Saints established their schools to spread Islam in Sub-Continent. CDG Multan was created in 2005.

Major Hazards

- Floods
- Earthquake
- Building Collapse
- Fire Incidents
- Road Traffic Accidents
- Bomb Blast / Terrorism

Response Objectives are as follows:

- Established the institutional and legal system for disaster management
- Prepare Disaster Management Plans at various levels
- Conduct multi-hazard, vulnerability and risk assessment
- Establish multi-hazard early warning and evacuation systems
- Promotion of training, education and awareness in relation to disaster management.

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	4745109
2.	No. of Tehsils	4
3.	No. of UCs	185
4.	No. of Revenue Estates	534
5.	Population Density (people per km ²)	837.9
6.	Family Size	7.2
7.	Pop Growth Rate	2.23
8.	PCI	
9.	District GDP/Annual Income	
10.	Poverty Rate	
11.	Patient/Doctor Ratio	15000/1
12.	AMR	
13.	IMR	62
14.	MMR	227
15.	Literacy Rate	60 %
16.	Global Acute Malnutrition (GAM) rate	28.4 % PAKISTAN NATIONAL NUTRITION SURVEY 2018
17.	Severe Acute Malnutrition (SAM) rate	-
18.	Percentage of population having access to clean drinking water	25.61%
19.	Annual Crime	38250

Population

Total	Male	Female
4745109	2437412	2307504

Source/Note: http://www.pbs.gov.pk/sites/default/files//DISTRICT_WISE_CENSUS_RESULTS_CENSUS_2017.pdf

Number of Dwelling Units	Urban	Rural
760858	330,874	429,984

Area (in acres) 935891

Total Area of District in Km ²	Area under cultivation	Cultivation in Settled Area	Cultivation in Baid Area
3721	759766	759766	117697

LITERACY RATE

Overall	Rural		Urban		Total	
	Male	Female	Male	Female	Male	Female
60%	12.7%	8.1%	54%	32%	65.9%	40.5%

Government Schools

Private Schools

Government Schools				Private Schools			
		Schools	Enrollment			Schools	Enrollment
Total/ Overall		1391	341092	Total/ Overall		1417	405764
Boys	Primary	356	82312	Boys	Primary	31	18910
	Middle	102	38689		Middle	517	180800
	High	109	68525		High	179	16112
Girls	Primary	647	76445	Girls	Primary	13	5230
	Middle	112	56864		Middle	428	151200
	High	65	18257		High	249	33512
Co-Education	Primary	0	0	Co-Education	Primary	0	0
	Middle	0	0		Middle	0	0
	High	0	0		High	0	0
Special Education	-	13	1451	Special Education	-	-	-

Source. schoolportal.punjab.gov.pk/sed_census/new_emis_details.aspx?distId=361--Multan

Higher/Technical/Professional Education (Public & Private)

Particulars	College	Universities	Professional	Technical	Commerce	Total
No of Institution	23	5	1	8	03	40
No of Students	33387	79,216	416	11586	2756	127361

Health Facilities

Particulars	Primary	Secondary	Tertiary	Private Hospital	Total
No. of Facilities	157	5	01		
Annual OPDs	226349	874586	1566756		
No of beds	470	310	1800		
Doctors Available	236	126	377		
Paramedical staff	947	192	234		
Ambulances available	27				
Mobile Medical Units					

Livestock:

Cattle	Buffalo	Total Large Animal	Sheep	Goat	Total Small Animals	Poultry
553660	348096	901756	151208	520701	671909	702947

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

Agriculture	Livestock	Poultry	Fish Farming	Services (Public & Pvt)	Business	expatriate	Industrial Labor	Skilled Labor	Unskilled Daily Labor	General Labor
40%	10%	1.2%	0.43%	6%	15%	02%	10%	8%	10%	5%

Disaster History - Floods

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	2010	132113	-	121	4310	7659	-	2010
2	2013	121090	1	111	139	31	3015000	
3	2014	156063	12	121	4866	7960	-	
4	2015	-	-	-	-	-	-	
5	2016	-	-	-	-	-	-	
6	2017	-	-	-	-	-	-	
7	2018	-	-	-	-	-	-	
8	2019	-	-	-	-	-	-	
9	2020	76816	05	90	0	0	3.2 M	
10	2021	-	-	-	-	-	-	

Disaster History – Other disasters (since 1970)

S#	Year	Disaster Type	No. of people affected	No. of deaths	Remarks
1					
2					
3					
4					
5					
6					
7					
8					

General Information

Particulars	Detail
Neighboring districts and their vulnerabilities	Khanewal, Vehari, Lodhran & Muzaffar Garh
Topographical Features	
Weather/Climate pattern	Temperature: max. 50 and min 0 Annual precipitation: <i>average</i> 186.8 mm (7.4 in) of <i>rainfall</i> per year Dust and Hail storms, heat waves from May to August No snow in Multan
Major Rivers	Name of river, passing through areas along with length in the district Major Barrages and their Flood levels Chanab & Satlaj
Major Nullahs / Streams	Name of river, passing through areas along with length in the district Flood levels 50 Kilometers-River Chanab 8-10 Kilometers-River Satlaj
Motorway/Highway	Vulnerable points of motorway/highway Shershah Road Head Muhammad Wala Road
Railways	Vulnerable points of Railway Multan-Sher Shah Railway Track
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	NIL	NIL	NIL	NIL	NIL	-

Major Embankments/Bunds

S. No.	Name of flood bund/spur	District	Length (Miles)	Top width (Ft)	Free board (Ft)	River side
1	Chenab Flood Bund RD.100-157950 tail.	Multan	11.59	25	6	3:1
2	Nawabpur Escape Bund left and right RD.0-8000x2=16000.	-do-	3.20	16	5	3:1
3	Nawabpur Flood Bund 0-17950.	-do-	3.60	25	6	3:1
4	Muzaffarabad Flood Bund 0-12710.	-do-	2.50	12	4	3:1
5	Akbar flood bund 0-21710.	-do-	4.30	25	6	3:1
6	Right bank of Shujabad Branch RD.231000-279000	-do-	9.6	20.0	6	3:1
7	Sher Shah Flood Bund Rd.0-20437	-do-	4.08	25	6	3:1
8	Sher Shah Railway Flood Bund Rd.0-15100 tail	-do-	3.02	25	6	3:1
9	Right Bank of Gajju hatta Branch as a 1st Defence line RD.17-35	-do- -do-	3.60	25	6	3:1
10	Nagni Flood Bund. RD.0-51000 Tail.	-do-	10.20	25	6	3:1
11	Dhundo Flood Bund RD 0-26500.	-do-	5.30	25	6	3:1
12	Gardezipur Flood Bund RD. 0-15750.	-do-	3.28	25	6	3:1
13	Sat Burji Flood Bund RD:54-72000 of Sat Burji Disty:	-do-	3.70	25	6	3:1
14	Jalalpur Khakhi Flood Bund RD. 0-.60000	-do-	12.00	25	6	3:1

15	Tie Flood Bund RD.0-8400	-do-	1.72	25	6	3:1
16	Baloch Wah Flood Bund RD.0-62230 tail.	-do-	12.44	25	6	3:1
	TOTAL		94.13			

Breaching Section

Name of Bund/ Embankment	Name of Breaching Section	Location with GPS Coordinates	Likely Affected Revenue Estate	Remarks
Sher Shah Railway Flood Bund	Sher Shah Breaching Section	X: 300446.00 Y: 711919.70	Gagra kachoor, Mirza Pur Jambhour Khan pur Qazi	
Head Muhammad Wala	Approach Road Head Muhammad Wala	X:301710.30 Y: 712303.40	Basti Mangana Purana Grey Wal, Basti Mala karloo, Basti Akbar pur, Basti Islamabad, Basti Chak Mahani, Basti Jhok Billu, Basti Grey Wal, UMER PUR, Basti Sial, Basti Aroka, Miana Wali.	

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

Name	Capacity	GPS Coordinates	Name	Capacity	GPS Coordinates
Sher Shah Oil Depot	-	X: 30.099660 Y: 71.341958			

Airport / Landing Strips

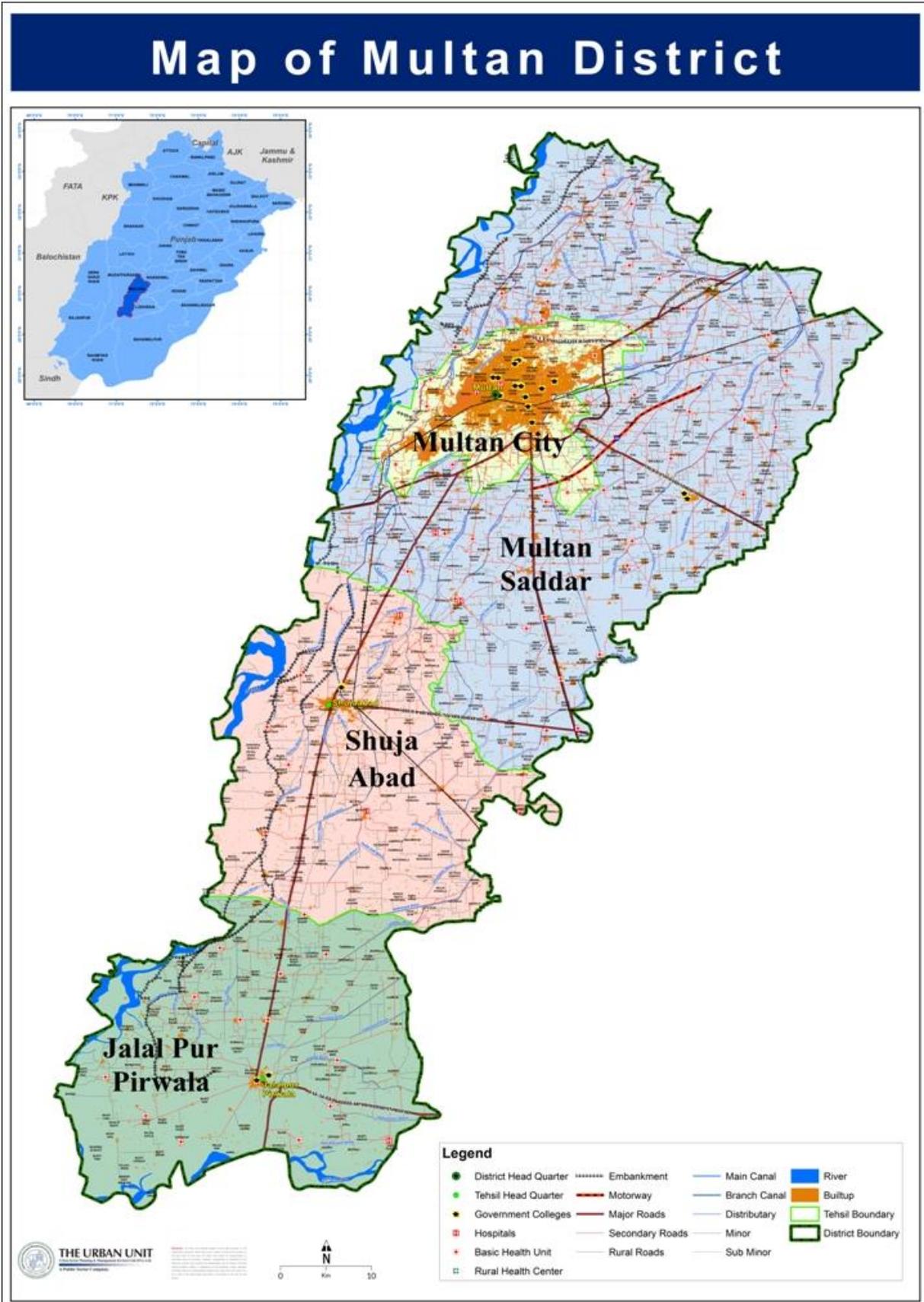
Type	Area Name	GPS Coordinates	Type	Area Name	GPS Coordinates
Multan International Airport	Multan Cantt	X:30.114707 Y: 71.252656			X: Y:

Govt. storage facilities/warehouses in the district

Facility Type	Capacity	Location with GPS Coordinates	Facility Type	Capacity	Location with GPS Coordinates
NIL	NIL	NIL			

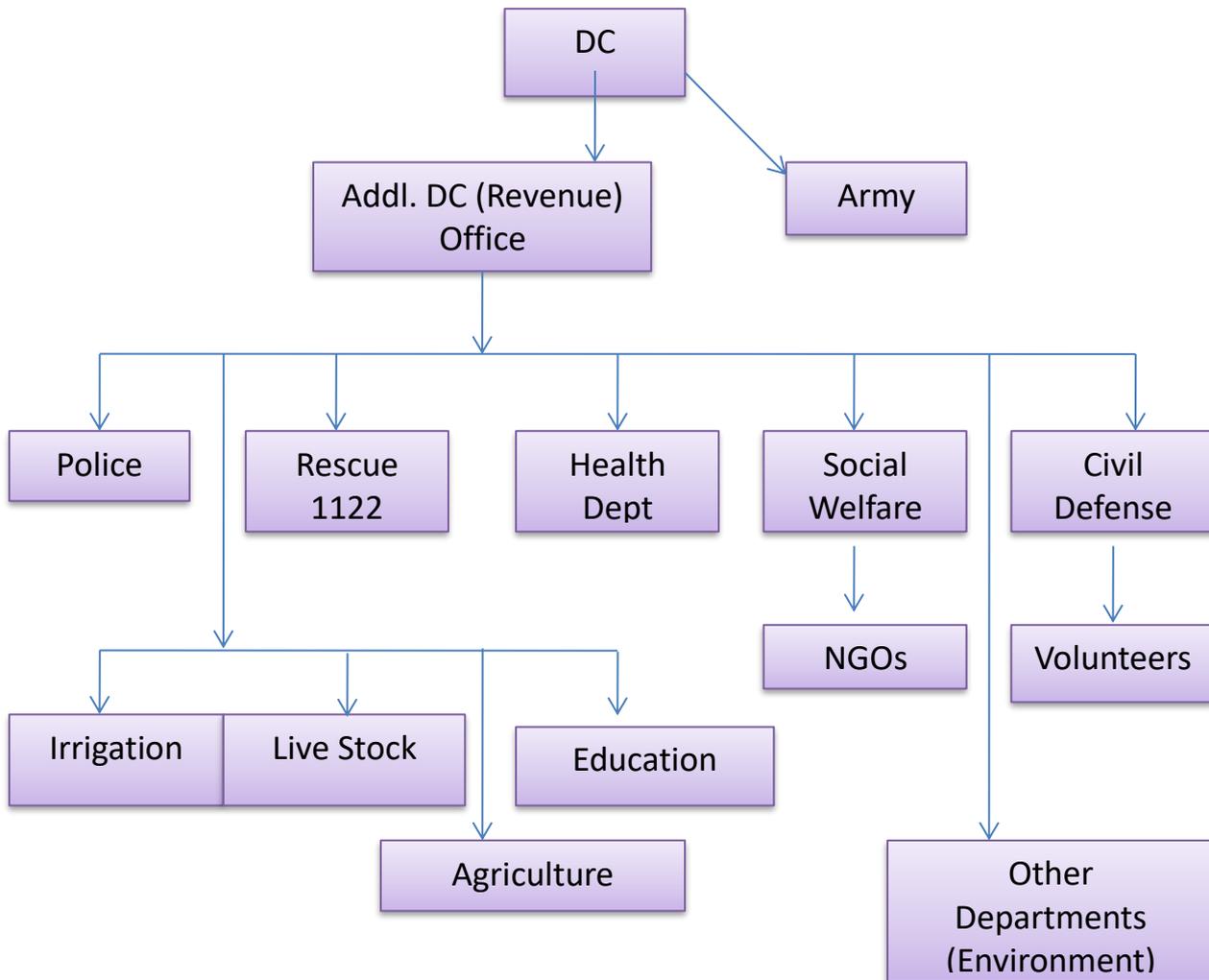
DISTRICT BASELINE/REFERENCE MAP

Source:



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 DCO/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

Tehsil / Town Municipal Administration (TMA)

- Tehsil / Town Municipal Administration (TMA) 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.
- Tehsil / Town Municipal Administration TMA will provide assistance to the District Government for setting up and management of relief camps/ operations.
- TMAs are responsible for provision & restoration of water and sanitation facilities in their municipalities besides disposal of waste or rain water/sewerage.
- TMAs 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.
- TMAs sanitary workers can be employed for cleaning relief camps, or other such areas which has been affected by any disaster.

- TMAs employ de-watering sets to remove excess water. All TMAs are required to ensure the maintenance of all dewatering sets prior to the monsoon season. The TMA maintains a list of all the choking points where rainy water accumulates as a result of heavy storms which can cause urban flooding.
- TMA should ensure supply of clean drinking in overhead reservoirs and ensure supply to the affected areas or relief camps through water bowsers. Clean drinking water is a major issue and requirement during any disaster.
- In case of any disaster that requires people to be relocated, the TMA 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 TMAs 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)

- DDMA's 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 CPO and line departments such as Health, Agriculture, Livestock, Civil Defence, 1122, TMAs 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 TMAs.
- 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 DDMA's for whole of the province:
 - i. **Deputy Commissioner (Chairperson)**
 - ii. Mayor of Municipal Corporation
 - iii. Chairman District Council
 - iv. City Police Officer
 - v. Two Elected Representatives to be nominated by the Chair
 - vi. Representative of Pak Army
 - vii. Two Representatives of NGOs/Civil Society to be nominated by the Chair
 - viii. Chief Executive Officer (Health)
 - ix. Chief Executive Officer (Education)

- x. Additional Director Livestock
- xi. Deputy Director Agriculture (Extension)
- xii. District Food Controller
- xiii. SP/DSP Special Branch
- xiv. Executive Engineer, Irrigation
- xv. Executive Engineer, Public Health
- xvi. Executive Engineer, Highways
- xvii. Executive Engineer, Buildings
- xviii. District Emergency Officer, Rescue 1122 (Secretary)
- xix. Representative of Red Crescent
- xx. All Chief Officers Municipal Corporation/committees/District Council
- xxi. Federal Government Officers which the DDMA's decide to co-op as per powers delegated under section 20 & 22 of NDM Act 2010.

- District Governments must establish a Disaster / Flood control room at the DCO'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 District Government 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.
- Executive District Officer (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.
- EDO (Agriculture) and DO 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.

Role of Rescue 1122 in districts during disaster

- The immediate evacuation of people from the disaster prone and vulnerable areas.
- Provision of immediate medical aid during any emergency and at the same time transporting the injured or sick to the nearby hospital through their team of ambulances.
- In flood situations rescuing people from drowning in the strong currents is a specialty of 1122 as it has its own set of divers and boats. Similarly in case of collapsed buildings or structures the 1122 is equipped with heavy machinery to cut through heavy debris.
- Apart from that responsible deployment of fire fighters, cordoning of hazardous areas, provision of first aid and medical treatment, immediate search and rescue of victims and management of the pre-hospital emergency system.
- Rescue 1122 is well trained in setting up medical camps for provision of emergency medical treatment. These camps are setup by Rescue 1122's doctors and paramedic staff.

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: Loudspeaker's 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

District Emergency operation centre (DEOC)

- The District Emergency Operation Centre (DEOC) established in the Rescue 1122 Office Kalma Chowk will be operational 24/7 round the clock with landline number 061-9200357
- Additional Deputy Commissioner (Rev)/District Flood Relief Officer will be overall incharge of DEOC.
- All the emergencies will be monitored in DEOC.
- Duty roster will be issued by the ADC-R/DEOC Incharge.
- The officials deputed for duty shall be given training by the DEOC Incharge about their role and duties.
- The officers/officials on duty at DEOC, will note each and every complaint received telephonically and through pront/electronic media & will take action as per SOPs of the operational manual of DEOC.
- The foregoing arrangements shall also be made on the similar pattern at offices of the Assistant Commissioners officers.
- During monsoon season, (in normal situation) Information regarding discharge position of River Chenab and all Nullahs in the District shall be received twice a day, in case of any potential threat or emergency, frequency of information shall be increased.
- During Monsoon season, the following departments shall also establish their Departmental Flood Control Rooms on the similar pattern.
 - Metropolitan Corporation, Multan
 - WASA
 - POLICE
 - Irrigation
 - Rescue 1122
 - Municipal Committees, Shujabad & Jalalpur Pirwala

District Emergency Operation Center (functions and responsibilities)

- Organization of Flood Control
- Deputy Commissioner
- Control Room
- Additional Deputy Commissioner (R)
- Sectors
- Sector 1 Sector 2 Sector 3 Sector 4
- City Saddar Shujabad Jalalpur Pirwala
- AC office AC Office AC Office AC Office
- District Flood Control Room in the office of Deputy Commissioner Office will be established.
- Comprehensive district level stakeholders' meetings are conducted to enhance liaison between irrigation, Revenue, Rescue 1122, Health, Municipal Corporation, District Council, Municipal Committees, Civil Defence, Agriculture, Livestock, etc.
- Mock search and rescue exercises to enable staff of the district and tehsil administrations have been planned. District Emergency Officer, Rescue 1122 Multan will conduct the training programmes.
- A list of important telephone numbers/available machinery within district has been prepared.

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 centres 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.

Role of Rescue 1122 Multan

The immediate evacuation of people from the disaster prone and vulnerable areas.

- Provision of immediate medical aid during any emergency and at the same time transporting the injured or sick to the nearby hospital through their team of ambulances.
- In flood situations rescuing people from drowning in the strong currents is a specialty of 1122 as it has its own set of divers and boats. Similarly in case of collapsed buildings or structures the 1122 is equipped with heavy machinery to cut through heavy debris.
- Apart from that responsible deployment of fire fighters, cordoning of hazardous areas, provision of first aid and medical treatment, immediate search and rescue of victims and management of the pre-hospital emergency system.
- Rescue 1122 is well trained in setting up medical camps for provision of emergency medical treatment. These camps are setup by Rescue 1122's doctors and paramedic staff.
-

Civil-Military Coordination Mechanism

To meet the flood situation successfully, Army shall be deployed along banks of River Chanab upon formal requisition of by the DC on request of ADC Revenue and District Emergency Officer, Punjab Emergency Service Department, Multan. 02 Army Units are likely to be deployed for relief operation in case of any emergency; Army will establish Control Center at Headquarters 111 Independent Infantry Brigade, Westridge Multan. This Center will assist the Civilian Authorities in relief operations and restoration of services in the areas of emergency.

Volunteer Network

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

There are 210 volunteers registered with the Civil Defense. Civil Defence Officer remains continuous in touch with the volunteer by means of their participation in different training programs conducted for their capacity buildings and in different events (National & International). In case of disaster already designated Team Leader is contacted first, who subsequently disseminate the same information to all team members for coordinated response.

RISK ANALYSIS

1. Potential hazards of the district

Hazards	Likelihood (Score 1-5)	Impact (Score 1-5)	Risk
Floods	3	4	12
Urban Flooding	2	3	6
Flash Floods	2	2	4
Hill Torrent	-	-	-
Glacial Lake Outburst Flood (GLOF)	-	-	-
Landslide	-	-	-
Tornado	-	-	-
Earthquake	2	2	4
Drought	2	2	4
Epidemic	2	2	4
Fire Incidents	4	4	16
Other Major Accidents (Building Collapse, road traffic accidents, train accident, Stampede, plane crash)	5	4	20
Environmental Hazards (industrial accidents, severe pollution etc.)	3	3	9

Risk = Impact x Likelihood

Low : 1-7

Medium : 8-14

High : 15-25

2. Hazards

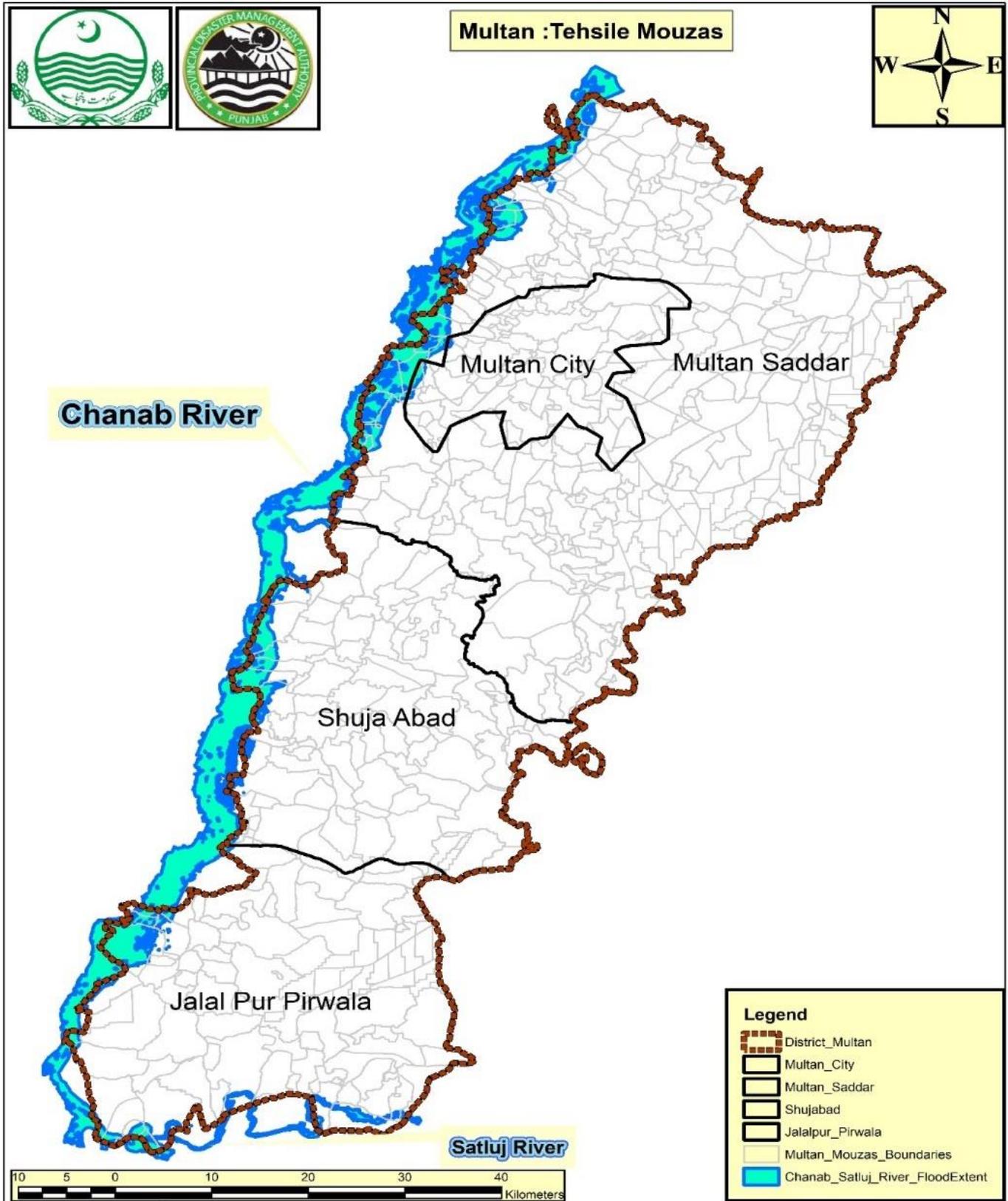
- Experience has shown that abnormal heavy rains in catchment areas result in flash floods in in the city of Multan caused damages in 2001, 2010, 2011, 2012, 2014 and 2015. Though the flood water recedes within a period of 3-8 hours, it causes considerable damage in the city area. Local drains from Old Multan City like, Ghanta Ghar, Bohar and Haram Gates and Cantonment area also fall in it which further aggravates the situation, especially when these drains cannot find their way into Nullah which is already in flood, causing inundation of surrounding low-lying areas (back water effect).

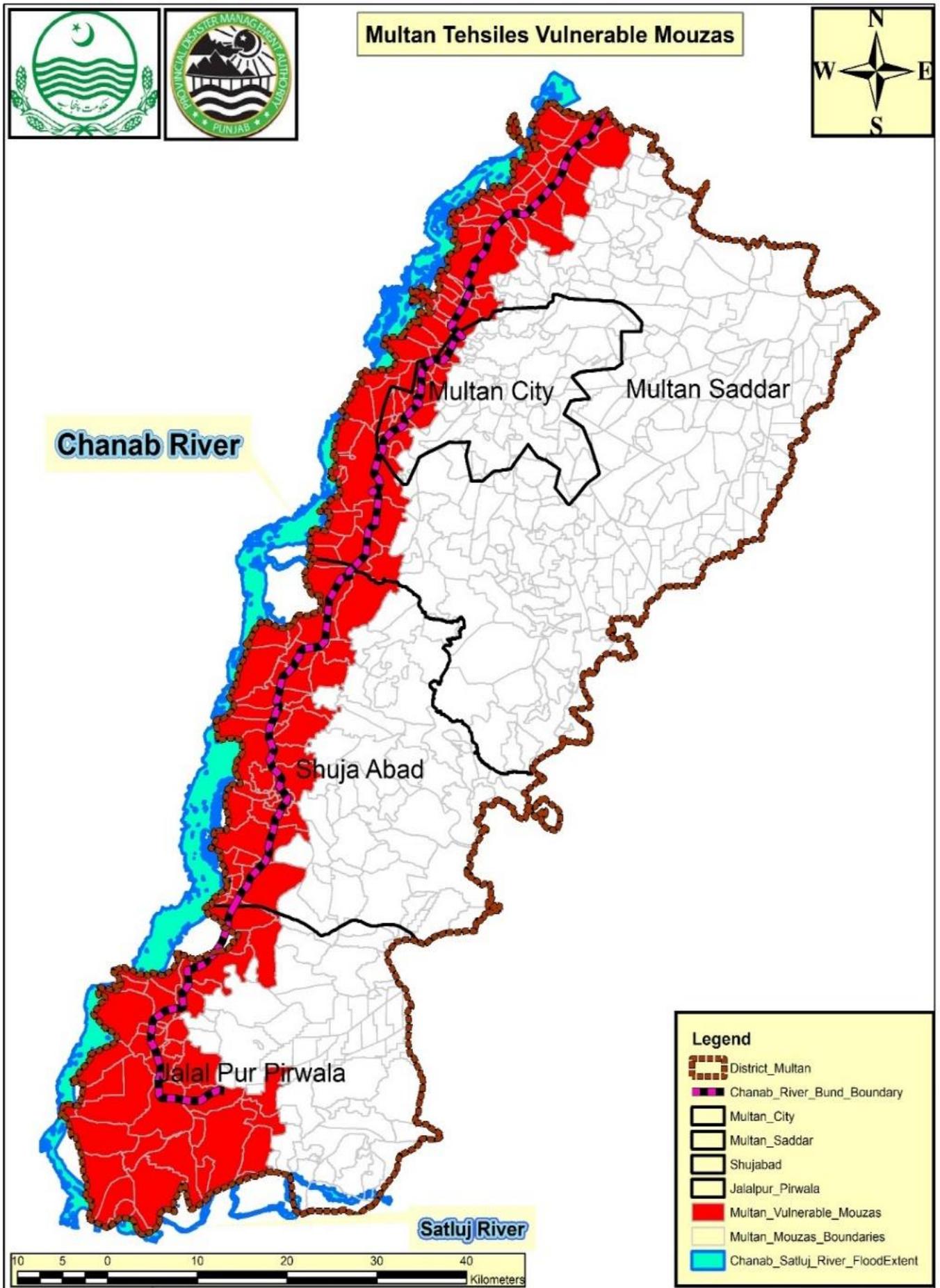
Flash Flood urban flood due to heavy monsoon rains is being planned every year for medium and high risk. The potential sites/vulnerable areas have been pointed out across the board.

Mainly heavy rainfall during monsoon season is the main triggering factor for urban flash flooding along with contributing factors of throwing of garbage in the main stream as well as in tributaries of nearby vulnerable areas.

DISTRICT DETAIL MAP WITH VULNERABLE POINTS, HAZARDS, PLANNED CAMPS, HEALTH FACILITIES, WAREHOUSES ETC.

Source:





3. Response & Operational Capacity

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

District Government has the following response capacities.

1. District Management
2. Metropolitan Corporation Multan
3. Tehsil Council Saddar Multan.
4. Municipal Committees
2. Rescue 1122
3. Monitoring Control System (in control of Rescue 1122)
4. 6 Rain fall Gages (in control of PMD)
5. 10 Warning posts for blowing sirens (in control of Rescue 1122)
6. Water level gauges (PMD)
7. Master Control Room (PMD)
8. Water and Sanitation Agency (WASA)
9. Multan Waste Management Company

4. Strategic Reserves

Items	Available	Functional	Non-Functional	Extra Demand
Boats	40	39	01	-
OBM	37	37	0	-
De-watering sets	90	90	0	13
Navigators	-	-	-	-
GIS devices	-	-	-	-
Life Jackets	540	540	-	-
Life Ring	222	216	06	-
Life Lines	10	10	10	50
Scuba diving suit with complete accessories	05	05	0	05
First Aid Kits	100	100	-	100
Rescue Bag	-	-	-	100
Safety Harnesses	7	6	1	50
Ambulances	29	29	-	11
Fire Brigade	15	15	1	4
Water Tanks / Bouzers	2	2	0	2
Extendable Ladders	10	06	04	20
Hydraulic Cutter	1	1	0	3
Sonar Rader	-	-	-	5
Jumping Sheet	-	-	-	20
Dumpers	22	21	01	05
Excavators	3	3	0	02
Cranes	2	2	0	02
Bulldozer	8	8	0	02
Boat Carrier/Trolleys	6	6	0	02
Pickups/Jeeps/4x4 vehicles/Mini Trucks	6	05	01	05
Searchlight (Torch Light)	-	-	-	100
Tent	2658	2199	459	500

Mosquito Net	1000	710	290	500
Plastic Mat	975	975	0	525
Blanket	500	500	-	-
Any other main relief/rescue equipment				05
Generator Sets	01	01	0	05
Gas-Cutters	01	01	01	05
Scuba Diving Set	05	05	0	05
Navigator/GPS Tracker	33	33	0	10
Floating Rope	30	30	0	100

5. Gaps and Constraints

- Lack of transportation system from the areas likely to be affected.
- Non availability of 4x4 vehicle.
- Non availability of trucks which could carry boats and rescue to the effected areas.
- Shortage of man power with rescue 1122 to under take flood rescue operation while containing their other regular rescue services/operation.
- There is dire need for capacity building of Rescue 1122 staff in terms of training and equipment provision. The PDMA should take lead role in above mentioned activities. Small inflatable Boats (10 Nos) and SCUBA diving sets may be provided on immediate basis.

MITIGATION STRATEGY

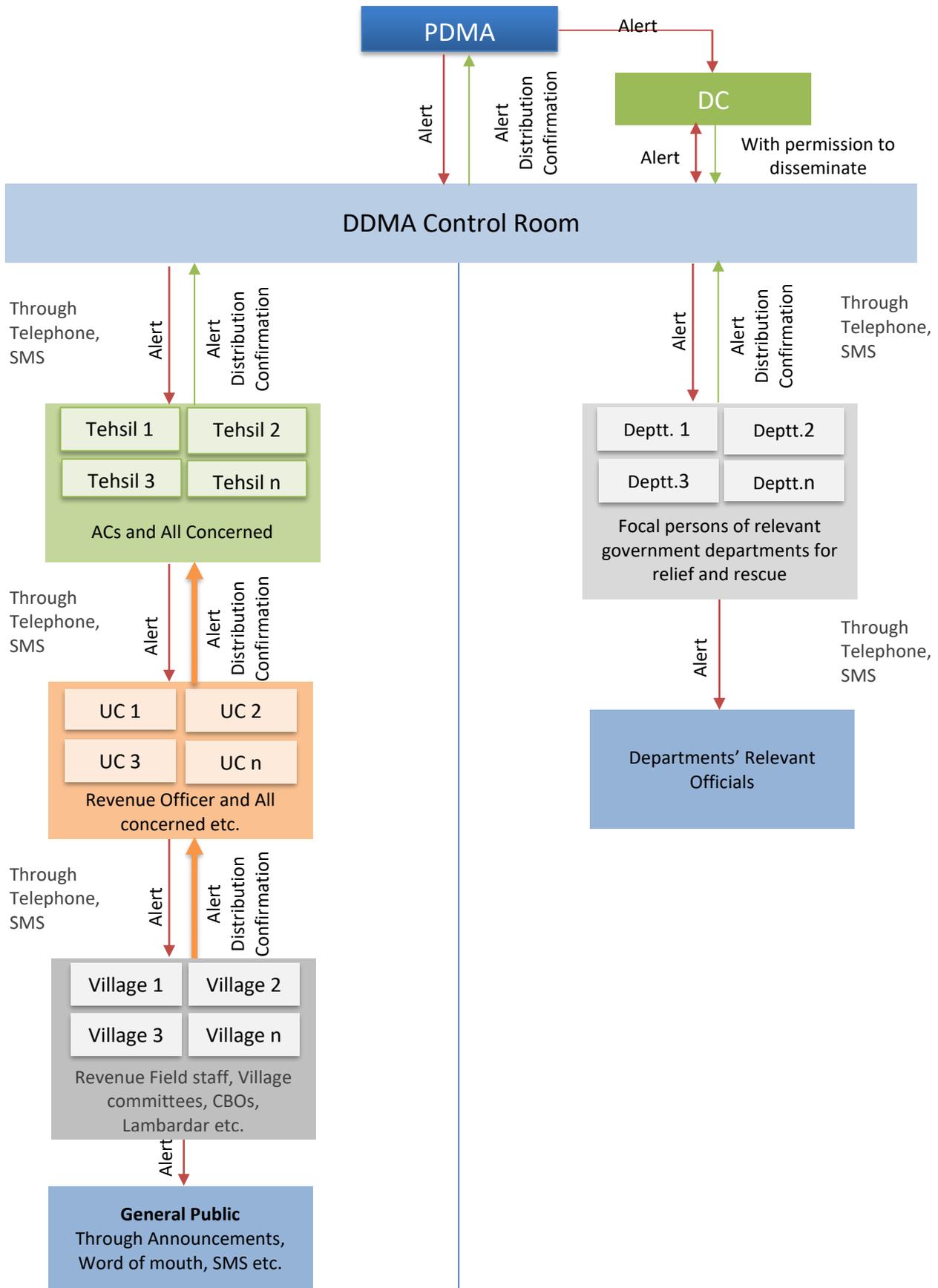
- ✓ Briefly describe what measure could be taken to reduce the impact of the potential disasters.
- ✓ Strategic pre-positioning of available relief stocks
- ✓ Public education and community awareness

Hazards	Mitigate Actions	Responsible Department
Floods	<p>Pre-Flood</p> <p>To ensure veterinary coverage, prophylactic caccination to each animal/poultry bird and to adopt appropriate measure to check any eddemic or endemic outbreak during flood, including any congagious dilemma.</p> <p>Pre flood caccination compaign will start wef 15-05-2018 to 14-06-2018.</p> <p>The prompt reporting system will be ensured to convey higher authorities of District.</p> <p>30% quota of the medicines as per policy guidelines of L&DD Department haqs been ear marked and required specification of different types of medicines.</p> <p>An awareness campaign regarding different measures to meet the flood situation i.e. River Chanab and its tributaries, details of low lying areas, Flood Forecasting and Warning System, Hazards Map, Detail of Flood Relief Centers/ Evacuation Centers, Evacuation Procedure and other preventive and precautionary measures etc. has been scheduled.</p> <p>A Flood evacuation drill/Mock exercise shall be conducted under the supervision of Deputy Commissioner Multan with the collaboration of District Line Departments before monsoon season.</p>	<p>Rescue 1122</p> <p>WASA</p> <p>MWMC</p> <p>Civil Defence</p> <p>Health</p> <p>Education</p> <p>Police</p> <p>Army</p> <p>Other district departments</p>
Urban Flooding	<p>Dewatering of rainy water</p> <p>Drainage of rainy water</p>	<p>MD WASA</p> <p>Metropolitan Corporation.</p> <p>Tehsil Council</p> <p>Saddar & Municipal Committees.</p> <p>Rescue 1122</p>
Earthquake	<p>Evacuation, relief camps, food, shelter, rehabilitation</p>	<p>Rescue 1122</p> <p>WASA</p> <p>MWMC</p> <p>Civil Defence</p> <p>Health</p> <p>Education</p> <p>Police</p> <p>Army</p>

		All other district line Departments
Other Major Accidents (Building Collapse, fire, road traffic accidents, train accident, Stampede, plane crash)	Evacuation, emergency response, shifting of patient to hospitals,	Rescue 1122 City Fire Brigade WASA MWMC Civil Defence Health Education Police Army All other district line Departments
Environmental Hazards (industrial accidents, severe pollution etc.)		Rescue 1122 Environment Department City Fire Brigade WASA MWMC Civil Defence Health Education Police Army All other district line Departments

EARLY WARNING

Information Flow Diagram



Alertness Levels

Following four levels alertness have been established:

<p>Level-D (Disaster threat is perceptible)</p>	<p>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.</p>
<p>Level-C (Alert) (Warning issued but likelihood of occurrence is less than 100%)</p>	<p>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 DCO and DPO shall grant leave according to the situation.</p>
<p>Level-B (High Alert) (Disaster threat is imminent)</p>	<p>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, TMA etc) facilities shall work 24/7 with full staff strength. DDMA shall monitor the situation on hourly basis.</p>
<p>Level-A (Red Alert) (Disaster is materialized)</p>	<p>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.</p>

Early Warning

Flood Forecasting and Early Warning System

Flood Forecasting and Early Warning System should be announced by Irrigation Department, Patwaris and through announcement in loud speakers of masjid. Master control Room which is controlled by Met office issues forecast information to District Emergency Operation Center (DEOC). Rescue 1122 is looking after Flood control Room and that disseminate area on alerts to residents living in vulnerable areas.

District Emergency Control Room disseminates immunity flood information to residents of low-lying areas by blowing risers which are installed along River Chanab. District Control Room also plays role coordination & Communication along all stakeholders.

After receiving information of pre alert through District Flood control Room, all the relevant stakeholders are part on high alert and their team start deployment in highly vulnerable low-lying areas.

DISTRICT EMERGENCY OPERATION CENTER (DEOC)

A Central Control Centre has been established at Kalma Chowk Rescue 1122 building, under the command of Deputy Commissioner & with the assistance of District Emergency Officer, Rescue 1122. This Control Room shall be the source of dissemination of information to the concerned departments and will also act as Operation Centre for coordinating all response activities. All the concerned departments / emergency service

RESCUE STRATEGY

- i. Strategic Command will be done by the Deputy Commissioner being the Chairman of District Disaster Management Authority (DDMA) and District Emergency Board (DEB)
- ii. The main focus of strategic command will be to establish the priorities and strategy for managing the flood situation and to supply the resources to deal with it.
- iii. Strategic Command has established a clear and unambiguous command structure based upon the experiences of previous years, Geographical Condition of District, unpredicted Climatic changes, resources held and future challenges.
- iv. A key function of Strategic Command will be to predeploy rescue and flood management Resources to District and Tehsil level Rescue Teams.
- v. Joint meetings of DDMA and DEB will be held before start of Flood season to review the preparation for the flood season, identify the resource gap/short comings and ensure timely completion/procurements.

HUMANITARIAN ASSISTANCE

Damages and loss data due to flash flooding and river flooding shall be collected from concerned Assistant Commissioners, and communicated to Additional Deputy Commissioner (R), Multan, which is then forwarded to Deputy Commissioner, Multan for onward of submission to Board of Revenue Punjab.

The Priority needs of affected people flood and earthquake (food, shelter, health etc.) is determined by taking recommendations from concerned stakeholders like Health Department, Education Department, Rescue 1122, Civil Defence, Building Department and Revenue Department of Multan.

The affected population due to flood or earthquake shall be shifted to the designated relief camps by Rescue 1122, Civil Defense and Volunteers.

Food and Health assistance will be provided by the Revenue Department and Health Department. Similarly, the need of rehabilitation of affected victims is assessed and evaluated by these.

PDMA has already issued the standardization of different packages/kits for food and tentage needs of affected victims. Whole of the activity regarding humanitarian assistance and monitoring is supervised by Additional District Collector in consultation with all relevant stakeholders in order to avoid duplication of resources and identification of gaps.

All the affected victims are shifted to the already designated relief camps in school. No separate camps are established as the flood emergency in Multan is of flash flood nature.

Multan District has sufficient capacity in terms of provision of food, shelter, medicine to cater maximum number of victims for more than even three months' time

As for as humanitarian strategy regarding protection, gender, age, environment and other cross cutting issues or concerned, the administration of Multan has taken diligent steps which are as follows:

- a. Issuance of early warning by Rescue 1122, Multan.
- b. Rescue and Shifting of Victims to hospitals and Relief Camps by Rescue 1122 and Civil Defense Volunteers.
- c. Establishment of relief camps in predestinated schools and relief camps established by District Administration.
- d. Humanitarian assistance of the victims by involving Health, Education and Revenue Department.
- e. Foolproof coordination and communication among all stakeholders through pre-alert warning issued by Rescue 1122.

- Record the hospitalized, the dead, the injured and missing persons.
- Attend to Local and International Welfare inquiries about persons in disaster areas.
- Help disaster victims in establishing contacts with relatives and friends outside the affected area.
- Refer cases of victims, individuals and families to appropriate agencies for rehabilitation etc.
- Answer inquiries as to whereabouts of missing persons.
- Assist in location of family members of victims, facilitate reunion of dislocated families.
- Provide useful knowledge and skills to victims to help them in their return to normal living.
- Arrange activities to meet the diverse needs of disaster victims.

III. **SECURITY SERVICES**

- These services shall be under the direct charge of the City Police Officer, Multan in order to maintain peace and order and protect life and property in the disaster area.
- The Assistant Commissioner and DSP shall assist him in his task at Tehsil level.
- There shall also be a Liaison Officer from the Army included in these Services.

❖ **Functions**

- Establish security post at the temp. Relief camp.
- Maintain peace and order
- Enforce Law & Order.
- Apprehend/Arrest law violators
- Protect evacuated inhabitants and stocks of resources.
- Facilitate disaster operations by controlling the movement of the individuals.
- Handling the bodies of deceased persons.
- Detect and prevent disaster.
- Carry out initial rescue and survey operations
- Assist in saving lives and property
- To establish temporary Police Check Posts at the vulnerable points to stop the cuts / breaches on banks of Canals.
- He will direct traffic and plan alternative road connection.

IV. **TRANSPORTATION SERVICES**

- The Secretary RTA shall be the Head of these services;

❖ **Functions**

- This cell, in addition to the existing Transport shall also requisition vehicles from other Departments and public sector.
- Ensure adequate supply of POL for all transport in use of all departments especially the emergency response services.
- Manage, direct and control all available transportation facilities and ensures their appropriate and efficient utilization in the disaster area.
- All requests are to be forwarded to the transportation service in the following cases:
 - Evacuation from the area under threat.
 - Transportation of the affected population from the temporary relief camps to the permanent relief camps established in the school buildings.
- Prepare list of persons to be contacted for provision of Transport.
- Constitute Teams to bring transport in line.
- Tehsil wise acquisition & utilization of the transport.

V. **AGRICULTURE DEPARTMENT SERVICES**

- The Deputy Director (Agriculture) shall be the incharge of these Services.

❖ **Functions**

- Survey of pre and post flood of cultivation land
- They shall help the Irrigation Department in the supply of earth moving machinery for bund protections.

- Supply of seed for sowing of crops.
- Assist farmers on preparation and sowing of crops.
- Provide fertilizers and agricultural implements on loan basis.

VI. LIVE STOCK & DAIRY SERVICES

- The AD (Live stock) shall be the incharge of these services:

❖ Functions

- The AD (Live Stock) shall start pre-flood vaccination w.e.f 1st May every year throughout the District that shall continue upto 15th May every year.
- Vaccination against H.S., Foot & Mouth, Entro Toxemia, pleuropneumonia and N.D.
- The AD (Live Stock) shall issue duty roster to this effect by 31st March every year.
- Rescue live stock in coordination with other departments.
- Establish veterinary camps.
- Arrange all necessary medicine
- Treatment of Animals
- Provision of fodder and Wanda

VII. CIVIL DEFENCE SERVICES

- The Civil Defence Officer shall be the incharge of these Services helped by 400 volunteers.

❖ Functions

- He shall issue duty roster assigning duties of volunteers in case of flood emergency.
- He shall ensure issuance of flood warning through his volunteers in case of likelihood of flood.
- He shall arrange training of the volunteers with a special focus on warning, rescue and relief activities pertaining to flood emergency in the month of April every year.
- The volunteers shall also be imparted first Aid Training including artificial respiration, treatment of snake biting and emergency method of rescue.
- He shall conduct search and sweeping through Bomb Disposal Squad in case of any suspicion.

VIII. COMMUNICATION SERVICES

- The City Police Officer shall supervise the communication system at the District level.

❖ Functions

- They shall ensure that all the telephone connections and wireless sets are in working order during emergency period.
- It shall also connect strategic points with the nearest telephone exchange or through wireless connection.
- Director Telephones Multan shall ensure that the telephone numbers of important departments are always in working condition especially those given in attached List.

IX. ENGINEERING (MECHANICAL) SERVICES

The Assistant Agriculture Engineer shall be incharge of these services:

❖ Functions

- Provide machines and material for repair of bulldozers and tractors working on bunds.
- Establish workshop near the vulnerable points.
- The bulldozers of Agriculture Department shall be utilized for the strengthening of canal banks and to improve the flow of water through siphons.

X. FOOD SERVICES

- The District Food Controller shall be Incharge of these Services.
- He shall be assisted by his Assistant Food Controllers.

❖ Functions

- He shall ensure that adequate stock of Aata is available in the District.

- He shall prepare a plan for special ration depots at the strategic places.
- He shall organize mobile depots.

VIII. FOREST DEPARTMENT

The Divisional Forest Officer shall be the incharge of these services.

❖ Functions

- Shall provide "ABKALANI" material and assist the patrolling of bunds. He shall provide places for flood affected cattle-heads.

X. INFORMATION SERVICES

The District Information Officer shall be the incharge of these services.

❖ Functions

- He shall ensure that news media and the public receive correct information and warning messages.
- He shall plan and arrange the visits of newsmen to the flood affected areas in district Multan.

XI. IRRIGATION & POWER SERVICES

This department consists of the following members:

- The Chief Engineer, Irrigation
- The XEN, Shujabad Canal
- The XEN, Multan Canal

❖ Functions

- The department shall supervise, direct and control bund protection activities,
- Desilting of all syphons and inlets of Head Muhammad Wala & Sher Shah Bridges
- It shall also control various canals in the district.

XII. WAPDA-POWER SUPPLY SERVICES

The Superintending Engineer, MEPCO Multan shall be the incharge of these services, assisted by his XENs in the districts.

❖ Functions

- He shall make lighting arrangements on the bunds for night patrol and protection activities.
- He shall also ensure orderly and regular power supply throughout the district in disaster emergency.
- He shall also establish emergency control room with telephone and mobile staff and shall work round the clock.

XIII. WATER & SANITATION AUTHORITY (WASA)

The Managing Director will be the incharge of these services within its respective jurisdiction.

❖ Functions

- Establish emergency flood center of their organization with staff working round the clock.
- They shall keep the dewatering set in working condition.
- Drain stagnant water from low lying areas.
- Keeping all disposal station at working condition.
- They shall further desilt the sewerage and open drains to help the drainage of flood and rain water from the affected area.
- They shall keep in hand adequate stores of spare parts, etc. for repair of necessary machinery and equipments.

XIII. METROPOLITAN CORPORATION SERVICES

Chief Officer will be the incharge of these services within its respective area.

❖ Functions

- Establish emergency flood center of their organization with staff working round the clock.
- They shall keep the dewatering set in working condition.
- Drain stagnant water from low lying areas.
- Provide food and other basic necessities.
- They shall conduct survey of dangerous buildings.

- They shall further desilt the sewerage and open drains to help the drainage of flood and rain water from the affected area.
- The District Officer (I&S) shall provide potable water in affected areas and in relief camps.
- The District Officer (I&S) shall keep in hand adequate stores of spare parts, etc. for repair of necessary machinery and equipments.
- He shall also ensure that adequate supplies are available for chlorination of drinking water.

XIV. TEHSIL COUNCIL SERVICES

Chief Officer will be the incharge of these services within tehsil.

❖ Functions

- Establish emergency flood center of their organization with staff working round the clock.
- They shall keep the dewatering set in working condition.
- Drain stagnant water from low lying areas.
- Provide food and other basic necessities.
- They shall conduct survey of dangerous buildings.
- They shall further desilt the sewerage and open drains to help the drainage of flood and rain water from the affected area.
- The Municipal Officer (I&S) shall provide potable water in affected areas and in relief camps.
- The Municipal Officer (I&S) shall keep in hand adequate stores of spare parts, etc. for repair of necessary machinery and equipments.
- He shall also ensure that adequate supplies are available for chlorination of drinking water.

XV. MUNICIPAL COMMITTEES SERVICES

Chief Officers shall be the incharge of these services within their respective tehsils.

❖ Functions

- Establish emergency flood center of their organization with staff working round the clock.
- They shall keep the dewatering set in working condition.
- Drain stagnant water from low lying areas.
- Provide food and other basic necessities.
- They shall conduct survey of dangerous buildings.
- They shall further desilt the sewerage and open drains to help the drainage of flood and rain water from the affected area.
- The Municipal Officer (I&S) shall provide potable water in affected areas and in relief camps.
- The Municipal Officer (I&S) shall keep in hand adequate stores of spare parts, etc. for repair of necessary machinery and equipments.
- He shall also ensure that adequate supplies are available for chlorination of drinking water.

XVI. ARMY SERVICES

The ADC (G) shall be the Liaison Offices of Civil Administration for liaison with the Army. The 104 Brigade shall nominate Liaison Officer for liaison with the Civil Administration. If help of the Army is required, they shall assist in rescue and evacuation operations, as also provide transport and communication facilities and assist the Irrigation authorities in bund protection.

XVII. XEN HIGHWAYS

He will depute staff at important bridges and roads for maintenance.

He will arrange machinery for repair of breaches in roads for provision of relief and during evacuation,

He will arrange desilting in culverts and water ways on provincial and district roads

XVIII. DISTRICT NAZIR

District Nazir to keep account of expenditure of field operations during emergency and to cater to funds authorised by DDMA.

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	Govt. Primary School Ghaloo	900	30.373501, 71.483327	13	Government Girls Middle School Khan Pur Qazian	800	29.993126, 71.266751
2	Basti Band Bosan	1000	30.375659, 71.528418	14	1. Government Boys Primary School Tahir Pur Near Bagi Pull 2. Government Boys High School Ponta (Covering Building)	1000	29.899034, 71.264711
3	Mouza Lutaf Abad Near Basti Wigan Wali	500	30.346235, 71.489916	15	BHU-- Marrah	800	29.882127, 71.229238
4	Chanab Chowk	800	30.299392, 71.450326	16	Office U/C Gardaiz Pur Basti Nawan Sher	1000	29.888000, 71.220068
5	Akbar Pur Flood Band	800	30.389640, 71.531557	17	Middle School Begrian	1000	29.776498, 71.240860
6	Sher Shah	1000	30.096357, 71.345238	18	Govt. Boys High School Jalal Pur Khakhi	1000	29.752849, 71.228045
7	Basti Buch Near Railway Station	1000	30.062565, 71.284028	19	Canal Rest House Behli Shareef	1000	29.649122, 71.170930
8	Jalalabad Band	1000	30.140964, 71.339687	20	H/S Khan Bela	1000	29.462419, 71.107448
9	Thatti Khahawaran Flood Band	1000	30.169304, 71.356739	21	Govt. P/S Basti Bharan	800	29.515976, 71.124314
10	Muhammad Pur Ghotta Flood Band	1000	30.246839, 71.447664	22	Govt. Boys High School Jalalpur Pirwala	800	29.548442, 71.144626
11	BHU Qasim Bela	1000	30.193106, 71.400240	23	Boys P/S Gujj	800	-
12	Langrial Shujabad Canal Bridge	800	-	24	H/S Bahadar Pur	1000	-

ANNEX II: LIST OF HAZARD PRONE MOUZAS OF RIVER CHENAB

(Populations: 243768)

Hazards	Tehsils	Name of Mouzas
Flood	City	<ol style="list-style-type: none"> 1. JALAL ABAD 2. JHAKAR PUR 3. THATHI KHAWARAN 4. LANGRIAL 5. MUHAMMAD PUR GHOTA 6. TIBBA MASOOD PUR 7. KHOR SAJRY WAHAN 8. KHAIR PUR 9. JALIL PUR 10. ARJAWAIN SHARIF 11. QASIM BELA
	Saddar	<ol style="list-style-type: none"> 1. SHAKAR BELA 2. ABU HATTA 3. RAJA PUR 4. TAJPUR THAMRAYA 5. JAMBOR 6. KACHOR 7. GAGRA 8. ZAMAN PUR 9. BOSAN 10. NAWAB PUR DOIM 11. NAWAB PUR AWAL 12. HAMROT 13. BINDA MOLANA 14. BEHLI 15. SYED ALI PUR 16. HAMAD PUR 17. SULTANPUR HAMAR 18. SHER SHAH 19. BUCH 20. RAN LUB DARYA 21. NOON ADHWANA 22. JHOK SARKARI 23. ALLAH DADI 24. ANAYAT PUR MAHOTA 25. LUTAFABAD 26. WALLEEN 27. SARWANI BELA 28. JHOK VAINS PARLE 29. WANDER 30. JHOK CHAJRA 31. BAKHRI 32. GHARIALA 33. BAQIR ABAD KHAKWANI 34. LASHKAR PUR 35. MAKAN WALA 36. JHOK LACHMI NARAIR 37. AKBAR PUR 38. DHILLU 39. KHIZAN PUR 40. NAURANG ABAD

		41. BAHAWAL PUR KHERA 42. BINDA SINDHILA 43. SANBAL 44. DHUDDI 45. NAWAB PUR AWAL 46. MIRZAN PUR 47. AMIR PUR SAHU 48. JHOK ARBI 49. CHAK MAHNI
	Shujabad	1. PAUNTA 2. JAI 3. MARAHA 4. AMAN ULLAH PUR 5. MAKHDOOM PUR 6. JHANGI 7. BAGRAIN 8. CHOTI 9. BHANA 10. GHAUS PUR 11. KHAN PUR QAZIAN 12. VAINUS 13. TAROR JALAL PUR 14. SHER PUR 15. FATEH BELA 16. SOMAN 17. SHEIKH PUR DARG 18. MOCHI PURA 19. SERI 20. KHAS PANJANI 21. JALALPUR KHAKHI 22. TAHIR PUR 23. DHONDOON 24. SAT BURJI 25. GURDEZ PUR 26. AGAR KHANI 27. PANJANI
	Jalalpur Pirwala	1. TAROR MANK WALI 2. MOSAN WALI 3. RAPRI 4. MANAK WALI 5. MOLVI ATTA 6. KHAKHI 7. KEKERY 8. 86/M 9. BEHLI 10. BEET KASER 11. WAHI SANDILA 12. BET MUGHAL 13. JAHAN PUR 14. UMAR PUR 15. BEET KECH JANUBI 16. BEET KECH SHUMALI 17. SHEHNI SHUMALI 18. NAROL 19. SHAH PUR LAMAN 20. JANG WALA

		21. DURAB PUR SHARQI 22. CHAK MOLVI ATTA 23. MIRA MALLAH 24. NAHIRAN WALA 25. SHUJAT PUR JANUBI 26. SHUJAT PUR SHUMALI 27. LANGAR 28. KOT AMAM DIN 29. KARMUN WALI GHARBI 30. INAYAT PUR 31. DAULAT PUR 32. DURAB PUR GHARBI 33. SHEHNI JANUBI 34. KHAN BELA 35. MOHANA SANDILA
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LIST OF HAZARD PRONE MOUZAS OF RIVER SUTLEJ

Hazards	Tehsils	Name of Mouzas
Flood	Jalalpur Pirwala	<u>SUTLEJ RIVERS MOUZAS</u> 1. MOHANA SANDEELA 2. SHIHNI SHUMALI 3. SHIHNI JANUBI 4. KHAN BELA 5. DAULLAT PUR 6. DURAAB PUR SHARQ 7. DURAAB PUR GHAR 8. KOT IMMAM DE 9. LUNGGER 10. OBARA JANUBI 11. NORAJA BHUTTA 12. BAIT WAHI 13. DEPAL 14. JHANDA MIANI 15. KANHOON JANUBI 16. SHUJAAT PUR SHUMALI 17. SHUJAAT PUR JANUBI.

ANNEX III: LIST OF HEALTH FACILITIES OF VULNERABLE AREAS

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 Jhoke Vains	X: 30.40 Y:71.56	Primary	Dr. Aiman 0312-7949425	Flood
2	RD Bosan	X: 30.22 Y:71.31	Primary	Dr. Muhammad Faizan Ellahi 03336103373	Flood
3	BHU Lutfabad	X: 30.18 Y: 71.30	Primary	Dr. Irfan Khan Mazari 03336103020	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.)
4	BHU Nawab Pur	X: 30.17 Y: 71.27	Primary	Dr. Momna 0321-8278019	Flood
5	BHU Binda Sandila	X: 30.13 Y: 71.25	Primary	Dr. Khadija Bukhari 0304-7593151	Flood
6	BHU Tibbas Masood Pur	X: 30.10 Y: 71.23	Primary	Dr. Muhammad Azhar 03017457065	Flood
7	BHU Qasim Bela	X: 30.12 Y: 71.23	Primary	Dr. Raheela 0308-9187515	Flood
8	BHU Muzaffarabad	X: 30.07 Y: 71.21	Primary	Dr. Maria 0333-6196399	Flood
9	RHC Sher Shah	X: 30.05 Y: 71.20	Primary	Dr. Ahmad Nadeem 0300-7386638	Flood
10	RHC Mardan Pur Bosan	X: 30.22 Y: 71.31	Primary	Dr. Imran Rafiq 0333-7300010	Flood
11	BHU Khan Pur Qazi	X: 29.58 Y: 71.17	Primary	Dr. Zulqarnain Qureshi 03317037670	Flood
12	BHU Pounta	X: 29.53 Y: 71.15	Primary	Dr. Qurat Ul Ain Ayyaz 03357925066	Flood
13	BHU Mahra	X: 29.51 Y: 71.13	Primary	Dr. Arshad Mahmood 03216349153	Flood
14	BHU Gardaiz Pur	X: 29.48 Y: 71.16	Primary	Dr. Muhammad Ishaq Qamar 03336243351	Flood
15	BHU Jalalpur Khaki	X: 29.45 Y: 71.13	Primary	Dr. Muhammad Bilal Tahir 03336640158	Flood
16	BHU Punjani	X: 29.42 Y: 71.12	Primary	Dr. M. Yousaf 03346988059	Flood
17	BHU Jahan Pur	X: 29.38 Y: 71.11	Primary	Khawaja Abdul Samee Mt 03017532819	Flood
18	BHU Behli Shareef	X: 29.35 Y: 71.10	Primary	Dr. Kamran Abid 03338566216	Flood
19	BHU Inayat Pur	X: 29.43 Y: 71.03	Primary	Dr. Rauf Malik Bhutta 03083388166	Flood
20	BHU Bait Kaitch	X: 29.29 Y: 71.06	Primary	Dr. Muhammad Majid Ali 03017975900	Flood
21	BHU Khan Bela	X: 29.28 Y: 71.06	Primary	Dr. Muhammad Usman Zafar 03326069332	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.)
22	BHU Durab Pur	X: 29.44 Y: 71.14	Primary	Dr. Muhammad Asif Manzoor 03445854007	Flood
23	BHU Khokran	X: 30.00 Y: 71.10	Primary	Dr. Sonia 0304-7014041	Flood
24	RHC Meeran Mallan	X: 29.36 Y: 71.10	Primary	Dr. Waqar Mehmood 0300-8688996	Flood
25	BHU Chajju Shah	X: 29.55 Y: 71.17	Primary	Iqbal Hussain Disp 03467116428	Flood
26	BHU Nouraja Bhutta	X: 29.25 Y: 71.13	Primary	Dr. Zulfaqar Mehdi 03006388281	Flood

ANNEX IV: LIST OF VULNERABLE AREAS EDUCATIONAL INSTITUTIONS

S#	Name	Institute type (School, College etc.)	GPS Coordinates	Enrolment	Teshil	Hazard Vulnerability (Floods, Earthquake etc.)
1	Govt. P/S, Khizan Pur, Markaz Bosan, Multan	School	X: 30.3733617067337 Y: 71.4833539724349	133	MULTAN SADDAR	LOCATED IN FLOOD AREA.
2	Govt. P/S, Serwani Bela, Markaz Bosan Multan	School	X: 30.41136005 Y: 71.52695887	122	MULTAN SADDAR	LOCATED IN FLOOD AREA.
3	Govt. P/S, Toroy Pur, Markaz Bosan Multan	School	X: 30.40999231 Y: 71.536751	105	MULTAN SADDAR	LOCATED IN FLOOD AREA.
4	Govt. MPS, Jhoke Arbi, (GGPS DHILOO WALA Markaz Bosan Multan	School	X: 30.38238604 Y: 71.50746347	25	MULTAN SADDAR	LOCATED IN FLOOD AREA.
5	Govt. Model P/S, Hamid Pur, MarkazSher Shah Multan.	School	X: 30.1699514 Y: 71.31298547	48	MULTAN SADDAR	LOCATED IN FLOOD AREA.
6	Govt. P/S, Said Ali Pur, Markaz Sher Shah, Multan.	School	X: 30.189893245697 Y: 71.3227325677871	HAND OVER PEF.	MULTAN SADDAR	LOCATED IN FLOOD AREA.
7	Govt. P/S, Bakhsh Wala, Markaz Sher Shah, Multan	School	X: 30.22333288 Y: 71.41000985	240	MULTAN SADDAR	LOCATED IN FLOOD AREA.
8	Govt. P/S, Hamroot, Markaz Sher Shah, Multan	School	X: 30.20708126 Y: 71.38568592	116	MULTAN SADDAR	LOCATED IN FLOOD AREA.
9	Govt. MPS, Bhakri Markaz Sher Shah, Multan	School	X: 30.1538282632827 Y: 71.3561046123504	144	MULTAN SADDAR	LOCATED IN FLOOD AREA.
10	Govt. P/S, Purana Sher Shah, Multan	School	X: 30.0915205478668 Y: 71.3170677423477	201	MULTAN SADDAR	VULNERABLE SCHOOL.
11	Govt. PS, Raja Pur, Multan	School	X: 30.11932876 Y: 71.33528529	206	MULTAN SADDAR	LOCATED IN FLOOD AREA.

S#	Name	Institute type (School, College etc.)	GPS Coordinates	Enrolment	Teshil	Hazard Vulnerability (Floods, Earthquake etc.)
12	GGES, Thathi Khawaran	School	X: 30.15424995 Y: 71.36531766	304	MULTAN CITY	LOCATED IN FLOOD AREA.
13	GGES, Basti Khairoo	School	X: 30.16058846 Y: 71.37515958	350	MULTAN CITY	LOCATED IN FLOOD AREA.
14	GGES, Jalalabad	School	X: 30.1370215415954 Y: 71.3501071929931	230	MULTAN CITY	LOCATED IN FLOOD AREA.
15	GGPS, Jhakar Pur	School	X: 30.14336653 Y: 71.36289836	48	MULTAN CITY	LOCATED IN FLOOD AREA.
16	GGPS, Garay Wala	School	X: 30.25610497 Y: 71.42988073	66	MULTAN SADDAR	LOCATED IN FLOOD AREA.
17	GGPS, Nasir Khan Khakwani	School	X: 30.25381207 Y: 71.42195879	78	MULTAN SADDAR	VULNERABLE SCHOOL.
18	GGPS, Khaji Wala,	School	X: 30.2277014 Y: 71.42175368	HAND OVER PEF.	MULTAN SADDAR	VULNERABLE SCHOOL.
19	GGPS, Mehdi Pur	School	X: 30.09435776 Y: 71.33334793	139	MULTAN SADDAR	LOCATED IN FLOOD AREA.
20	GGPS, Jinnah Abadi	School	X: 30.1258657 Y: 71.33969124	124	MULTAN SADDAR	LOCATED IN FLOOD AREA.
21	GMPS, Sairy Wala	School	X: 30.04934365 Y: 71.32361357	125	MULTAN SADDAR	VULNERABLE SCHOOL.
22	GMPS, Gagra Kachoor	School	X: 30.06273267 Y: 71.30875608	99	MULTAN SADDAR	VULNERABLE SCHOOL.
23	GPS, Mirza Pur	School	X: 30.01968767 Y: 71.29717399	157	MULTAN SADDAR	VULNERABLE SCHOOL.
24	GHS, Sanbhal	School	X: 30.43538186 Y: 71.54209346	529	MULTAN SADDAR	LOCATED IN FLOOD AREA.
25	GGHS, Binda Sandeela	School	X: 30.2399110794067 Y: 71.4231222867965	627	MULTAN SADDAR	VULNERABLE SCHOOL.
26	GGPS BASTI JAMHOOR	School	X: 30.03574136 Y: 71.30214952	40	MULTAN SADDAR	LOCATED IN FLOOD AREA.
27	GGPS Chah yar Muhammad Wala	School	X: 30.02285202 Y: 71.31194323	75	MULTAN SADDAR	LOCATED IN FLOOD AREA.
28	GGES Wacha Sandila	School	X: 29.56184683 Y: 71.09273484	198	JALALPUR PIRWALA	LOCATED IN FLOOD AREA.
29	GGPS Ripri	School	X: 29.61815163 Y: 71.14176758	89	JALALPUR PIRWALA	LOCATED IN FLOOD AREA.
30	GGPS Zahra	School	X: 29.60491352 Y: 71.14101595	100	JALALPUR	LOCATED IN FLOOD AREA.

S#	Name	Institute type (School, College etc.)	GPS Coordinates	Enrolment	Teshil	Hazard Vulnerability (Floods, Earthquake etc.)
31	GGPS Bakhsha	School	X: 29.55163968 Y: 71.09258053	72	PIRWALA	LOCATED IN FLOOD AREA.
32	GGES Darkhan Wala	School	X: 29.54043035 Y: 71.10028722	236	JALALPUR	LOCATED IN FLOOD AREA.
33	GGPS Jhangi Ahmad Khan	School	X: 29.53572599 Y: 71.08049959	82	PIRWALA	LOCATED IN FLOOD AREA.
34	GGPS Basti Kamal	School	X: 29.524121 Y: 71.08147394	135	JALALPUR	LOCATED IN FLOOD AREA.
35	GGPS Tharoo Wali	School	X: 29.51879351 Y: 71.10037212	90	PIRWALA	LOCATED IN FLOOD AREA.
36	GGPS Lar Janubi	School	X: 29.52052863 Y: 71.06510299	80	JALALPUR	LOCATED IN FLOOD AREA.
37	GGPS Saif Ullah Baloch	School	X: 29.47406008 Y: 71.06776589	38	PIRWALA	LOCATED IN FLOOD AREA.
38	GGES Dewala	School	X: 29.46527359 Y: 71.07530811	135	JALALPUR	LOCATED IN FLOOD AREA.
39	GGHS Khan Bela	School	X: 29.4671720266342 Y: 71.113611459732	734	PIRWALA	LOCATED IN FLOOD AREA.
40	GGPS Jafrain	School	X: 29.4316971302032 Y: 71.1242812871932	46	JALALPUR	LOCATED IN FLOOD AREA.
41	GGES Durab Pur	School	X: 29.44123525 Y: 71.14564383	136	PIRWALA	LOCATED IN FLOOD AREA.
42	GGPS Basti Kachala	School	X: 29.48939018 Y: 71.12222355	146	JALALPUR	LOCATED IN FLOOD AREA.
43	GGPS Hiyat Wala	School	X: 29.48005208 Y: 71.13510007	83	PIRWALA	LOCATED IN FLOOD AREA.
44	GES Bait Mughal	School	X: 29.46361096 Y: 71.07725901	312	JALALPUR	LOCATED IN FLOOD AREA.
45	GMMS Hazoor Bakhsh Dada	School	X: 29.4026380777359 Y: 71.0564804077148	102	PIRWALA	LOCATED IN FLOOD AREA.
46	GPS Baseera	School	X: 29.4318956136703 Y: 71.0635238885879	119	JALALPUR	LOCATED IN FLOOD AREA.
47	GMPS Shehni	School	X: 29.445714354515 Y: 71.0819453001022	183	PIRWALA	LOCATED IN FLOOD AREA.

S#	Name	Institute type (School, College etc.)	GPS Coordinates	Enrolment	Teshil	Hazard Vulnerability (Floods, Earthquake etc.)
48	GPS Sultan Mahmood Wala	School	X: 29.4860976934432 Y: 71.062284708023	60	JALALPUR	LOCATED IN FLOOD AREA.
49	GPS Nahran Wala	School	X: 29.4904374 Y: 71.03814365	80	PIRWALA	LOCATED IN FLOOD AREA.
50	GMPS Bait Kaitch	School	X: 29.49323431 Y: 71.0777123	174	JALALPUR	LOCATED IN FLOOD AREA.
51	GMPS Natching	School	X: 29.506402015686 Y: 71.0755509138107	180	PIRWALA	LOCATED IN FLOOD AREA.
52	GMPS Shamas Abad	School	X: 29.49317974 Y: 71.0897419	166	JALALPUR	LOCATED IN FLOOD AREA.
53	GMPS Din Pur	School	X: 29.50271905 Y: 71.10321876	161	PIRWALA	LOCATED IN FLOOD AREA.
54	GES Faiz Abad	School	X: 29.53929958 Y: 71.10079497	350	JALALPUR	LOCATED IN FLOOD AREA.
55	GES Wachah Sandila	School	X: 29.56184683 Y: 71.09273484	225	PIRWALA	LOCATED IN FLOOD AREA.
56	GMPS Narool	School	X: 29.5425045490264 Y: 71.0738825798034	84	JALALPUR	LOCATED IN FLOOD AREA.
57	GPS Chah Mohammad Ali Wala	School	X: 29.52680925 Y: 71.05234527	258	PIRWALA	LOCATED IN FLOOD AREA.
58	GPS Kot Imam Din	School	X: 29.40501161 Y: 71.08846592	87	JALALPUR	LOCATED IN FLOOD AREA.
59	GMPS Karmon Wali	School	X: 29.47880431 Y: 71.10295118	263	JALALPUR	LOCATED IN FLOOD AREA.
60	GPS Hazoor Bakhsh Kachala	School	X: 29.4858455657958 Y: 71.1369520425796	55	PIRWALA	LOCATED IN FLOOD AREA.
61	GMPS Mohana Sandila	School	X: 29.48201836 Y: 71.16024043	289	JALALPUR	LOCATED IN FLOOD AREA.
62	GMPS Bhuttain	School	X: 29.61800801 Y: 71.14168152	141	PIRWALA	LOCATED IN FLOOD AREA.
63	GMPS Shah Pur Laman	School	X: 29.58551959 Y: 71.10756899	61	JALALPUR	LOCATED IN FLOOD AREA.
64	GPS Tibi Sohrab	School	X: 29.488454 Y: 71.12330756	79	PIRWALA	LOCATED IN FLOOD AREA.

S#	Name	Institute type (School, College etc.)	GPS Coordinates	Enrolment	Teshil	Hazard Vulnerability (Floods, Earthquake etc.)
65	GPS Manik Wali	School	X: 29.59611078 Y: 71.14454285	118	JALALPUR	LOCATED IN FLOOD AREA.
66	GPS Khakhi Pounta	School	X: 29.58474586 Y: 71.17209171	138	PIRWALA	LOCATED IN FLOOD AREA.
67	GPS Jafrain	School	X: 29.43362244 Y: 71.1184695	70	JALALPUR	LOCATED IN FLOOD AREA.
68	GPS Durab Pur Sharqi	School	X: 29.45438838 Y: 71.11565481	67	PIRWALA	LOCATED IN FLOOD AREA.
69	GES Durab Pur	School	X: 29.44949128 Y: 71.1478251	401	JALALPUR	LOCATED IN FLOOD AREA.
70	GPS Ghafar Abad	School	X: 29.46006431 Y: 71.12938992	109	PIRWALA	LOCATED IN FLOOD AREA.
71	GMMS Zaidan	School	X: 29.41044307 Y: 71.15782724	111	JALALPUR	LOCATED IN FLOOD AREA.
72	GMPS Langar	School	X: 29.44855032 Y: 71.16767773	87	JALALPUR	LOCATED IN FLOOD AREA.
73	GPS Ramzan Wala	School	X: 29.44726691 Y: 71.18655904	165	PIRWALA	LOCATED IN FLOOD AREA.
74	GMPS Sawan	School	X: 29.44842342 Y: 71.19731027	196	JALALPUR	LOCATED IN FLOOD AREA.
75	GMPS Shujat Pur	School	X: 29.47818517 Y: 71.1940006	137	PIRWALA	LOCATED IN FLOOD AREA.
76	GES Bait Qaisar	School	X: 29.57081054 Y: 71.12031906	248	JALALPUR	VULNERABLE SCHOOL.
77	GPS Joia Abad	School	X: 29.3940764665603 Y: 71.3581269979476	102	PIRWALA	LOCATED IN FLOOD AREA.
78	GPS Jam Qasim Wala	School	X: 29.4035553932189 Y: 71.2838459014892	95	JALALPUR	LOCATED IN FLOOD AREA.
79	GPS Jhanda Miani	School	X: 29.41188365 Y: 71.27324726	125	PIRWALA	LOCATED IN FLOOD AREA.
80	GMMS Noshara	School	X: 29.41295411 Y: 71.26068109	90	JALALPUR	LOCATED IN FLOOD AREA.
81	GPS Jhanbhoo	School	X: 29.44117049 Y: 71.29043482	89	PIRWALA	VULNERABLE SCHOOL.
82	GPS Lang Wala	School	X: 29.44108696 Y: 71.30071284	70	JALALPUR	VULNERABLE SCHOOL.
83	GPS Bait Wahi No.2	School	X: 29.43419449 Y: 71.31615067	203	PIRWALA	VULNERABLE SCHOOL.
84	GHS Motha	School	X: 29.4292473 Y: 71.36910481	264	JALALPUR	VULNERABLE SCHOOL.

S#	Name	Institute type (School, College etc.)	GPS Coordinates	Enrolment	Teshil	Hazard Vulnerability (Floods, Earthquake etc.)
85	GMPS Miani Motha	School	X: 29.40517385 Y: 71.38080617	175	PIRWALA	VULNERABLE SCHOOL.
86	GPS Kotla Shah Rasool	School	X: 29.4346100091934 Y: 71.3389062881469	101	JALALPUR	VULNERABLE SCHOOL.
87	GMPS Guj	School	X: 29.45038199 Y: 71.23064546	140	PIRWALA	VULNERABLE SCHOOL.
88	GMPS Bug Wala	School	X: 29.45202696 Y: 71.21617988	310	JALALPUR	VULNERABLE SCHOOL.
89	GPS Obara Janubi	School	X: 29.4591468572616 Y: 71.2093341350555	92	PIRWALA	VULNERABLE SCHOOL.
90	GMPS Khalil Abad	School	X: 29.47349553 Y: 71.228403	147	JALALPUR	VULNERABLE SCHOOL.
91	GMMS 87/M	School	X: 29.45579867 Y: 71.26841366	52	PIRWALA	VULNERABLE SCHOOL.
92	GHS, Lar Janubi,	School	X: 29.521889090538 Y: 71.0691136121749	357	JALALPUR	LOCATED IN FLOOD AREA.
93	GHS, Khan Bela	School	X: 29.462952 Y: 71.10718077	231	PIRWALA	LOCATED IN FLOOD AREA.
94	Govt. P/S, Fateh Bela, Tehsil Shujabad	School	X: 29.94671855 Y: 71.25044772	130	SHUJABAD	LOCATED IN FLOOD AREA.
95	Govt. P/S, Tahir Pur, Darya Paar, Shujabad	School	X: 29.90139746 Y: 71.24313257	109	SHUJABAD	LOCATED IN FLOOD AREA.
96	Govt. P/S, Soman Jadeed, Shujabad	School	X: 29.88896811 Y: 71.2362759	91	SHUJABAD	LOCATED IN FLOOD AREA.
97	Govt. P/S, Marah, Shujabad	School	X: 29.85722298 Y: 71.21420718	119	SHUJABAD	LOCATED IN FLOOD AREA.
98	Govt. P/S, Kikar Wala, Shujabad	School	X: 29.8311746120452 Y: 71.2206423282623	80	SHUJABAD	LOCATED IN FLOOD AREA.
99	Govt. P/S, Mansay Wala	School	X: 29.75943416 Y: 71.23121037	131	SHUJABAD	LOCATED IN FLOOD AREA.
100	Govt. P/S Bhana,	School	X: 29.7780400514602 Y: 71.1979454755783	45	SHUJABAD	LOCATED IN FLOOD AREA.

S#	Name	Institute type (School, College etc.)	GPS Coordinates	Enrolment	Teshil	Hazard Vulnerability (Floods, Earthquake etc.)
101	Govt. P/S Rashid pura	School	X: 30.0108987092971 Y: 71.2896126508712	206	SHUJABAD	LOCATED IN FLOOD AREA.
102	Govt. M P/S Aman-Ullahpur	School	X: 29.7962951660156 Y: 71.2082022428512	91	SHUJABAD	LOCATED IN FLOOD AREA.
103	Govt. P/S Sairy	School	X: 29.72796334 Y: 71.21042037	72	SHUJABAD	LOCATED IN FLOOD AREA.
104	Govt. P/S Thatha Makhdoompur	School	X: 29.70403461 Y: 71.20151993	122	SHUJABAD	LOCATED IN FLOOD AREA.
105	Govt. P/S Jhangi	School	X: 29.7759318351745 Y: 71.2336403131484	125	SHUJABAD	LOCATED IN FLOOD AREA.
106	Govt. P/S Baghrain	School	X: 29.77661142 Y: 71.24086895	118	SHUJABAD	LOCATED IN FLOOD AREA.
107	Govt, P/S Chak Jalalpur	School	X: 29.75417527 Y: 71.18360757	70	SHUJABAD	LOCATED IN FLOOD AREA.
108	Govt, Model P/S Chotan Sharif	School	X: 29.79563714 Y: 71.25361726	100	SHUJABAD	LOCATED IN FLOOD AREA.
109	Govt. P/S Sherpur	School	X: 29.9516095 Y: 71.27462105	107	SHUJABAD	LOCATED IN FLOOD AREA.
110	GGPS Mouza Jai	School	X: 29.96058591 Y: 71.26114536	86	SHUJABAD	LOCATED IN FLOOD AREA.
111	GGPS Chawley Wala	School	X: 29.94667426 Y: 71.26186077	105	SHUJABAD	LOCATED IN FLOOD AREA.
112	GGES Jalal Pur Khakhi	School	X: 29.75149124 Y: 71.22991623	194	SHUJABAD	LOCATED IN FLOOD AREA.
113	GGPS Sehri Shujra	School	X: 29.72995156 Y: 71.21388743	111	SHUJABAD	LOCATED IN FLOOD AREA.
114	GGPS Labeja	School	X: 29.78034296 Y: 71.19777335	40	SHUJABAD	LOCATED IN FLOOD AREA.
115	GGPS, Noor Faqir Wala	School	X: 29.79563714 Y: 71.25361726	55	SHUJABAD	LOCATED IN FLOOD AREA.
116	GPS Shamsuddin wala	School	X: 29.83743827 Y: 71.21824177	220	SHUJABAD	LOCATED IN FLOOD AREA.

ANNEX V: LIST OF INDUSTRIES WITH HAZARD 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	M/S. Atta Chemicals	Industrial Estate Multan	X 30.13 Y 70.37	Chemical	Asif Hyat 03008637523	Medium	Fire
2	M/s. Multan Chemical Pvt. Ltd	-do-	X 30.14 Y 71.39	Chemical	Rao Abid 03336066008	Medium	Fire
3	M/s. Pak Arab Fertilizer	Khanewal Road, Multan	X 30.13 Y 71.32	Chemical Fertilizer	Hasan Jamail 03006306805	High	Fire, Toxic Gases
4	M/s. Mousa Pak Chemicals	Industrial Estate Multan	X 30.13 Y 71.38	Chemical	Malik Aslam 03008631734	Low	Fire
5	Multan Chemicals	Industrial Estate Multan	X 30.13 Y 71.38	Chemical		Low	Fire

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	Ehsas Development Organization	Local	Gulgasht Colony, Multan	Environment and Health	Manzoor Yusuf	03467102250
2	Zikriya Welfare Development Association	Local	Nishtar road, Multan	Health	Hafiz Abdul Rehman	03009639932
3	Women Rights Association	Local	Chowk Kumharan Wala, Multan	Women Welfare	Shaista Bukhari	03007318909
4	The Council for Insani Behbood	Local	Hazoori Bagh road, Multan	Education	M Arif	03457272576
5	Khan Welfare Services	Local	Sher Shah, Multan	Health and Education	Shamshad Kousari	03226180848
6	Aman Welfare Organization	Local	Naqashband Colony, Multan	Health, Women Welfare	Shahbaz Hussain	03007347842
7	Dais Taraqiati Tanzeem	Local	Nawab Pur, Multan	Health	Dr. Aslam Joyia	03127795809
8	Sunrise Social Welfare Organization	Local	Budhla Sanat, Multan	Women Welfare	Haji Ghulam Sarwar	0302733213
9	Roshni Welfare Organization	Local	Suraj Miani, Multan	Women Welfare, Education	Zahid Zahoor	03006303574
10	Arooj Development Organization	Local	Timber Market, Multan	Education, Women Welfare	Hafiz Anwar Hussain Malik	03336104918
11	Encourage the Human Development (EHD)	Local	MDA Chowk, Multan	Women Welfare, Child Welfare	Ms Munaza Hashmi	03007183789
12	Al Aziz Welfare Organization	Local	Sharif Pura Multan	Women Welfare, Education	M Raza Baqir	03123620284
13	Shaur Taraqiati Tanzeem	Local	Sher Shah Town, Multan	Environment and Narcotics	Shahid Mehmood Ansari	03006363682
14	Ufaq Taraqiati Tanzeem	Local	Peeran Ghayab, Multan	Women Welfare	Malik Sarfaraz	03216309707
15	Active Organization for Development	Local	Altamash Road, Multan	Women Welfare	Ayaz Ali Sheikh	03023575302
16	Rehbar Development Organization	Local	Grass Mandi, Multan	Education	Ms Violet	03457317834
17	Rohi Development Organization	Local	Allah Shafi Chowk, Multan	Women Welfare, Education	Dr. Farooq Langah	03336105276
18	Society for Special Persons	Local	Kalma Chowk, Multan	Disability Welfare	Ms Zahida Hameed	03216315160
19	Courage Development Foundation	Local	Garden Town, Multan	Women Welfare, Child Welfare	Ms Neelam	03336141524
20	Shujabad Literacy Society	Local	Shujabad	Education, Women Welfare	Meraj Din Qureshi	03027442854

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.
21	Dehi Taraqiati Project Matotally	Local	Shujabad	Education, Women Welfare	Rana Riaz Noon	03457282920
22	Tanzeem e Haqooq Insani	Local	Jalalpur Pirwala	Awareness	Syed Tafseer Hussain	03017406606
23	Anmol Women Welfare Organization	Local	Jalalpur Pirwala	Women Welfare	Syeda Kalsoom Mubarak	03067751675

ANNEX VII: CONTACT LIST OF MAIN STAKEHOLDERS/ DEPARTMENTS

S#	Name	Desig.	Telephone (Office)	Telephone (Residential)	Email ID	Mobile
1.	Irshad Ahmad	Commissioner, Multan Division Multan	061-9200044 061-9200048	061-9200068	shoaibhusain@gmail.com	-
2.	Javed Akbar Riaz	Regional Police Officer Multan	061-9200425	061-9200424	rpomultan15@gmail.com	
3.	Amir Kareem Khan	Deputy Commissioner Multan	061-9200042 061-9200043	061-9200045	dco.multan.it@gmail.com	0304-0920081
4.	Khurram Shahzad Haider	City Police Officer	061-9200476	061-9200474	dpomultan@yahoo.com	-
5.	Imran Ghilzai	Chief Traffic Officer, Multan	061-9200657	-	ctomultan@yahoo.com	-
6.	Azhar Gillani	District Officer	061-9200480	-	sebra.mul@gmail.com	0333-6175577
7.	Tayyab Khan	Additional Deputy Commissioner (Revenue)	061-9200073	061-9200091	doc.mtn1@gmail.com	0308-0110838
8.	Rizwan Nazeer	Additional Deputy Commissioner (General)	061-9200049	-	adcgmultan@gmail.com	0300-4174947
9.	Arif Zia Gujjar	Additional Deputy Commissioner (F&P)	061-9200038	-	edofnmpul@gmail.com	0300-9636868
10.	Rana Ikhlaz	Additional Deputy Commissioner HQ	061-9200578	-	-	0300-6685530
11.	Khuwaja Umair Mahmood	Assistant Commissioner City Multan	061-9200089	-	acmultan.city@gmail.com	0321-6342634
12.	Amir Iftikhar	Assistant Commissioner Saddar Multan	061-9200784	-	ac.saddar.multan@gmail.com	0334-5057232
13.	Nasir Shahzad	Assistant Commissioner, Shujabad Multan	061-4396480	-	acshujaabadmln@gmail.com	0333-6114689
14.	Tariq Mahmood	Assistant Commissioner, Jalalpur Pirwala Multan	061-4212232	-	acjalalpur@gmail.com	0321-7519757
15.	Shamsher Ahmad Khan	CEO	061-9210035	-	ceodeamultan@gmail.com	0301-7462980
16.	Dr. Shoaib Gurmani	CEO	061-9200902	-	Edohealth.multan@punjab.gov.pk	0300-7302270
17.	Rai Zafar Abbas	Deputy Director Agriculture (Ext.) Multan	061-9200748	-	doaextmultan@hotmail.com	0301-7571029
18.	Nasir Sultan	DDMC	061-4507415	-	ddmc_mul.piu@pdma.gov.pk	0336-7920307
19.	Nasir Iqbal	Additional Director General MDA Multan	061-9200832	-	mda_mln@yahoo.com	0300-9494449
20.	Shahzad Muneer	Managing Director	061-9330051	-	wasa_mln@yahoo.com	0321-7318390

S#	Name	Desig.	Telephone (Office)	Telephone (Residential)	Email ID	Mobile
21.	Naveed Mubashir	Divisional Superintendent	061-9200619	-	dsprmultan@gmail.com	0333-4244280
22.	Ch. Khalid Mahmood	Superintendent Engineer	061-9220258	-	momultan@live.com	0302-8312562
23.	M. Aftab Bhatti	XEN, Irrigation Shujabad Canal Multan	061-9200699	-	Xenshujabad_canal@yahoo.com	0300-0762038
24.	Ahmad Javed	District Food Controller	061-6778324	-	dfcmultanfood@gmail.com	0301-4578957
25.	Farmaish Ali	Chief Officer, Zila Council Multan	061-9200298	-	districtcouncilmn@gmail.com	0323-2008085
26.	Farmaish Ali	Chief Officer, Metropolitan Corporation, Multan	061-9330331	-	mcmco786@gmail.com	0323-2008085
27.	Mansha Ahsan	Chief Officer, Municipal Committee Shujabad	061-4397115	-	mcshujabad@gmail.com	-
28.	Syed Maslihuddin Bukhari	Chief Officer, Municipal Committee Jalalpur Pirwala	061-4210334	-	mcjalalpurpirwala@gmail.com	0300-7817005
29.	Capt. Haseeb Akram	HQ Engineer, 2 Corps Pak Army Multan	061-4516604	-	-	0333-8743070
30.	Mrs. Fatima Khan	Civil Defence Officer, Multan	061-9200706	-	-	0332-6644499
31.	Muzammil Yar	Deputy Director Social Welfare Multan	061-9200554	-	dosw786mn@gmail.com	0333-9794975
32.	Rana Mohsin	Secretary, DRTA Multan	061-9200611	-	drtamultan@gmail.com	0300-4415154
33.	Humayun Khan Masroor	XEN M&R Provincial Highways	061-9200712	-	-	0337-6005300
34.	M. Nadeem Gujjar	XEN, Public Health Engineering	061-9330011	-	phxenmln@yahoo.com	0306-8106189
35.	Humayun Khan Masroor	XEN M&R Provincial Buildings	061-9200388	-	xenbmultan@gmail.com	0337-6005300
36.	Dr. Kaleem Ullah	District Emergency Officer (Rescue 1122), Multan	061-9220305	-	deo.mul@rescue.gov.pk	0323-4018426
37.	Engr. Ahmad Kamal	Emergency Officer (O&A) (Rescue 1122), Multan	061-9220306	-	deo.mul@rescue.gov.pk	0300-7350001
38.	M. Asif Iqbal	SNA/Focal Person Flood Control Room	061-9200963	-	Snamultan.11@gmail.com	0300-6309301
39.	Control Room Rescue 1122	-	061-9220305	-	deo.mul@rescue.gov.pk	-

ANNEX VIII: LIST OF VOLUNTEERS FOR HAZARD ACTIVITIES

Sr.#	Name	CNIC	Contact Number
1.	M Aqeel Taj	36302-0352594-5	0307-6193918
2.	Baber Jamil	36302-4272109-9	0302-8402000
3.	Maratib Ali	36103-8792549-7	0323-9051942
4.	Abdul Majeed	36302-7534118-3	0305-6079195
5.	Kashif Ali	36302-9586862-7	03000-49101
6.	Abdul Sajid	36303-1240712-1	0322-8922101
7.	Abdul-Rehman	36302-1932854-3	0307- 1741581
8.	Amir Khan	36303-9469441-3	0305-50223848
9.	Arbaz Ali	32303-58870921-5	0308-8818963
10.	Arslan Ali	36303-1867047-1	0301-9044426
11.	Hafiz Bbber Ali	36303-7513967-9	0309-0821617
12.	Kaleem ullah	36302-7472536-9	0308-5475694
13.	Khizar Iqbal	36201-8146264-5	0303-0601081
14.	M Abdullah	36302-2062088-1	0303-3817699
15.	M Adnan	36303-6883053-1	0305-8318901
16.	M Amjid	36303-6742778-9	0309-8230146
17.	M Aqib	36302-4214874-5	0306-8439833
18.	M Arslan	36303-5251638-7	0306-1772276
19.	M Bilal	36302-4967078-7	0303-0601081
20.	M Hamza	36302-5380229-7	0304-8896359
21.	M Luqman	36303-7430950-7	0307-6640927
22.	M Rizwan	36302-6737583-9	0320-7733795
23.	M Saifullah	36303-0617242-1	0305-2047154
24.	M Sarfraz	36303-9944870-7	0320-8719733
25.	M Shahbaz	36102-8189626-5	0308-9251559
26.	M Sultan	36303-91617639	0309-9470656
27.	M Zeeshan	36302-5820866-9	0303-3167391
28.	Naeem Gulam Nabi	36302-2141259-1	0307-6488106
29.	Rashid Khan	36302-2552219-9	0305-6079195
30.	Ubaid Ur Rahman	36302-9310723-1	0306-8846037
31.	Usama	36303-2739585-1	0307-6546961
32.	Mahboob Riaz	36303-5222326-1	0320-1757534
33.	M shahid	36302-9428379-7	0300-3529898
34.	M Danish	36303-7011715-3	0304-7446372

35.	M Sohaib	36303-3958553-5	0303-1447694
36.	Abdullah Kashif	36303-4477852-1	0303-3817699
37.	M Mudasar Abbas	36303-2337063-5	0315-4895779
38.	Tanveer Ahmad	36302-4582954-1	0315-4895779
39.	Ansar Abbas	36304-0622106-7	0300-6137214
40.	M Tayyab	36302-2212390-5	0318-7507454
41.	M Asghar	36303-2906766-7	0302-7484301
42.	M Faraz	36304-6599894-5	3017490182
43.	M Irfan	36302-1883768-5	0305-3613510
44.	Ali Ahmad	36302-4698031-7	0306-2915383
45.	Umer Waqas	36302-3377031-7	030000-49101
46.	Syed Ali Haider	36302-9956362-3	0307-6193918
47.	Sajjad Nazir	36303-7018903-7	0302-8402000
48.	M uzair Khalid	36303-5010999-5	0323-9051942
49.	M Sohaib	36302-7830498-5	0303-0373931
50.	M Saleem	36302-1425007-5	0301-7411992

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
154	Malik Ahmad Hassain Deharr	PTI	0300-9635599	211	Ali Haider Gillani	PPPP	0320-4015555
155	Malik Aamir Dogar	PTI	0300-8730786	212	M. Saleem Akhtar	PTI	0345-7212228
156	Shah Mehmood Qureshi	PTI	0300-8634453	213	Waseem Khan Badozai	PTI	0300-8637704
157	Makhdoom Zain Qureshi	PTI	0307-6664466	214	M. Zaheer Ud Din Alizai	PTI	0333-6118868
158	M. Ibrahim Khan	PTI	0300-8633665	215	Javed Akhtar Ansari	PTI	0300-6339520
159	Rana M. Qasim Noon	PTI	0323-5741457	216	M. Nadeem Qureshi	PTI	0300-9633860
				217	Salman Naeem	PTI	0312-8900000
				218	Wasif Mazhar	PTI	0300-8635691
				219	Dr. M. Akhtar Malik	PTI	0300-8634051
				220	Mian Tariq Abdullah	PTI	0345-7222221
				221	Rana Ejaz Noon	PTI	0333-6106666
				222	Qasim Abbas Khan	PTI	0300-8631085
				223	Naghma Mushtaq	PMLN	0300-8463610

ANNEX X: LOCAL GOVERNMENT**District and Tehsil Level**

S#	Designation	District/Tehsil Name	Name	Contact Number	Mobile Number
1	Chairman District Council	Multan	Dewan M. Abbas Bukhari	9200299	0300-9728583
2	Chairman Municipal Corporation, Multan	Multan	Ch. Naveed Arain	9330331	0300-7322606
3	Chairman Municipal Committee, Shujabad	Shujabad	Dr. Rafique Qureshi	061-4396715	0301-8632545
4	Chairman Municipal Committee, Jalalpur Pirwala	Jalalpur Pirwala	Khawaja Saleem	061-4210334	0300-3375429

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
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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.
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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
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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	Punjad 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-	Khangarh 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.				Exp. High
			Low	Med:	High	Very 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
SUTLEJ	Balloki	2.25	0.4	0.65	0.9	1.35	1.8
	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.