

DISTRICT DISASTER MANAGEMENT PLAN 2020

Division: Rawalpindi

District: Chakwal

Tehsils: Tehsil Chakwal, Tehsil Talagang, Tehsil Choa
Saiden Shah, Tehsil Kallar Kahar, Tehsil Lawa

Major Risks: Floods, Hill Torrent, Earthquake,
Epidemic



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XX

Estimated number of people at risk of **hill torrent** in 2020



Risk: Low

XX

Estimated number of people at risk of **Hill Torrent** in 2020



Risk: Low

XX

Estimated number of people at risk of **earthquake** in 2020



Risk: High

XX

Estimated number of people at risk of **epidemic** in 2020



Risk: Medium

EXECUTIVE SUMMARY

Provide a short executive summary outlining the situation and risk analysis, the response objectives and intended operational delivery.

District Chakwal is arid district with no flood hazards. There is no river situated in district Chakwal. Only in heavy rain season some nullas are flooded but in previous known history no major disaster occurred in the district.

In case of any emergency situation all the line departments are fully prepared to such situation. Main departments are Rescue 1122, Civil Defense Department, Health Department, Tehsil / Municipal Committees. All these departments are equipped with emergency response tools and quite capable with operational delivery.

All the head of departments have already been directed to make suitable arrangements for the rescue and relief operations and effectively coordinate with each other to make an effective effort for rescue.

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	1,495,982
2.	No. of Tehsils	5
3.	No. of UCs	71
4.	No. of Revenue Estates	455
5.	Population Density (people per km ²)	210
6.	Family Size	7
7.	Pop Growth Rate	2.00
8.	PCI	0
9.	District GDP/Annual Income	
10.	Poverty Rate	
11.	Patient/Doctor Ratio	
12.	AMR	
13.	IMR	341,000
14.	MMR	289,100
15.	Literacy Rate	84%
16.	Global Acute Malnutrition (GAM) rate	
17.	Severe Acute Malnutrition (SAM) rate	
18.	Percentage of population having access to clean drinking water	
19.	Annual Crime	

Population

Total	Male (above 18)	Female	Male	Minor (F) (less than 18)	Vulnerable People (PLWs, disabled, aged)
1,495,982	411,966	771,744	724,205		

Source/Note: District Population Department

Number of Dwelling Units	Kaccha (Mud/clay)	Pakka (Bricks & Mortar)

Source/Note: Click here to enter text.

Area (in acres)

Total Area of District in Km ²	Area under cultivation	Cultivation in Settled Area	Cultivation in Baid Area
2591	820,020		

Literacy Rate

Overall	Rural		Urban		Total	
	Male	Female	Male	Female	Male	Female
84%	82%	81%	85%	84%	85%	83%

Source/Note: Click here to enter text.

Government Schools
Private Schools

		Schools	Enrollment			Schools	Enrollment
Total/ Overall		1148	184256	Total/ Overall		1093	170457
Boys	Primary	316	18643	Boys	Primary		
	Middle	83	13720		Middle		
	High	141	50566		High	190	4657
Girls	Primary	349	22698	Girls	Primary		
	Middle	106	18642		Middle		
	High	144	59395		High	212	5349
Co-Education	Primary			Co-Education	Primary	149	48309
	Middle				Middle	450	112142
	High				High		
Special Education		09	592	Special Education			

Higher/Technical/Professional Education (Public & Private)

Particulars	College	Universities	Professional	Technical	Commerce	Total
No of Institution	66	01		02	2	71
No of Students	16864	350		450	206	17070

Health Facilities

Particulars	Primary	Secondary	Tertiary	Private Hospital	Total
No. of Facilities	80	09	0	106	195
Annual OPDs					
No of beds	310	335	00	335	980
Doctors Available	162	62	0	0	224
Paramedical staff	398	219			617
Ambulances available	13		0	2	15
Mobile Medical Units					

Livestock: Small Animals (goats, sheep etc.):

Big Animals (cows, buffalos, camel etc.)

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

Agriculture	Livestock	Poultry	Fish Farming	Services (Public & Pvt)	Business	Expatriates	Industrial Labor	Skilled Labor	Unskilled Daily Labor	General Labor
60%	17%	6%	0%	4%	3%	1%	2%	1%	4%	2%

Disaster History - Floods (since 1970)

S#	Year	No. of people affected	No. of deaths	No. of Revenue Estates affected	Houses Damaged (Partially)	Houses Damaged (Fully)	Compensation Paid (Rs.)	Financial Impact (including infrastructure damaged)
1	1992	500	1	1	300			
2	1997	299		1	25			
3	1997	100		1	25			
4	2013	200	1	1	250			

Disaster History – Other disasters (since 1970)

S#	Year	Disaster Type	No. of people affected	No. of deaths	Remarks
1	2015	Earthquake	1	1	1 child death due earthquake Kalar Kahar

General Information

Particulars	Detail
Neighboring districts and their vulnerabilities	Jhelum, Khushab, Mianwali, Rawalpindi
Topographical Features	
Weather/Climate pattern	e.g. max. and min. temperature, annual precipitation, storms, heat waves, snow fall etc. Max. 43 and Min. 10
Major Rivers	Name of river, passing through areas along with length in the district Major Barrages and their Flood levels There is no river passing through District Chakwal area and no Barrage
Major Nullahs / Streams	Name of river, passing through areas along with length in the district Flood levels N/A
Motorway/Highway	Vulnerable points of motorway/highway Kallar Kahar Interchange
Railways	Vulnerable points of Railway N/A
Geological features	e.g. fault line, mountainous areas etc. Mountainous area

Dams (including small dams)

Name of Dam	Location	GPS Coordinates	Capacity	High Flood Level	Critical Points, if any	Remarks
Khokher Zer Dam	20 Km south-east of Chakwal on Chakwal Choa Saidan Shah Road	X:300004.89 Y: 3632238.73	3212	1924		Ok
Dhok Tahlian Dam	27 Km south-east of Chakwal on Chakwal Choa Saidan Shah Road	X: 310752.1 Y: 3628283.7	1805	1947.5	-	Ok
Kot Raja Dam	25 Km south-east of Chakwal on Chakwal Choa Saidan Shah Road	X: 3125747 Y:3632231.6	2844	1721.5	-	Ok
Dhok Qutab	40 Km south-	X: 316303.1	1976	1948	-	Ok

Din Dam	east of Chakwal near Village Dhok Qutab Din	Y:3632564.9				
Nikka Dam	35 Km south of Chakwal on Khushab Road.	X: 281835.8 Y:3627397	1248	2351	-	Ok
Walana Dam	44 Km south of Chakwal City	X: 277668.1 Y:3640402.7	2193	1712	-	Ok
Gurabh Dam	15 Km from Talagang on Khushab Road	X: 252790.7 Y:3638493.2	922	1756	-	Ok
Pira Fatehial Dam	20 Km South-West of Talagang near Village Jhatla	X: 252446.6 Y:3632030.3	7400	1878.3	-	Ok
Dhuranl Dam	55 Km from Talagang on Mianwali Road near Village Dhurnal	X: 228146.3 Y:3633707	1950	1485	-	Ok
Bhughtal Dam	40 Km South of Talagang City	X: 241018.7 Y:3634325.9	1140	1799	-	Ok
Mial Dam	45 Km from Talagang on Mianwali Road near Village Mial	X: 231088.8 Y:3637711.6	3200	1442	-	Ok
Jamal Dam	8 Km from Mundra Road near Village Jamal Tehsil Gujar Khan District Rawalpindi	X: 325067.1 Y:3684958.2	1860	1661	-	Ok
Khai Dam	25 Km from Chakwal on Khushab Road near Village Khai	X: 290745.94 Y:3633063.57	5921	2050	-	Ok
Ghazial Dam	45 Km from Chakwal on Sohawa Road near Village Ghazial	X: 327739.76 Y:3649778.23	2000	1587	-	Ok
Minwal Dam	35 Km from Chakwal near Village Minwal	X:300911.5 Y:3657664.5	2000	1568	-	Ok
Dharabi Dam	20 Km from Chakwal on Talagang Road near Village	X:280934.18 Y:3643113.41	37000	1608	-	Ok

	Balkassar					
Dhok Hum Dam	Dam Site located near Village Chowkhandi on Mianwali Road	X:244928.8 Y:3636530.7	8000	1724	-	Ok
Mundee Dam	Dam Site located near Village Mundee on Sohawa Road	X:326125.34 Y:3655899.88	450	1545	-	Ok
Dhok Jhang Dam	30 Km from Chakwal on Choa Saidan Shah Road near Village Bhun Amir Khatoon	X:305175.5 Y:3631132	2650	1923	-	Ok
Lakhwal / Uthwal Dam	35 Km from Chakwal on Neela Road near Village Lakhwal	X:291695.9 Y:3656485.9	18000	1478	-	Ok
Arrar Mughlan Dam	Dam site is located near Daman Village	X:730309 Y:325533	5200	1491.5	-	Ok
Surlah Dam	20 KM south of Chakwal on Chakwal- Choa Road	X:300306.95 Y:3632165.86	1905	1924	-	Ok

Major Embankments/Bunds

Name of Embankment	Length (km)	Starting Point (Revenue Estate /Tehsil Name)	Ending Point (Revenue Estate /Tehsil Name)	Name of Critical/ vulnerable Points	GPS Location of Critical/ Vulnerable Points	Remarks
N/A	0	NIL	NIL	NIL	X:0.00 Y: 0.00	NIL

Breaching Section

Name of Bund/ Embankment	Name of Breaching Section	Location with GPS Coordinates	Likely Affected Population			Likely Affected Revenue Estate	Remarks
			Male	Female	Children		
N/A		X: Y:					

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

Name	Capacity	GPS Coordinates	Name	Capacity	GPS Coordinates
132 KV GSS CHAKWAL	122 MVA	X: Y:	132 KV C.S.SHAH	26 MVA	X: Y:
132 KV GSS PADSHAHAN	33.5 MVA	X: Y:	132 KV TALAGANG	38 MVA	X: Y:
132 KV	28 MVA	X:	132 KV N.P.SETHI	26 MVA	X:

BHAGWAL		Y:			Y:
66 KV TAMMAN	26.8 MVA		66 KV D.S.BILAWAL	25.5 MVA	

Airport / Landing Strips

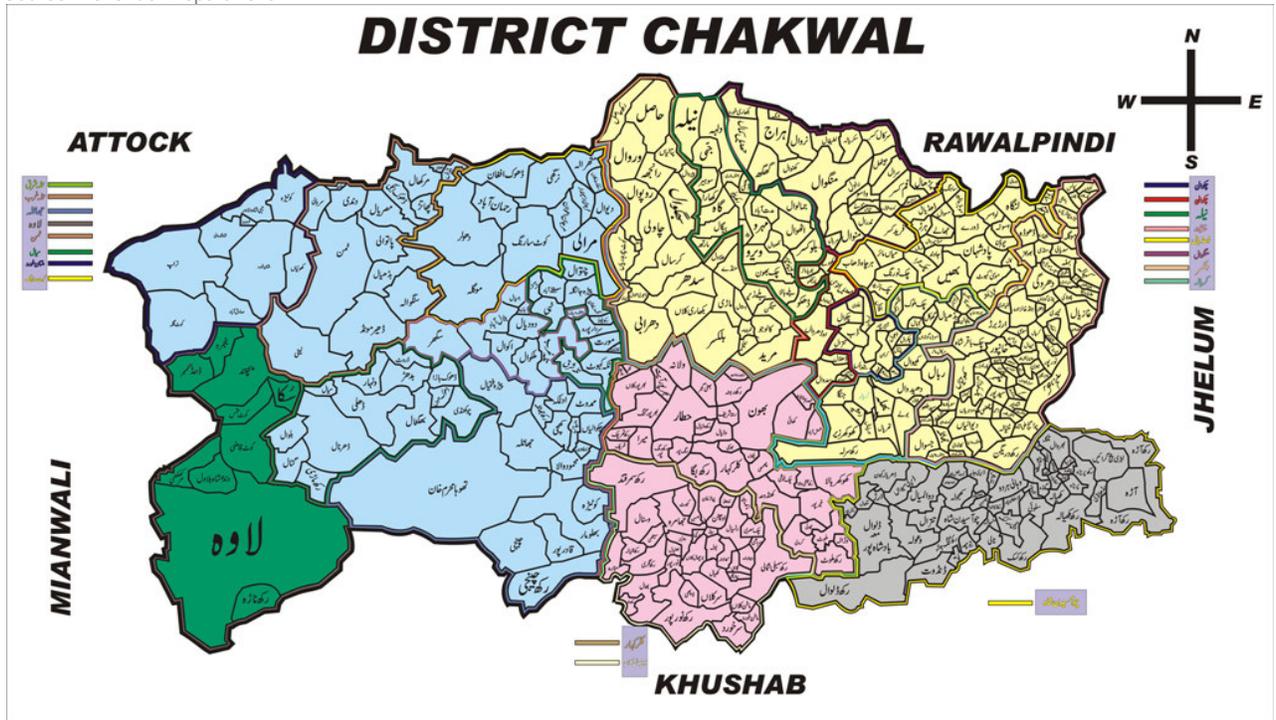
Type	Area Name	GPS Coordinates	Type	Area Name	GPS Coordinates
N/A		X: Y:			X: Y:

Govt. storage facilities/warehouses in the district

Facility Type	Capacity	Location with GPS Coordinates	Facility Type	Capacity	Location with GPS Coordinates
Chakwal	11000 MT	X:32.9369189 Y: 72.8569454	Talagang	2000	X:32.9269426 Y: 72.4136916

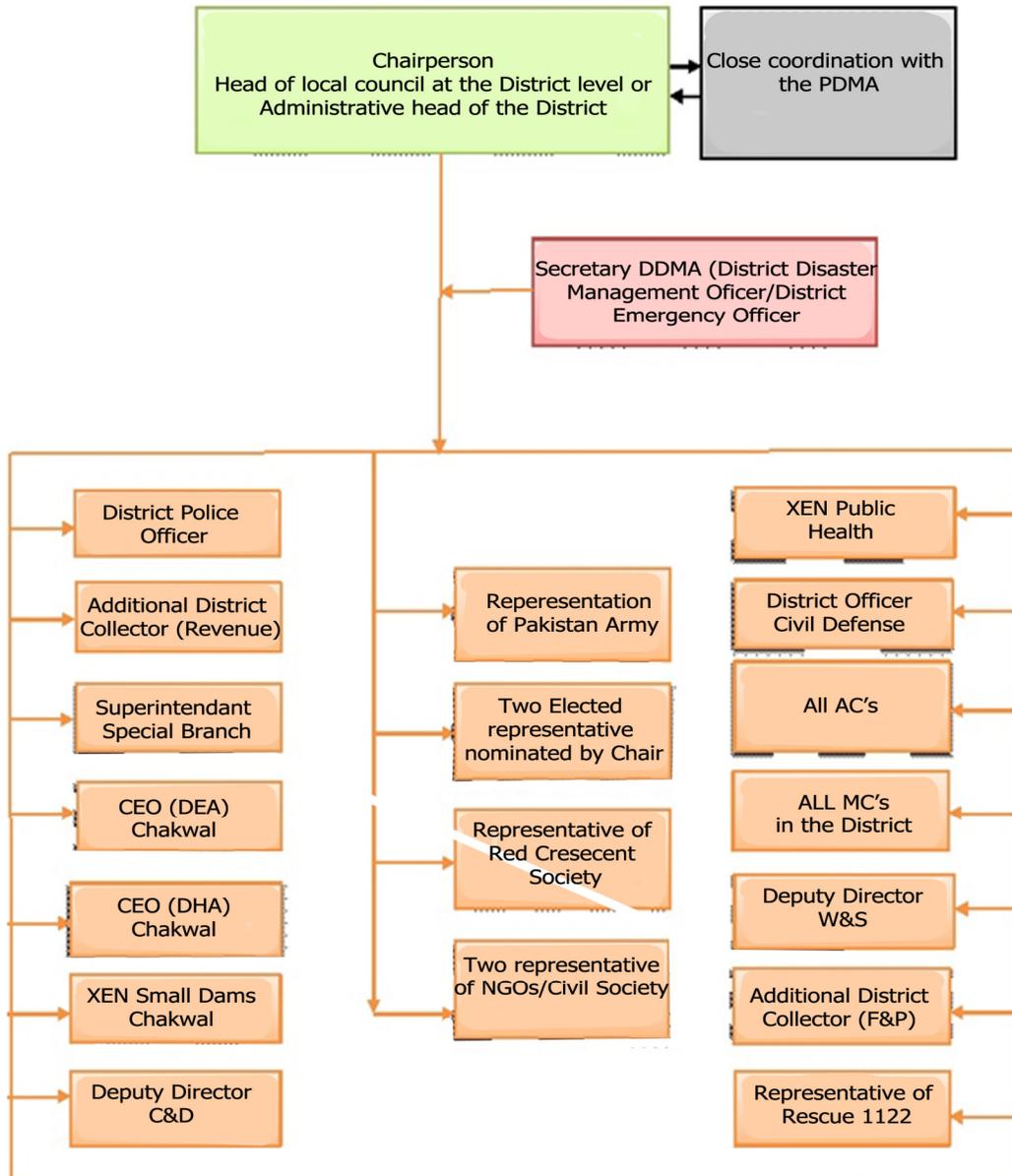
District baseline/reference map

Source: Revenue Department



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 programs for different levels of officers, employees and voluntary rescue workers in the district;
- j) facilitate community training and awareness programs 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 centers or camps and make arrangements for water supply and sanitation in such buildings or places;
- p) establish stockpiles of relief and rescue materials or ensure preparedness to make such materials available at a short notice;
- q) provide information to the Provincial Authority relating to different aspects of disaster management;
- r) Encourage the involvement of non-governmental organizations and voluntary social-welfare institutions working at the grass root level in the district for disaster management.
- s) ensure communication systems are in order and disaster management drills are carried out periodically; and
- t) Perform such other functions as the Provincial Government or Provincial Authority may assign to it or as it deems necessary for disaster management in the district.

District Plan:

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

Additional Powers of District Authority:

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

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

Revenue Department (Functions and Responsibilities)

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

- Taking everyone on board is perhaps the most important thing to do. Regular meetings of DDMA should be held to clearly highlight the roles and duties of DPOs, CEO's, and 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 are 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
- 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/MC)

- Tehsil / Town Municipal Administration (TMA/MC) 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/MC 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 AC will assist in the migration of the affected people.
- During the relief effort and subsequent rehabilitation effort 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 NDMA 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 defence and the implementing arm of the government policy and plans. Within the district there are three to four key players/departments that have to put up a joint and coordinated effort in order to fight with and handle any disaster under the leadership and coordination of the DC. The office of the DC fully supported by the DPO and line departments such as Health, Agriculture, Livestock, Civil Defence, 1122, TMAs and the Revenue Department form the main disaster management team within 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 Incharge of his/her tehsil. All disaster related activities in a said tehsil will be coordinated through the concerned AC.
- 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. District Police Officer
 - iii. Additional Deputy Commissioner (Revenue) Focal Person
 - iv. Two Elected Representatives to be nominated by the Chair
 - v. Representative of Pak Army
 - vi. Two Representatives of NGOs/Civil Society to be nominated by the Chair
 - vii. District Officer (Coordination)
 - viii. Additional Deputy Commissioner (F&P)
 - ix. Deputy Director (Works & Services)
 - x. CEO (Health)
 - xi. CEO (Education)
 - xii. Deputy Director (C&D)
 - xiii. SP Special Branch
 - xiv. XEN Irrigation / Public Health
 - xv. District officer Civil Defence
 - xvi. Assistant Commissioners
 - xvii. All Municipal Committees
 - xviii. District Emergency Officer, Rescue 1122(**Secretary**)
 - xix. Representative of Red Crescent
 - xx. Such other District level Officers to be appointed by District Government

- District Governments must establish a Disaster / Flood control room at the DC's office, the numbers of which will be circulated to all concerned. The Disaster / Flood Control Room have to maintain updated information regarding the threat of disaster and statistics post disaster. The centre 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.
- CEO (Health) will ensure the availability of adequate medicines for treatment of common issues, particularly for snake and dog bite cases and general vaccines at each relief camp.
- DO (Agriculture) and DO Livestock would arrange fodder and feed supplement for livestock and animals displaced.
- District Regional Transport Authorities (DRTA) are managed by Secretaries who would coordinate with local transporters to arrange 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 sites. It 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 and evacuate victims.
- Apart from that 1122 will be 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: Loudspeakers announcements

- Establishment of control rooms
- Cancellation of all type of leaves of all employees Designation of Focal Persons
- Assignment of duties and responsibilities of all officers for flood emergency
- Preparation of Telephone Directories with the cell numbers of all the members of DDMA's and volunteers
- No leave during flood days; No official will leave station

Disaster Emergency Control Room (functions and responsibilities)

As already mentioned above that this district has remained safe from flood calamity due to its peculiar geographical location and topography. But to meet any unforeseen and untoward incident, adequate arrangements have been made and resources and equipments with different department have been identified which will be available at a short notice for quick response.

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 affected in camp (sick, aged and children) shall be communicated daily
- Availability of at least one emergency vehicle at centre 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. 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.

Civil-Military Coordination Mechanism

District Administration have close coordination with military in all situation including Moharram and other sensitive occasion. So, in case of emergency or before emergency situation army will be called by District Administration through proper channel.

Volunteer Network

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

There are almost / approximately 500 volunteers registered with District Civil Defense Department. DO (CD) already made a comprehensive plan to mobilize these volunteers and his department will coordinate with them in case of emergency. District Officer (Civil Defense) is the focal person to coordinate and mobilize with volunteers. The Rescue 1122 has teams of volunteers which are named as CERT. These will also be mobilized by the District Emergency Officer Rescue 1122 in case of any disaster.

RISK ANALYSIS

1. Potential hazards of the district

Hazards	Likelihood (Score 1-5)	Impact (Score 1-5)	Risk
Floods	3	4	12
Urban Flooding			
Flash Floods			
Hill Torrent			
Glacial Lake Outburst Flood (GLOF)			
Landslide	2	1	2
Tornado			
Earthquake	5	4	20
Drought			
Epidemic	6	5	30
Fire Incidents			
Other Major Accidents (Building Collapse, road traffic accidents, train accident, Stampede, plane crash)			
Environmental Hazards (industrial accidents, severe pollution etc.)			

Risk = Impact x Likelihood

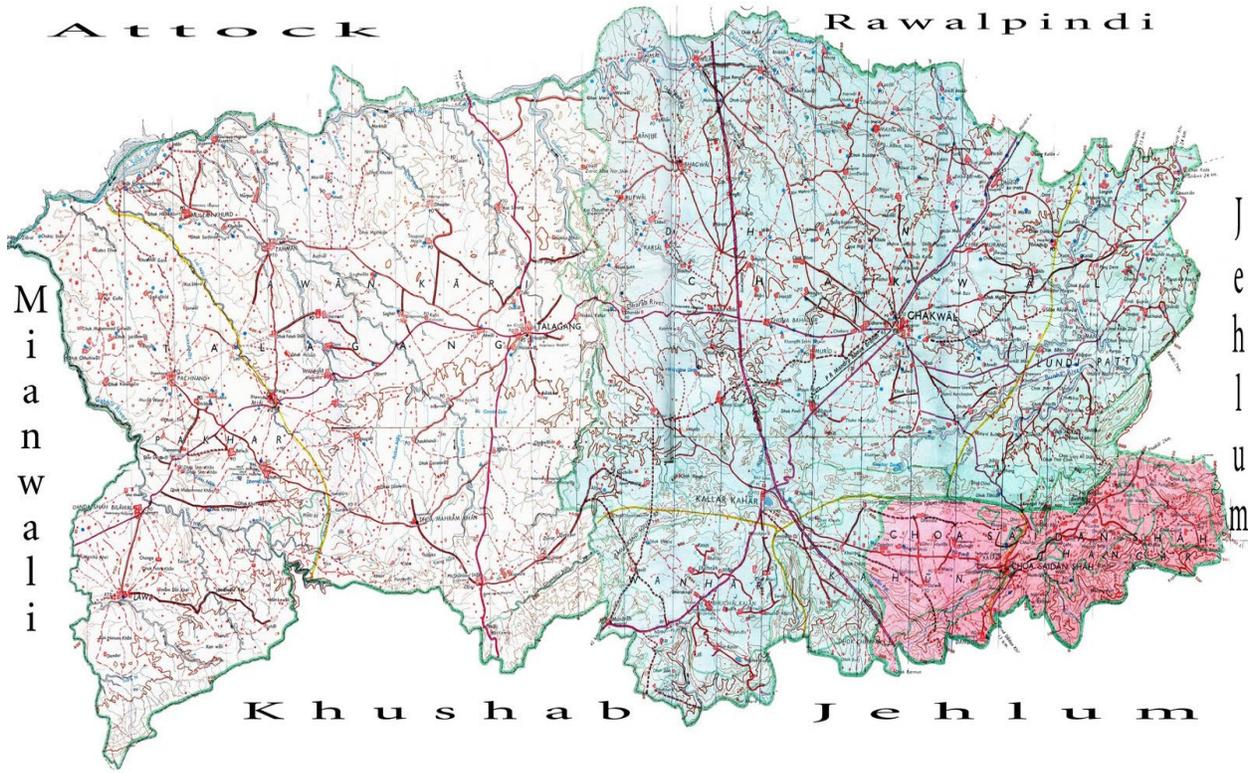
Low : 1-7
 Medium : 8-14
 High : 15-25

2.Hazards

- *Disasters occurred over the past two to three decades and their impact on communities and development sectors*
- *Provide a brief description of the hazards being planned for (medium and high risks), including potential location that could be affected;*
- *Briefly outline the triggers*
 - ✓ Normally the phenomenon of Flood does not occur in this region on large scale because of uneven terrain.
 - ✓ Moreover there is no major river passing in the District Chakwal except river soan but in river soan flood does not occur. No major disaster occurred from last fifteen years and damages are also not considerable.

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)

Mostly response mechanism is comprising from Government sector. However, main national NGOs like Plan International always coordinated in good manners. So according to need these national NGOs may be involved in relief work.

4. Strategic Reserves

Items	Available	Functional	Non-Functional	Extra Demand
Boats	04	04	00	
OBM	04	04	00	
De-watering sets	15	13	2	
Navigators				
GIS devices				
Life Jackets	47	47	00	
Life Ring	67	67	00	
Life Lines	02			
Scuba diving suit with complete accessories	02			
First Aid Kits	14			
Rescue Bag				
Safety Harnesses				
Ambulances	13	12	01	
Fire Brigade	03	03	0	
Water Tanks / Bouzers	07	05	02	
Extendable Ladders				
Hydraulic Cutter	01	01	00	
Sonar Rader				
Jumping Sheet				
Dumpers				
Excavators				
Cranes				
Bulldozer				
Boat Carrier/Trolleys/Tractor Trolley	13	13	0	
Pickups/Jeeps/4x4 vehicles/Mini Trucks	5	4	1	
Searchlight	4	4	0	
Tent	05	00	05	
			Unserviceable	
Mosquito Net	05	05	00	
Plastic Mat	05	05	00	
Blanket				
Any other main relief/rescue equipment				
Generator Sets	03	03	0	
Gas-Cutters				
Sonar Radars				
Navigator/GPS Tracker				
Jetter	1	1	0	
Sucker	1	1	0	

5.Gaps and Constraints

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

For rescue and response there is capacity gaps of equipments. Due to non availability of funds.

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

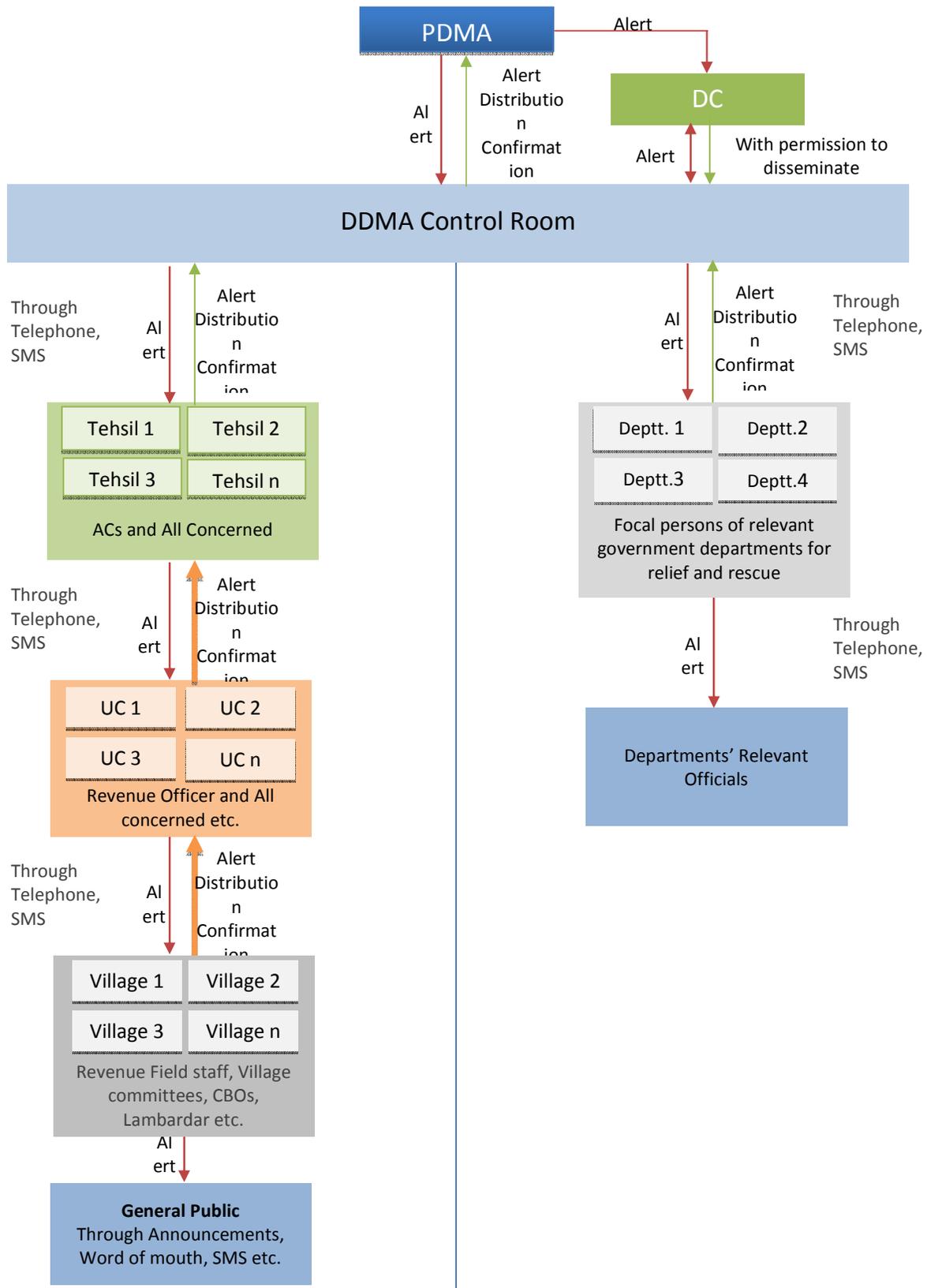
Hazards	Mitigate Actions	Responsible Department
Floods	<ul style="list-style-type: none"> ✓ By 24 hours watching arrangements of hydraulic structure. ✓ Spilway of Dam will flow with natural form in Nalla. ✓ In case of emergency, the pubic living surrounding the Nullah will be informed through the announcement of District Administration, Local FM Radio and in Mosque.Schools are flood free. 	Irrigation Department (Small Dam Organization)
Urban Flooding	N/A	N/A
Flash Floods	N/A	N/A
Hill Torrent	N/A	N/A
Glacial Lake Outburst Flood (GLOF)	N/A	N/A
Landslide	Awareness campaign should be collectively launched at the hilly area. Concerned Tehsil Administration	Concerned Tehsil Administration

Tornado		
Earthquake		
Drought		
Epidemic	Provision of Medical cover	Health
Fire Incidents	Awareness campaign must be launched for common causes of fire.	
Other Major Accidents (Building Collapse, road traffic accidents, train accident, Stampede, plane crash)		

<p>Environmental Hazards (industrial accidents, severe pollution etc.)</p>	<p>Hazard: Environmental Hazards (industrial accidents, severe pollution etc.) Mitigate Actions:</p> <ul style="list-style-type: none"> ☒ In built effluent treatment technologies may be adopted rather end of pipe treatment. ☒ Environmental impact assessment (EIA)/ Initial Environmental Examination (IEE) studies must be conducted before commencement of any major or minor project or before starting the construction and operational phase of project as per law. ☒ Personal protective equipments (PPEs), fire fighting system and proper safety measures may be adopted by the industrial units. ☒ All staffs and workers may be provided proper training keeping in view the nature, type and possible Environmental hazards. ☒ Maximum tree plantation may b adopted where ever possible in and around the industrial projects to reduce the impact of Environmental pollution. 	

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 DC 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

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

Who is the focal person at district level?

Functions of District/Tehsil Emergency Control Rooms in early warning

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

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

Mechanism will be initiated through Patwaris at tehsil level and each Assistant commissioner will be responsible to communicate details through SMS and phone to higher ups. Media will be involved according to the situation and severity.

RESCUE STRATEGY

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

First early warning system activate the execute the affecties to nearest relief centers for first aid. 1122 and civil defence alonge with local comunities to avacuate the effected community..

Medical Assistance

- Who does what and when? Responsible departments /agencies

Health Department and Rescue 1122 will be resposnsible of medical assistance.

Provision of Ambulances to rescue the patients by fetching them to health facilities and then provision of medical cover to the patients.

The roles and responsibilities are described earlier all departments will work according to their mandate.

-The district administration is reponsible to call Pakistan Army for back up support.

-The camps site have been identified and CEO (DEA) will be reponsible to provide nearst school for camping or temporary shelter.

HUMANITARIAN ASSISTANCE

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

Damage and Losses Data

- Data regarding losses/damages will be collected through filed formation of various tires and through wirelss, telephone with the Control Room established in the DC Office.

Priority Needs

- Priority neededs will be determined after survey of affected arears and according to magnitude of dsaster.

Activities of assistance

- Activities based on the magnitude of dsaster.

What assistance

- Assistance in the evacuation, medical treatment, food, shelter and damages will be provided.

Standardization of Packages

- As per provision of PDMA..

Assistance Mechanism

- UC chairman and general councilor will provide list of effetees and revenue staff will recheck to avoid duplication.

Minimum standard for camp

- As per PDMA standard.

Current capacity of district

- Current capacity is enough for any any kind of disaster in the district.

Relevant cross-cutting Issues

- N/A.

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	GHS # 1 (Boys) Chakwal	200	X: 32.93 Y:72.85	11	Govt Higher Secondary School Bhagwal	200	X: 32.82 Y:73.95
2	Municipal Stadium Chakwal	200	X: 32.93 Y:72.84	12	Govt High School Neela	200	X: 33.16 Y:72.61
3	Sports Complex 3 Marla Scheme Chakwal	5,000	X: 32.94 Y:72.86	13	Govt High School Dullah	200	X: 33.17 Y:72.61
4	Ground Opposite Community Centre Talagang Road Chakwal	2,000	X: 32.93 Y:72.84	14	Govt Higher Secondary School Lawa	200	X: 32.69 Y:71.93
5	Govt Islamia High School Chakwal	200	X: 32.92 Y:72.85	15	Govt Higher Secondary School Dhurnal	300	X: 32.80 Y:72.10
6	Sarpak Ground Chakwal	200	X: 32.93 Y:72.84	16	Govt Higher Secondary School Tamman	300	X: 33.00 Y:72.10
7	Govt Post Graduate College (Boys) R/Pindi Road Chakwal	200	X: 32.93 Y:72.87	17	Govt High School Dharrabi	200	X: 32.94 Y:72.53
8	Govt Girls Degree College Chakwal	1,000	X: 32.92 Y:72.84	18	Govt Higher Secondary School Chingi	300	X:32.71 Y:72.36
9	Govt High School Warval	200	X: 33.13 Y:72.51	19	Govt High School Wanhar	200	X:32.88 Y:72.18
10	GHSS Choa Saiden Shah	200	X:32.78 Y:72.98	20	GHSS Kallar Kahar	200	X:32.78 Y:72.71

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

Hazards	Tehsils	UCs	Names of Revenue Estates	Names of Villages
Floods	Choa Saidan Shah	Choa Saidan Shah	Choa Saidan Shah	Choa Saidan Shah
Urban Flooding	Choa Saidan Shah	Choa Saidan Shah	Choa Saidan Shah	Choa Saidan Shah
Flash Floods				
Hill Torrent				
Tornado				
Earthquake				
Drought				
Epidemic				
Environmental Hazards (industrial accidents, severe pollution etc.)	Kallar Kahar	Khairpur	Khairpur	Khairpur, Chhoi, Maloot, Khandoa

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

S#	Name and Location	GPS Coordinates	Health Facility Type (Primary, Secondary, Tertiary)	Name and Contact No of Focal Person	Hazard Vulnerability (Floods, Earthquake etc.)
1	BHU Mulhal Mughlan	X: Y:	Primary (BHU)		Earthquake
2	Nachindi	X: Y:	Primary (BHU)		Earthquake
3	Sohawa Dewalian	X: Y:	Primary (BHU)		Earthquake
4	Chak Umra	X: Y:	Primary (BHU)		Earthquake
5	Chakral	X: Y:	Primary (BHU)		Earthquake
6	Shahpur Syedan	X: Y:	Primary (BHU)		Earthquake
7	Jandial Faiz Ullah	X: Y:	Primary (BHU)		Earthquake
8	Saiglabad	X: Y:	Primary (BHU)		Earthquake
9	Dab	X: Y:	Primary (BHU)		Earthquake
10	Kariala	X: Y:	Primary (BHU)		Earthquake
11	Khoker Zar	X: Y:	Primary (BHU)		Earthquake
12	Mureed	X: Y:	Primary (BHU)		Earthquake
13	Maingon	X: Y:	Primary (BHU)		Earthquake
14	Karsal	X: Y:	Primary (BHU)		Earthquake
15	Roopwal	X: Y:	Primary (BHU)		Earthquake
16	Ranjah	X: Y:	Primary (BHU)		Earthquake
17	Neela	X: Y:	Primary (BHU)		Earthquake
18	Warwal	X:	Primary (BHU)		Earthquake

S#	Name and Location	GPS Coordinates	Health Facility Type (Primary, Secondary, Tertiary)	Name and Contact No of Focal Person	Hazard Vulnerability (Floods, Earthquake etc.)
		Y:			
19	Dullah	X: Y:	Primary (BHU)		Earthquack
20	Mangwal	X: Y:	Primary (BHU)		Earthquack
21	Jamalwal	X: Y:	Primary (BHU)		Earthquack
22	Saral	X: Y:	Primary (BHU)		Earthquack
23	Bheen	X: Y:	Primary (BHU)		Earthquack
24	Padshahan	X: Y:	Primary (BHU)		Earthquack
25	Jhatla Jaswal	X: Y:	Primary (BHU)		Earthquack
26	Minwal	X: Y:	Primary (BHU)		Earthquack
27	Jand	X: Y:	Primary (BHU)		Earthquack
28	Dharabi	X: Y:	Primary (BHU)		Earthquack
29	Nakka Kahut	X: Y:	Primary (BHU)		Earthquack
30	Tehi	X: Y:	Primary (BHU)		Earthquack
31	Jasial	X: Y:	Primary (BHU)		Earthquack
32	Kot Sarang	X: Y:	Primary (BHU)		Earthquack
33	Dhouler	X: Y:	Primary (BHU)		Earthquack
34	Dhermond	X: Y:	Primary (BHU)		Earthquack
35	Pachnand	X: Y:	Primary (BHU)		Earthquack
36	Bhudial	X: Y:	Primary (BHU)		Earthquack
37	Multan Khrud	X: Y:	Primary (BHU)		Earthquack

S#	Name and Location	GPS Coordinates	Health Facility Type (Primary, Secondary, Tertiary)	Name and Contact No of Focal Person	Hazard Vulnerability (Floods, Earthquake etc.)
38	Venhar	X: Y:	Primary (BHU)		Earthquack
39	Dhurnal	X: Y:	Primary (BHU)		Earthquack
40	Kot Gullah	X: Y:	Primary (BHU)		Earthquack
41	Chinji	X: Y:	Primary (BHU)		Earthquack
42	TM Khan	X: Y:	Primary (BHU)		Earthquack
43	Pira Fatehal	X: Y:	Primary (BHU)		Earthquack
44	Dhoke Hum	X: Y:	Primary (BHU)		Earthquack
45	Ghool	X: Y:	Primary (BHU)		Earthquack
46	Patwali	X: Y:	Primary (BHU)		Earthquack
47	Bhillomar	X: Y:	Primary (BHU)		Earthquack
48	Sukka	X: Y:	Primary (BHU)		Earthquack
49	Dulmial	X: Y:	Primary (BHU)		Earthquack
50	Badshahpur	X: Y:	Primary (BHU)		Earthquack
51	Basharat	X: Y:	Primary (BHU)		Earthquack
52	Ara	X: Y:	Primary (BHU)		Earthquack
53	Lehar Sultanpur	X: Y:	Primary (BHU)		Earthquack
54	Kajoola	X: Y:	Primary (BHU)		Earthquack
55	Bhaun	X: Y:	Primary (BHU)		Earthquack
56	Bharpur	X: Y:	Primary (BHU)		Earthquack
57	Kallar Kahar	X:	Primary (BHU)		Earthquack

S#	Name and Location	GPS Coordinates	Health Facility Type (Primary, Secondary, Tertiary)	Name and Contact No of Focal Person	Hazard Vulnerability (Floods, Earthquake etc.)
		Y:			
58	Khairpur	X: Y:	Primary (BHU)		Earthquake
59	Munara	X: Y:	Primary (BHU)		Earthquake
60	Kahut	X: Y:	Primary (BHU)		Earthquake
61	Dhermond	X: Y:	Primary (BHU)		Earthquake
62	Noorpur	X: Y:	Primary (BHU)		Earthquake
63	Sardhi	X: Y:	Primary (BHU)		Earthquake
64	Sar Kalan	X: Y:	Primary (BHU)		Earthquake
65	DHQ Hospital Chakwal	X: Y:	DHQ		Earthquake
66	THQ Choa Saidu Shah	X: Y:	THQ		Earthquake
67	THQ Talagang	X: Y:	THQ		Earthquake
68	City Hospital Talagnag	X: Y:	City Hospital		Earthquake
69	Rhc Dhudial	X: Y:	RHC		Earthquake
70	Dhummon	X: Y:	RHC		Earthquake
71	Buchal Kalan	X: Y:	RHC		Earthquake
72	Balkassar	X: Y:	RHC		Earthquake
73	Munday	X: Y:	RHC		Earthquake
74	Tammon	X: Y:	RHC		Earthquake
75	Lawa	X: Y:	RHC		Earthquake
76	Kot Qazi	X:	RHC		Earthquake

S#	Name and Location	GPS Coordinates	Health Facility Type (Primary, Secondary, Tertiary)	Name and Contact No of Focal Person	Hazard Vulnerability (Floods, Earthquake etc.)
		Y:			
77	Pir Phullahi	X: Y:	RHC		Earthquack
78	Jhatla	X: Y:	RHC		Earthquack

ANNEX IV: LIST OF VULNERABLE EDUCATIONAL INSTITUTIONS

S#	Name	Institute type (School, College etc.)	GPS Coordinates	Enrolment	Incharge Name	Contact Number
1	N/A		X: Y:			

ANNEX V:LIST OF INDUSTRIES WITH THEIR RISK LEVEL

S#	Industry Name	Location	GPS Coordinates	Risk Type (Chemical, Biological, Radiological, Nuclear)	Name and Contact of Focal Person	Risk Level (low, medium, high)	Prone to Hazard? Fire/ Floods/Earthquake
1	N/A		X: Y:				

ANNEX VI:LIST OF NGO WORKING IN THE DISTRICT

S#	NGO Name	NGO Type (Local, National, International)	Location where they are working	Sector/Cluster of work (e.g. WASH, Health, Education)	Focal Person Name	Contact No.
1	DEAP Development Organization H.# 17/104 Mohallah Ghousia Jhelum Road Chakwal city	Local	District Chakwal	Welfare of Child, Women Welfare Patient Welfare	Pr. Atif Abbas 0333-5785799 G.S Muhammad Fiaz 0333-5916591	0333-5785799
2	Al Jannat Foundation Chakwal	Local	District Chakwal	--	Mumtaz Ul Haq 0333-5906001	
3	(BEHOLDE)Welfare Association Gulistan Colony Rawalpindi Road Chakwal	Local	District Chakwal	Welfare of women, Child welfare, Welfare of disabled	Pr. Shahbaz Khan 0301-5785412 G.S Reynolds Dean 0313-5787600	0301-5785412
4	Jinnah Welfare Society Malakwal	Local	Malakwal	--		
5	Anjuman Falah-o-Behbood Buchal Kalan	Local	District Chakwal	1-Welfare for women (PWP Center) 2-Disabled Welfare 3-Welfare of Youth 4-Welfare Of Children	Malik Nusrullah 0333-3904208	0333-3904208
6	Social Welfare Committee Dulmial	Local	District Chakwal	1-Welfare for women (PWP Center) 2-Disabled Welfare 3-Welfare of Youth 4-Welfare Of Children	Malik Riaz Ahmed 0301-8554286	0301-8554286
7	Social Welfare Council Talagang	Local	District Chakwal	1.Education 2. Help of Needy Person	M.Ashraf Iqbal 03005785891	03005785891
8	Social Welfare Council Dalwal	Local	District Chakwal	Welfare for women (EWP Centre)	Aamir Malik 0332-5918929	Malik Anayat 0332-8001377

ANNEX VII: CONTACT LIST OF MAIN STAKEHOLDERS/ DEPARTMENTS

S#	Designation	Person Name	Telephone (Office)	Telephone (Residential)	Mobile
1	Commissioner		051-9292506 051-9292507		
2	RPO		051-9270631		
3	DC	Abdul Sattar Issani	0543-660101 0543-660001	0543-660101 0543-660001	0304-0920073
4	DPO	Muhammad Bin Ashraf	0543-660066	0543-660028 0543-660066	0333-5915333
5	ADC (Revenue)	M.Musawar Niazi	0543-660102		0321-6085504
6	DEO Rescue 1122	Dr. Ateeq Ahmed Khan	0543-541400		0336-0001122
7	AC - Chakwal	Muzafir Mukhtar	0543-553220		0332-5377802
8	AC – Choa Saidan Shah	Muhammad Akbar	0543-580224		0307-2000028
9	AC – Tallagang	Hafiz Muhammad Imran	0543-410938		0300-9600094
10	AC – Kallar Kahar	M.Murtaza	0543-588166		0300-8400002
11	AC –Lawa	Mr.Bilawal	0543-483483		0321-6796566
12	DO Civil Defence	Aqeel Aslam	0543-660113		0322-5095596
13	Tehsildar – Chakwal	Qazi Mubeen Ur Rehman	0543-553220		0333-4441213
14	Tehsildar – Tallagang	Allah Bakhsh Jaswal	0543-410938		0346-5770868
15	Tehsildar – Choa Saidan Shah	Chaudry.Rizwan Ali	0543-580224		0300-8508207
16	Tehsildar – Kallar Kahar	Chaudry Muhammad Rizwan	0543-588539		0300-8508207
17	Tehsildar – Lawa	Malik Muhammad Ashraf	0543-483483		0300-6001294
18	MC – Chakwal	Iftikhar Ailee	0543-660117	--	0333-5780599
19	MC – Tallagang	M.Saddique	0543-413580		0316-9202035
20	MC – Kallar Kahar	Malik Aabid	0543-588539		0333-5888301
21	MC – Choa Saidan Shah	Ch.Muhammad Fiaz	0543-580064		0300-6264077
22	MC – Lawa	Muhammad Imran	0543-413580		0300-6207963
23	CEO Education	Iftikhar Ahmed Nawaz Virk	0543-660120		0333-4838163
24	EDO Irrigation/ XEN Small Dams	Hafiz Ijaz	0543-660123		0304-4512075
25	Chief Engr. Irrigation				
26	Deputy Director Social Welfare	Kausar Bilal	0543-660026		0333-5924025
27	Deputy Director Community Development		0543-660121		
28	Deputy Director Agriculcutre	Muhammad Jafar Imran			0345-5233135

S#	Designation	Person Name	Telephone (Office)	Telephone (Residential)	Mobile
29	CEO Health	Dr.Saadat Ali Khan	0543-660138		0300-5472131
30	Additional Director Livestock	Dr.Kamal Nasir	0543-550865		0300-5471176
31	DDHO Kallar Kahar	Dr.Kamran			0333-5281804
32	DDHO Choa Saiden Shah	Dr.Abdul Majeed			0333-8024594
33	MS DHQ Hospital	Dr.Mukhtar Sarwar Niazi	0543-602005		0340-8954298
34	MS THQ Talagang	Dr.Tahir Zaman Niazi	0543-690298		0300-9865728
35	MS City Hospital Talagang	Dr.Abdur Razaq	0543-411444		0300-5275871
36	MS THQ Choa Saiden Shah	Dr.Tabasum Zia			0332-5419021
37	Trauma Centre Kallar Kahar	Dr.Saqib Hussain	0543-588417		0300-3037020

ANNEX VIII: LIST OF VOLUNTEERS (PAID VOLUNTEER CIVIL DEFENCE)

S#	Volunteer Name	CNIC	Address	Contact Number and Email	Blood Group	Time Required to be on-board
1	Ghulam Hur S/O Imtiaz Hussain Bhatti					
2	Mr.Niaz Hussain S/O Muhammad Ramzan					
3	Mr.Rustam Khan S/O Ghulam Mustafa					
4	Syed Hassan Raza S/O Ghulam Mustafa					
5	Mr.Wajahat Ali S/O M.Younas					
6	Abdul Rehman S/O Muhammad Sardar					
7	Miss.Uroosa Gul D/O Khalid Mehmood					
8	Mr.Ghulam Murtaza S/O Fazal Din					
9	Mr.Sadam Arif S/O Muhammad Arif					
10	Mr.Ayaz Ur Rehman Shah S/O Zulfiqar Hussain					
11	Mr.Junaid Zahid Awan S/O Zahid Hussain Awan					
12	Mr.Noor Khan S/O Muhammad Fazal					
13	Mr.Azhar Hussain S/O Babu Khan					
14	Mr.Waseem Akram S/O Khan Zaman					
15	Qazi Ashraq Hussain S/O Qazi Talib Hussain					
16	Mr.Ghulam Ali Raza S/O Maqbool Hussain					
17	Mr.Kashif Shahzad S/O Muhammad Rasheed					
18	Mr.Muhammad Ishfaq S/Muhammad Iqbal					
19	Mr.Muhammad Ajmal Muneer S/O Muhammad Muneer					
20	Mr.Muhammad Younas S/O Komair Khan					
21	Mr.Shamas Ul Waheed S/O Muhammad Yahya					
22	Mr.Ali Muhammad S/O Muhammad Aqeel					
23	Hamayun Yousaf S/O Muhammad Yousaf					
24	Miss Anam Ashraf D/O Khushi Muhammad					
25	Khizer Ali S/O Muhammad Ibrar ali					

S#	Volunteer Name	CNIC	Address	Contact Number and Email	Blood Group	Time Required to be on-board
26	Sajjad Hussain S/O Sher Ahmed Khan					
Civil Defence Volunteers for Flood Duties 2020						
1	Ahmed Fiaz Qazi S/O Aftab Ahmed Qazi					
2	Syed Muhammad Shakeel S/O Syed Muhammad Sharif					
3	Shiekh Muhammad Adeel S/O Sheikh Muhammad Bashir					
4	Rizwan Bashir S/O Malik Muhammad Bashir					
5	Ahmad Saraj Qazi S/O Aftab Ahmed Qazi					
6	Syed Fiyaz Abbas S/O Syed Ghulam Abbas					
7	Rifaqat Ali Tahir S/O Haji Rang Elahi					
8	Mehboob Hussain S/O Karam Dad					
9	Fazal Ur Rehman S/O Abdul Rauf					
10	Faisal Khalil S/O Muhammad Khalil					
11	Bilal Ahmad Gondal S/O Manzoor Hussain					
12	Ghulam Mustafa S/O Ghulam Muhammad					
13	Khushi Muhammad S/O Ghulam Muhammad					
14	Muhammad Aslam S/O Mouladad					
15	Muhammad Rizwan Arshad S/O Muhammad Arshad					
16	Mudassar Saleem S/O Rana Muhammad Saleem					
17	Muhammad Umair S/O Muhammad Jameel Tabasum					
18	Abdullah S/O Mehfooz Ur Rehman					
19	Muhammad Zeeshan S/O Bahadur Khan					
20	Azhar Mehmood S/O Aurangazaib					
21	Ehtasham Khalid S/O Khalid Masih					
22	Muhammad Kamran S/O Ghulam Muhammad					
23	Muhammad Waqar Yousaf S/O Muhammad Shafi					
24	Raja Zulfiqar Ali S/O Raja Hakim ali					
25	Mubashar Fiyaz S/O Ghulam Muhammad					

ANNEX X: LOCAL GOVERNMENT

District and Tehsil Level

S#	Designation	District/Tehsil Name	Name	Contact Number	Mobile Number
1	District Chairman	Chakwal			
2	District Vice Chairman	Chakwal			
3	Tehsil Chairman	Chakwal			
4	Tehsil Vice Chairman	Chakwal			
5	Tehsil Chairman	Kallar Kahar			
6	Tehsil Vice Chairman	Kallar Kahar			
7	Tehsil Chairman	Talagang			
8	Tehsil Vice Chairman	Talagang			
9	Tehsil Chairman	Choa Saiden Shah			
10	Tehsil Vice Chairman	Choa Saiden Shah			
11	Tehsil Chairman	Lawa			
12	Tehsil Vice Chairman	Lawa			

UC Level

S#	Tehsil	UC	Chairman	Chairman Contact	Vice Chairman	VC Contact
1	CHAKWAL	Thanil Kamal				CHAKWAL
2	CHAKWAL	Mangwal				CHAKWAL
3	CHAKWAL	Saral				CHAKWAL
4	CHAKWAL	Dhudial				CHAKWAL
5	CHAKWAL	Padshahan				CHAKWAL
6	CHAKWAL	Jand Awan				CHAKWAL
7	CHAKWAL	Mogla				CHAKWAL
8	CHAKWAL	Mulhal Mughlan				CHAKWAL
9	CHAKWAL	Jand Khan Zada				CHAKWAL
10	CHAKWAL	Dhumman				CHAKWAL
11	CHAKWAL	Choa Gang				CHAKWAL

S#	Tehsil	UC	Chairman	Chairman Contact	Vice Chairman	VC Contact
		Ali Shah				
12	CHAKWAL	Khotian				CHAKWAL
13	CHAKWAL	Jaswal				CHAKWAL
14	CHAKWAL	Karyala				CHAKWAL
15	CHAKWAL	Khai				CHAKWAL
16	CHAKWAL	Dab				CHAKWAL
17	CHAKWAL	Chak Malook				CHAKWAL
18	CHAKWAL	Bheen				CHAKWAL
19	CHAKWAL	Chak Umra				CHAKWAL
20	CHAKWAL	Har Char Dhab				CHAKWAL
21	CHAKWAL	Jabair Pur				CHAKWAL
22	CHAKWAL	Odherwal				CHAKWAL
23	CHAKWAL	Mureed				CHAKWAL
24	CHAKWAL	Balokassar				CHAKWAL
25	CHAKWAL	Mangan				CHAKWAL
26	CHAKWAL	Balkassar				CHAKWAL
27	CHAKWAL	Bikhari Kalan				CHAKWAL
28	CHAKWAL	Karsal				CHAKWAL
29	CHAKWAL	Kot Chudrian				CHAKWAL
30	CHAKWAL	Bigal				CHAKWAL
31	CHAKWAL	Warwal				CHAKWAL
32	CHAKWAL	Dullah				CHAKWAL
33	CHOA SAIDEN SHAH	Lehr Sultan Pur				CHOA SAIDEN SHAH
34	CHOA SAIDEN SHAH	Bashrat				CHOA SAIDEN SHAH
35	CHOA SAIDEN SHAH	Ara				CHOA SAIDEN SHAH
36	CHOA SAIDEN SHAH	Saloi				CHOA SAIDEN SHAH
37	CHOA SAIDEN SHAH	Dandot				CHOA SAIDEN SHAH
38	CHOA SAIDEN SHAH	Dalwal				CHOA SAIDEN SHAH
39	CHOA SAIDEN SHAH	Dulmial				CHOA SAIDEN SHAH

S#	Tehsil	UC	Chairman	Chairman Contact	Vice Chairman	VC Contact
40	KALLAR KAHAR	Khair Pur				KALLAR KAHAR
41	KALLAR KAHAR	Buchal Khurd				KALLAR KAHAR
42	KALLAR KAHAR	Miani				KALLAR KAHAR
43	KALLAR KAHAR	Buchal Kalan				KALLAR KAHAR
44	KALLAR KAHAR	Noor Pur				KALLAR KAHAR
45	KALLAR KAHAR	Bhur Pur Kalan				KALLAR KAHAR
46	KALLAR KAHAR	Munara				
47	TALAGANG	Dholar				
48	TALAGANG	Kot Sarang				
49	TALAGANG	Niraghi				
50	TALAGANG	Jasial				
51	TALAGANG	Tehi				
52	TALAGANG	Nakka Kahoot				
53	TALAGANG	Malikwal				
54	TALAGANG	Pira Fatehal				
55	TALAGANG	Jhtala				
56	TALAGANG	Bhilomar				
57	TALAGANG	Thoha Mehram Khan-I				
58	TALAGANG	Thoha Mehram Khan-II				
59	TALAGANG	Saghar				
60	TALAGANG	Bidhar				
61	TALAGANG	Dharmond				
62	TALAGANG	Tamman				
63	TALAGANG	Multan Khurd				
64	TALAGANG	Jabbi Shah Dilawar				
65	TALAGANG	Bhudial				
66	TALAGANG	Lati				
67	TALAGANG	Dhurnal				
68	TALAGANG	Lawa				
69	TALAGANG	Kot Qazi				

S#	Tehsil	UC	Chairman	Chairman Contact	Vice Chairman	VC Contact
70	TALAGANG	Pichnand				
71	TALAGANG	Kot Gullah				
72	Chakwal	Chibbar				
73	Talagang	Akwal				
74	Talagang	Jhatla				
75	Chakwal	Thoa Bahadur				
76	Chakwal	Tatral				
77	Choa Saiden Shah	Ratucha				
78	Talagang	Chingi				
79	Chakwal	Complex				
80	Kallar Kahar	Laphi				
81	Chakwal	Line Park				
82	Chakwal	Nila				
83	Choa Saiden Shah	Pidh				
84	Chakwal	Chohan				
85	Talagang	Dhulli				
86	Chakwal	Sadwal				
87	Chakwal	Fim Kasar				
88	Talagang	Kot Sarang				
89	Chakwal	Mohra Sharif				
90	Kallar Kahar	Khai				
91	Choa Saiden Shah	Gharib Wal Cement Factory				
92	Chakwal	Karyala				
93	Chakwal	Usman abad Dab				
94	Chakwal	Christian Colony				

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 Reporting Performa

District: _____

Date: _____

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

District: _____

Date: _____

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

District: _____

Date: _____

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

District: _____

Date: _____

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

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

District: _____

Date: _____

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

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

District: _____

Date: _____

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

P9:NGOs registration performa

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

District: _____

Date: _____

S#	Name of NGO	Local /INGO	Relief activity	Relief camp if any	Focal person in the district	Registered with PDMA	Foreigners to be visiting or not.
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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	Punjnad Head works Division	Right Marginal Bund	15,000
2	-do-	Left Marginal Bund	15,000
3	-do-	Colony Protection Bund	15,000
4	Khanpur Canal Division	Minchin Flood Bund	10,000
	Total in feet.		55,000
	Total in Miles.		10.42
MULTAN ZONE.			
1	Trimmu Division	Right Marginal Bund	20,000
2	-do-	Left Marginal Bund	20,000
3	Sulemanki Division	Left Marginal Bund	10,000
4	-do-	Right Marginal Bund	10,000
5	Shuja Canal Division	Right Bank of Shujabad Branch	10,000
6	-do-	Akbar Flood Bund	10,000
	Total in feet.		80,000
	Total in Miles.		15.15
D.G.KHAN ZONE			
1	Taunsa Barrage	Right Guide Bund Upstream	15,000
2	-do-	Left Guide Bund	20,000
3	-do-	Shahwala Groyne	10,000
4	Muzaffargarh Canal Division	Muzaffargarh Flood Bund	50,000
5	-do-	Doaba Flood Bund.	5,000
6	-do-	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	86,000
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
<u>D.G.KHAN ZONE</u>			
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
<u>LBDC (IP)</u>			
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
<u>LAHORE ZONE</u>			
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
<u>PMO BARRAGES</u>			
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
	Mangla	10.6	0.75	1.1	1.5	2.25	3
	Rasul	8.5	0.75	1.1	1.5	2.25	3
CHENAB	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
	Jassar	2.75	0.5	0.75	1	1.5	2
RAVI	Ravi Syphon	4	0.4	0.65	0.9	1.35	1.8
	Shahdara	2.5	0.4	0.65	0.9	1.35	1.8
	Balloki	2.25	0.4	0.65	0.9	1.35	1.8
	Sidhnai	1.5	0.3	0.45	0.6	0.9	1.3
SUTLEJ	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.