

# DISTRICT DISASTER MANAGEMENT PLAN 2020

Division: FAISALABAD

District: CHINIOT



IDP Camp in 2009



Earthquake



e.g Floods in 2014



Fire incident at Lahori Gate, Lahore – Jan 2020

Prepared by: Deputy Commissioner Office Chiniot.

Approved by: Deputy Commissioner Chiniot.



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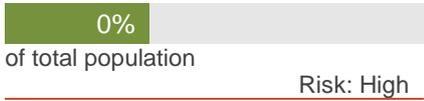
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XX

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



## EXECUTIVE SUMMARY

This Disaster Management Plan has been developed on the template provided by the PDMA Punjab. It is designed for comprehensive disaster management within the district. It focuses on minimizing the effects of the hazards on local communities by ensuring the coordinated effort in risk management within the community. The plan is designed to enhance the capacity of all agencies to plan and respond to emergency situations more effectively.

XX

Estimated number of people at risk of Floods in 2020



XX

Estimated number of people at risk of earthquake in 2020



XX

Estimated number of people at risk of epidemic in 2020



## 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	1,369,740
2.	No. of Tehsils	3
3.	No. of UCs	39
4.	No. of Revenue Estates	361
5.	Population Density (people per km <sup>2</sup> )	524.9
6.	Family Size	6.12
7.	Pop Growth Rate	1.86
8.	PCI	--
9.	District GDP/Annual Income	--
10.	Poverty Rate	--
11.	Patient/Doctor Ratio	--
12.	AMR	--
13.	IMR	--
14.	MMR	--
15.	Literacy Rate	65%
16.	Global Acute Malnutrition (GAM) rate	--
17.	Severe Acute Malnutrition (SAM) rate	--
18.	Percentage of population having access to clean drinking water	70%
19.	Annual Crime	

### Population

Total	Male (above 18)	Female (above 18)	Minor (M) (less than 18)	Minor (F) (less than 18)	Vulnerable People (PLWs, disabled, aged)
<b>1369740</b>	480,892	459,240	219,708	206,816	

Source/Note: Click here to enter text.

Number of Dwelling Units	Kaccha (Mud/clay)	Pakka (Bricks& Morter)
<b>223,813</b>	89,525	134,287

Source/Note: Click here to enter text.

### Area (in acres)

Total Area of District in Km <sup>2</sup>	Area under cultivation	Cultivation in Settled Area	Cultivation in Baid Area
<b>2643</b>	533034	528634	4400

### Literacy Rate

Overall	Rural		Urban		Total	
	Male	Female	Male	Female	Male	Female
<b>65%</b>						

Source/Note: Click here to enter text.

## Government Schools

		Schools	Enrollment
Total/ Overall		697	189869
Boys	Primary	205	71831
	Middle	41	20639
	High	48	12548
Girls	Primary	320	62791
	Middle	53	14524
	High	30	7536
Co-Education	Primary	-	-
	Middle	-	-
	High	-	-
Special Education		4	3600

## Private Schools

		Schools	Enrollment
Total/ Overall		314	49018
Boys	Primary	1	150
	Middle	31	3020
	High	29	1570
Girls	Primary	3	550
	Middle	27	4340
	High	28	2245
Co-Education	Primary	70	25210
	Middle	95	9500
	High	30	1800
Special Education		-	

## Higher/Technical/Professional Education (Public &amp; Private)

Particulars	College	Universities	Professional	Technical	Commerce	Total
No of Institution						
No of Students						

## Health Facilities

Particulars	Primary	Secondary	Tertiary	Private Hospital	Total
No. of Facilities	39	3	""	29	71
Annual OPDs	880805	1577699	""	122520	2581024
No of beds	140	174	""	553	867
Doctors Available	55	85	""	130	270
Paramedical staff	215	135	""	237	587
Ambulances available	0	0	""	5	5
Mobile Medical Units					0

**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
40%	5%	%	2%	5%	13%	%	%	%	25%	13%

## 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	2014		16		2185	3616		
2								
3								
4								

5								
6								
7								
8								
9								
10								
11								
12								

### Disaster History – Other disasters (since 1970)

S#	Year	Disaster Type	No. of people affected	No. of deaths	Remarks
1	2014	Flood		16	Due to exceptionally high flood damages have been occurred.
2					
3					
4					
5					
6					
7					
8					
9					
10					

### General Information

Particulars	Detail
Neighboring districts and their vulnerabilities	Faisalabad, Jhang, Sargodha, Hafizabad
Topographical Features	
Weather/Climate pattern	Minimum Temperature 8°C & Maximum Temperature 45°C
Major Rivers	River Chenab River Chenab Flows Through 75 KM Length of District Chiniot starting from Mouza Burj Boda to Mouza Maral Wala. Major Barrage is Chenab Bridge, Chiniot Flood levels
Major Nullahs / Streams	M.C. Drain, LJB
Motorway/Highway	Jhang Road & Sargodha Road Chiniot
Railways	Ahmad Nagar & Kot Muhammad Yar
Geological features	e.g. fault line, mountainous areas etc.

## 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	Nil
		X: Y:				

## Major Embankments/Bunds

Name of Embankment	Length (km)	Starting Point (Revenue Estate /Tehsil Name)	Ending Point (Revenue Estate /Tehsil Name)	Name of Critical/vulnerable Points	GPS Location of Critical/Vulnerable Points	Remarks
Chiniot Flood Bund	25.5 KM	Chiniot	Kot Muhammad Yar Chiniot			
Kot Naja Protection Bund		Lalian				
LBN Protection Bund		Lalian				

## Breaching Section

Name of Bund/ Embankment	Name of Breaching Section	Location with GPS Coordinates	Likely Affected Population			Likely Affected Revenue Estate	Remarks
			Male	Female	Children		
Chenab	RD 2500					Kot Muhammad & Chiniot Town	
		X: Y:					
		X: Y:					

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

Name	Capacity	GPS Coordinates	Name	Capacity	GPS Coordinates
Jhang Road Chiniot	132 KVA	X: Y:	Lorry Adda Bhowana	132 KVA	X: Y:
Kamal Pur Grid Station, Near Thaithian.	132 KVA	X: Y:	Shamas Textile Mills.	66 KVA	X: Y:
Lalian Grid Station	132 KVA	X: Y:	Barana Grid Station.	66 KVA	X: Y:

## Airport / Landing Strips

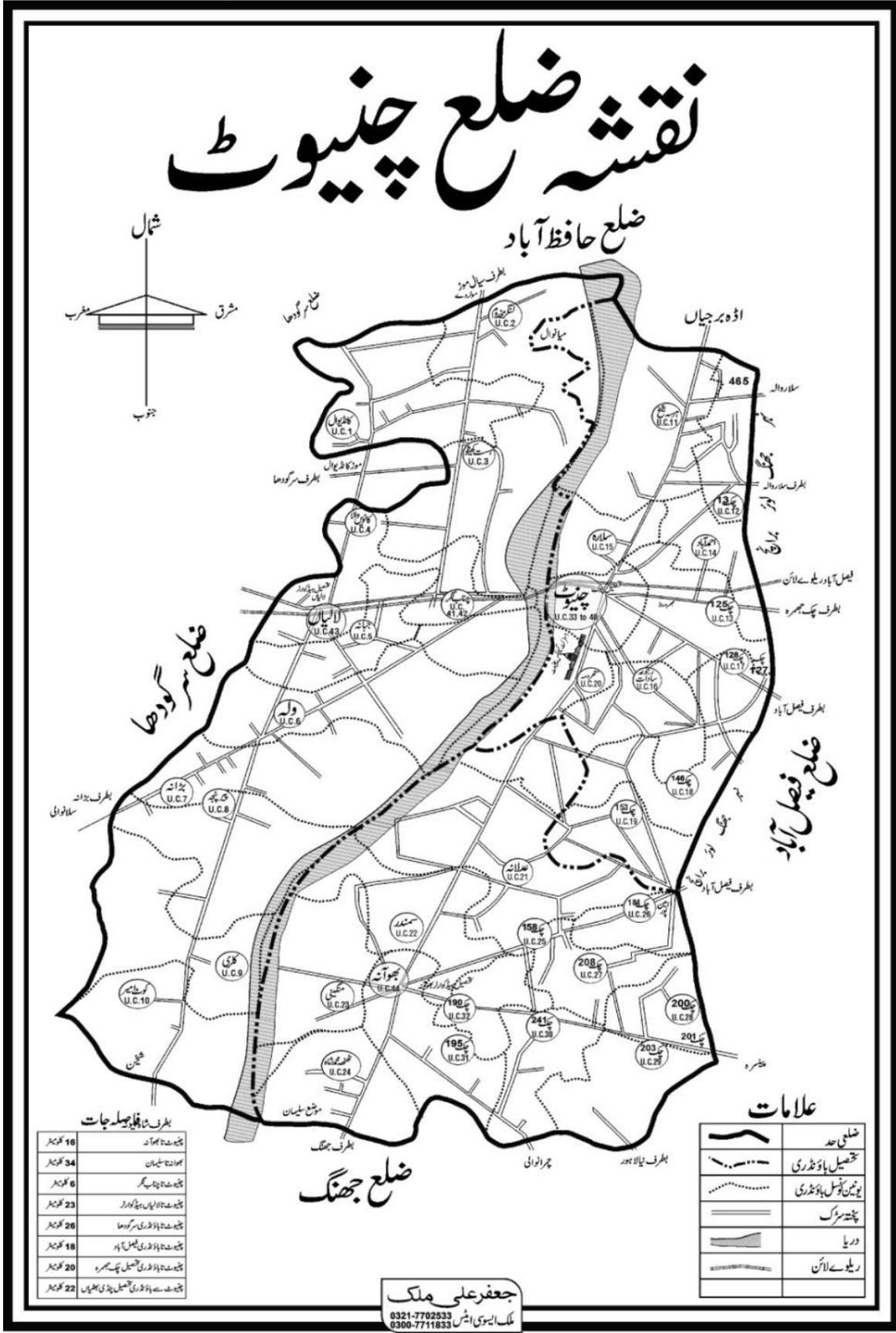
Type	Area Name	GPS Coordinates	Type	Area Name	GPS Coordinates
		X: Y:			X: Y:
		X: Y:			X: Y:
		X: Y:			X: Y:
		X:			X:

		Y:			Y:
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## Govt. storage facilities/warehouses in the district

Facility Type	Capacity	Location with GPS Coordinates	Facility Type	Capacity	Location with GPS Coordinates
Chiniot Procurement Center, Mandi Shaikhan	8000 Ton	X: Y:	Chak No.11 Lahore Road, Sar Wala.	8000 Ton	X: Y:
Chenab Nagar Procurement Center Near Railway Station.	7500 Ton	X: Y:	Lalian Procurement Center, Near Railway Station.	11000 Ton	X: Y:
Jamia Abad Procurement Centre, Near Ramzan Sugar Mills.	20000 Ton		Crescent Cold Storage FSD Road Chiniot	2700 Ton	
Al Jamil Cold Storage FSD Road Chiniot	2750 Ton		Rustam Cold Storage Lahore Road Chiniot	4000 Ton	
Shahid Ice Factory Lahore Road Chiniot	800 Ton		Randhawa Cold Storage FSD Road Chiniot	3500 Ton	
Ch. Latif Cold Storage Lahore Road Chiniot	3000 Ton		Fatima Cold Storage Moza salary	3600 Ton	
Royal Cold Storage Saar murad wala Road	3600 Ton		Bukhshi cold Storage Sargodha Road chiniot	1800 Ton	
Mughal Cold storage Sargodha Road Lalian	1900 Ton		Alnoor Cold storage Sargodha Road Lalian	1600 Ton	
Ahmad Cold storage Sargodha Road Lalian	1800 Ton		Ittehad Cold Storage Kalowal Road Lalian	4000 Ton	

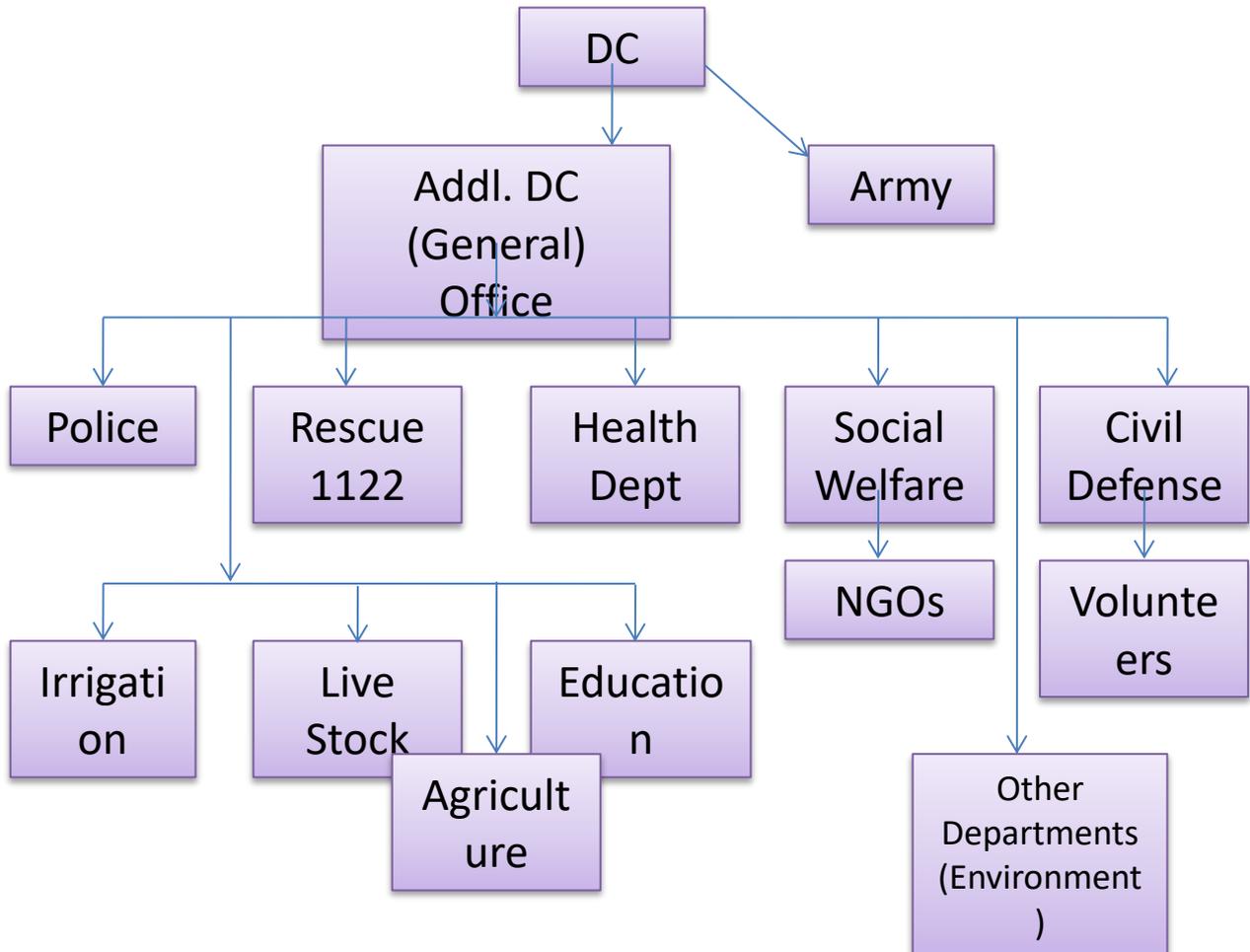
District baseline/reference map



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 DC/DC should ensure that the following measures and steps have been taken:

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

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

#### Checklist for Revenue Department:

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

#### Metropolitan / Municipal Corporations

##### Municipal / Town Committees

- Local Bodies play an important role of providing municipal services in the district including clean drinking water, sanitation facilities, maintenance of parks and removal of encroachment etc.
- Local Bodies will provide assistance to the District Administration for setting up and management of relief camps/ operations.
- Local Bodies are responsible for provision & restoration of water and sanitation facilities in their municipalities besides disposal of waste or rain water/sewerage.
- Local Bodies 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.
- Local Bodies sanitary workers can be employed for cleaning relief camps, or other such areas which has been affected by any disaster.

- Local Bodies employ de-watering sets to remove excess water. All Local Bodies are required to ensure the maintenance of all dewatering sets prior to the monsoon season. The Local Bodies maintains a list of all the choking points where rainy water accumulates as a result of heavy storms which can cause urban flooding.
- Local Bodies 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 Local Bodies under the concerned Administrator i.e Commissioner / DC/AC will assist in the migration of the affected people.
- During the relief effort and subsequent rehabilitation effort the Local Bodies 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 DPO and line departments such as Health, Agriculture, Livestock, Civil Defence, 1122, Local Bodies 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 Local Bodies.
- 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:
  - Deputy Commissioner (Chairperson)**
  - District Police Officer
  - Additional Deputy Commissioner (Rev)
  - Two Elected Representatives to be nominated by the Chair
  - Representative of Pak Army
  - Two Representatives of NGOs/Civil Society to be nominated by the Chair
  - Additional Deputy Commissioner (General)
  - Additional Deputy Commissioner (F&P)

- ix. XEN Buildings
- x. XEN Highways
- xi. Chief Executive Officer (DHA)
- xii. Chief Executive Officer (DEA)
- xiii. SP Special Branch
- xiv. XEN Irrigation / Public Health
- xv. District officer Civil Defense
- xvi. Administrators of Tehsil Councils / Municipal Corporations
- xvii. All Chief Officers of Local Bodies in District
- xviii. District Emergency Officer, Rescue 1122 (Secretary)
- xix. Representative of Red Crescent
- xx. Such other District level Officers to be appointed by District Administration

- District Administrations must establish a Disaster / Flood control room at the DC's office, the numbers of which will be circulated to all concerned. The Disaster / Flood Control Room has to maintain updated information regarding the threat of disaster and statistics post disaster. The center will maintain a regular communication with the Flood Forecasting Division or the dam authorities up stream in case of a flood.
- The District Administration would immediately mobilize the equipment needed to tackle the challenges created by a disaster. The District Administrations 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.
- DO (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: 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)**

#### **DUTIES OF THE OFFICERS OF VARIOUS DEPARTMENTS**

1. District Flood Control Room, DOC Office, Chiniot.
2. Tehsil Flood Control Room, Office of Assistant Commissioner, Lalian.
3. Tehsil Flood Control Room, Office of Assisnat Commissioner, Bhowana.

**Checklist for Control Room:**

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

**Checklist for Relief Camp Incharge:**

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

**Role of Health Department**

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

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

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

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

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

### **Civil-Military Coordination Mechanism**

In case of extreme disaster, Pak Army will be requisitioned in consultation with all stakeholders and District Police. A complete plan for rescue/ rehabilitation work will be chalked out in connivance with all the agencies/ stakeholders.

**Volunteer Network**

With the help of DO (Civil Defence) & DO(Social Welfare) all volunteers have already been registered. However, in case of extreme disaster, more number of volunteers may be registered through DO(Civil Defence) Chiniot and all the volunteers may be activated in case of emergency. DO (Civil Defence) will be the liaison officer in this regard.

# RISK ANALYSIS

## 1. Potential hazards of the district

Hazards	Likelihood (Score 1-5)	Impact (Score 1-5)	Risk
Floods	5	2	10
Urban Flooding	4	2	8
Flash Floods			
Hill Torrent			
Glacial Lake Outburst Flood (GLOF)			
Landslide	2	1	2
Tornado			
Earthquake	2	2	4
Drought	1	2	2
Epidemic	1	2	2
Fire Incidents	1	2	2
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

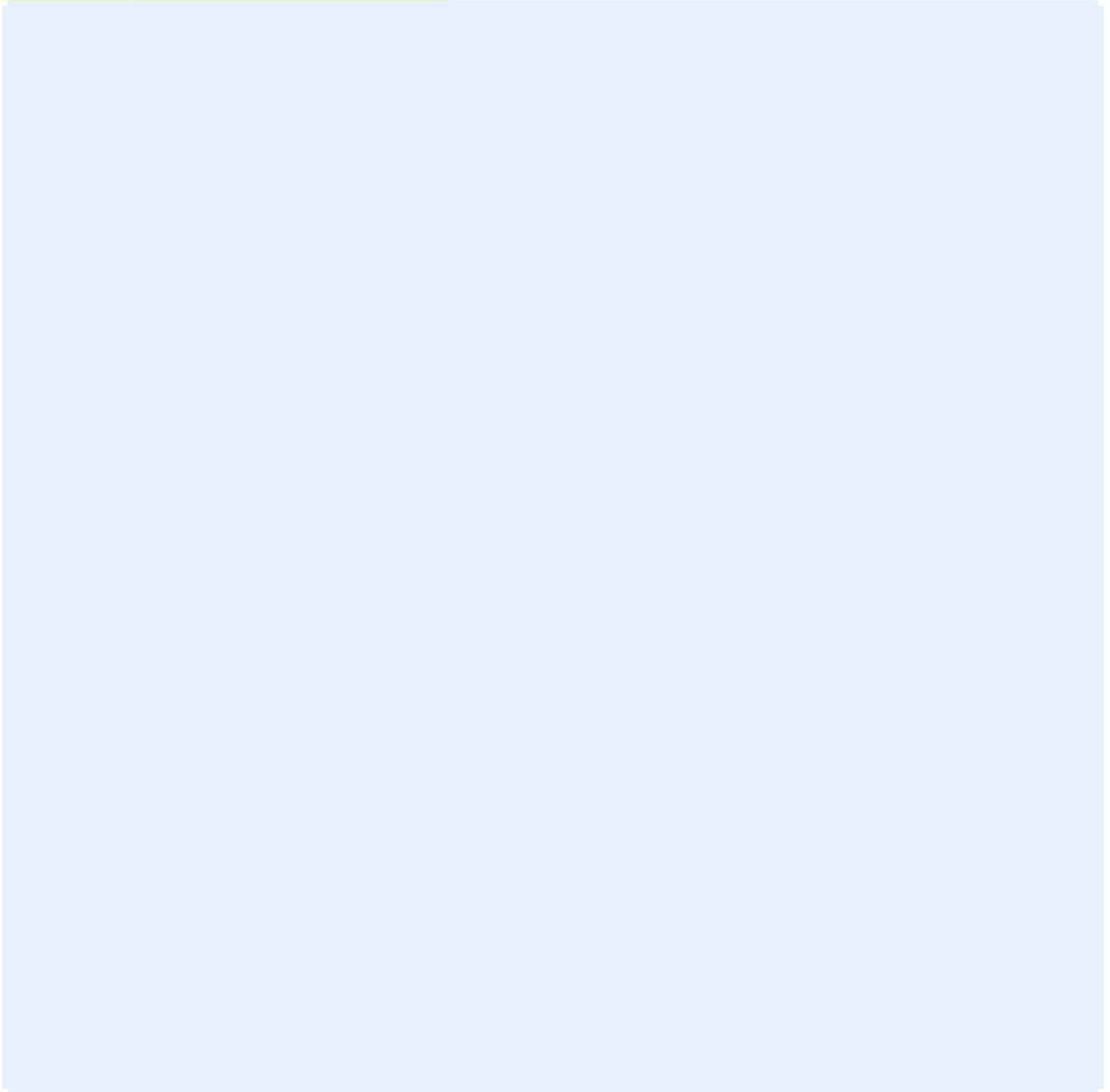
High : 15-25

## 2.Hazards

District Chiniot has a population of about 1.3 Million and has an area of 650891 acres. River Chenab flows through 75 KM length of District Chiniot starting from Mouza Burj Boda to Mouza Maral Wala. There are 361 villages/ Chaks in this District. Flood in District Chiniot is a normal feature of the river Chenab mainly caused by heavy rainfalls in the upper catchment areas during the monsoon season.

M.C drain starts from Jhang Branch Canal and is falls into river Chenab at Mouza Mehta passing through Chak No. 15/JB, 101/JB, Ahmad Abad, Bala Raja, Kot Khuda Yar, Jahanian, Talib, Korala, Chiniot No.1 and Chiniot No.2 Total length of M.C drain is 20-KM. Buildings of Chenab College, Punjab College & residential area is also situated around M.C drain starting from Mouza Jat Gujjar passing through Mouza Bala Raja enters into M.C drain. Length of this drain is about 18-KM.

**District detail map with vulnerable points including (Rivers, Nullahs, Hill Torrents, Wheat Gowdowns, hazards, planned camps, health facilities, warehouses) etc.**



Source:

### 3. Response & Operational Capacity

- ✓ The purpose of this plan is:
- ✓ • To outline the role of administration and other Governmental organization and NGOs during the
- ✓ calamity.
- ✓ • To provide guidance, knowledge and facts for carrying out relief operations.
- To establish operational structures and operational procedures.

## 4. Strategic Reserves

Items	Available	Functional	Non-Functional	Extra Demand
Boats	23	23	-	05
OBM	23	23	-	05
De-watering sets	10	10	-	-
Navigators	-	-	-	10
GIS devices	-	-	-	10
Life Jackets	446	446	-	-
Life Ring	106	106	-	-
Life Lines	02	02	-	-
Scuba diving suit with complete accessories	02	02	-	2
First Aid Kits	67	67	-	-
Rescue Bag	10	10	-	-
Safety Harnesses	10	10	-	20
Ambulances	16	16	-	-
Fire Brigade	04	04	-	-
Water Tanks / Bouzers	01	01	-	-
Extendable Ladders	4	4	-	2
Hydraulic Cutter	-	-	-	3
Sonar Rader	-	-	-	1
Jumping Sheet	-	-	-	3
Dumpers	-	-	-	-
Excavators	-	-	-	-
Cranes	-	-	-	-
Bulldozer	-	-	-	-
Boat Carrier/Trolleys	3	3	-	1
Pickups/Jeeps/4x4 vehicles/Mini Trucks	1	1	-	-
Searchlight	14	14	-	-
Tent	498	498	-	-
Mosquito Net	985	985	-	-
Plastic Mat	769	769	-	-
Blanket	-	-	-	-
Any other main relief/rescue equipment	-	-	-	-
Generator Sets	1	1	-	1
Gas-Cutters	-	-	-	1
Sonar Radars	-	-	-	1
Scuba Diving Set	2	2	-	2
Navigator/GPS Tracker	23	23	-	-
Hydraulic Cutter	-	-	-	2
Floating Rope	5	5	-	5

## 5.Gaps and Constraints

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

# MITIGATION STRATEGY

- ✓ Briefly describe what measures 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	Flood contingency Plan has been prepared and submitted in the office of Deputy Commissioner, Chiniot. District Chiniot has enough resources to deal flood emergency in the District. Strategic pre-positioning of available relief stock/ equipment shall be made as per requirement in the District. Community Safety program is continued to train volunteers to cope with any untoward eventuality in the District.	
Urban Flooding		
Flash Floods		
Hill Torrent		
Glacial Lake Outburst Flood (GLOF)		
Landslide		

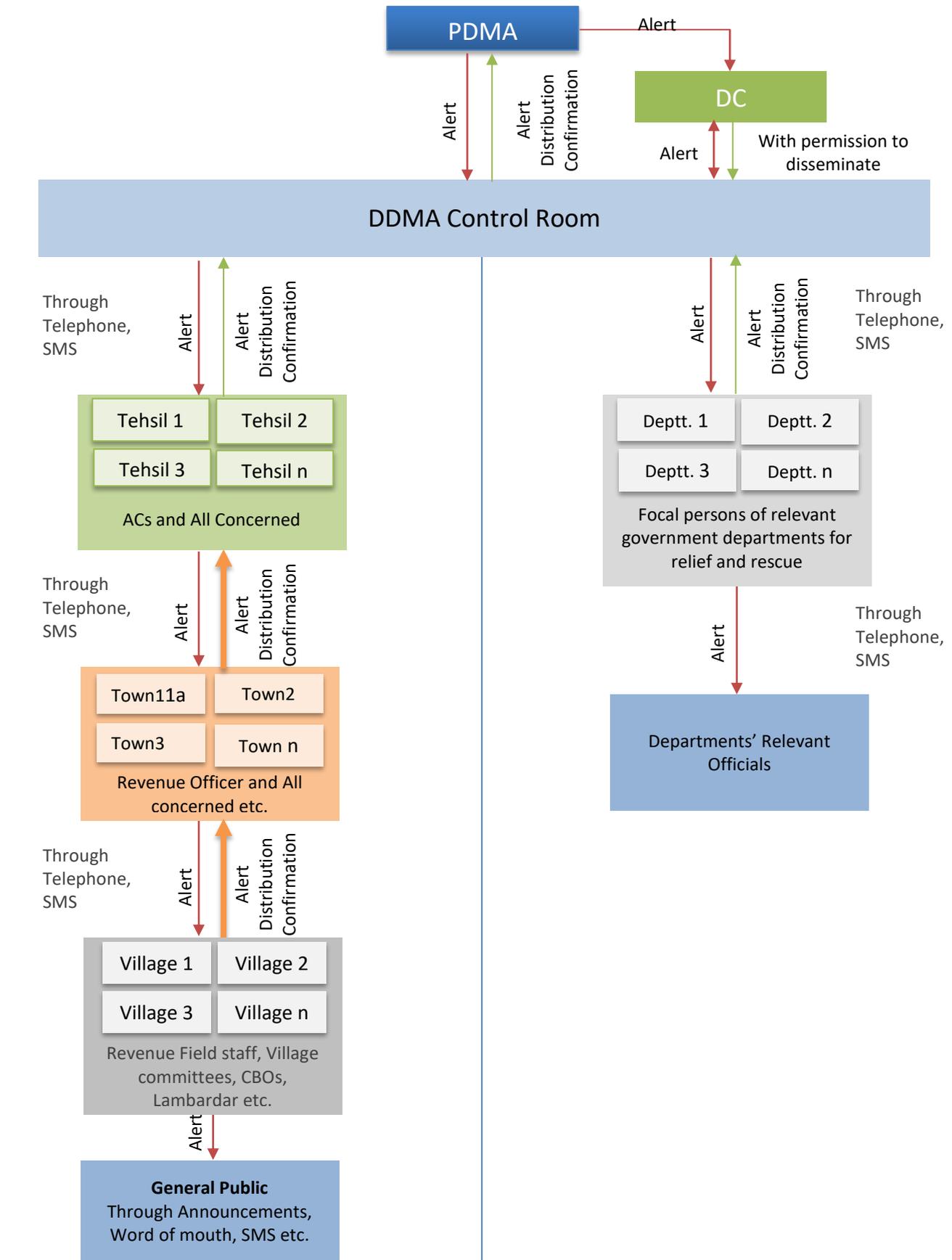
Tornado		
Earthquake		
Drought		
Epidemic		
Fire Incidents	Community Awareness program BLS (Basic Life Support & Fire Safety ) is being conducted regularly in all over the District to reduce/prevent from such emergencies. Rescue 1122 is dealing fire cases since inauguration 1 <sup>st</sup> February, 2013 of Rescue Service in the District Chiniot. We have five fire vehicles to respond to fire emergencies in District.	
Other Major Accidents (Building Collapse, road traffic accidents, train accident, Stampede, plane crash)		

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Environmental Hazards (industrial accidents, severe pollution etc.)		

# EARLY WARNING

## Information Flow Diagram



## Alertness Levels

Following four levels alertness have been established:

<p><b>Level-D</b> (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><b>Level-C</b> (Alert) (Warning issued but likelihood of occurrence is less than 100%)</p>	<p><b>Activities to be undertaken in level D</b> + 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><b>Level-B</b> (High Alert) (Disaster threat is imminent)</p>	<p><b>Activities to be undertaken in level C</b> + 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, LOCAL BODIES etc) facilities shall work 24/7 with full staff strength. DDMA shall monitor the situation on hourly basis.</p>
<p><b>Level-A</b> (Red Alert) (Disaster is materialized)</p>	<p><b>Activities to be undertaken in level B</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.*

## RESCUE STRATEGY

1. First priority should be of evacuation, provision of foods, cleanliness and provision of health facilities. Similarly, psychological treatment of affectees may also be ensured through psychiatrists.

2. Revenue Functionaries must ensure evacuation through the assistance of emergency staff (Rescue 1122) into the capms. Then medical teams will ensure medical assistance. Later on philanthropist should be taken on based of provision of cooked food to the affectees.

3. Upon receipt of alert of exceptionals high risk, Pak Army may be requisitioned through Home Department for supporting the rescue activities.

4. Yes detail given as under.

## HUMANITARIAN ASSISTANCE

1. Through Revenue field staff, Rescue 1122 & Police.
2. After evacuation priority must be given like provision of food, shelter, Health & security.
3. Through Revenue functionaries, Health Department, Livestock Department.
4. Shelter, food, medicines(Human/Livestock) and security and psychological education to the affectees.
5. Must be in iniform standard.
6. Supervisors shold be nominated for the purpose and monitoring through ACs, DCO, Commissioners & Secretaries and involvement of NGOs.
7. At least 500 persons capacity and all the camps should be of uniformed facilities.
8. Presentaly, capacity of camps is sufficient.

All the affectees may be provided proper food in uniform standard and ensure medical treatment. Cleanliness and sanitary conditions may also be imroved through Tehsil Municipal Administrations. Psychiatrists and others doctors may be consulted for mentally strength of all the affectees about the disasters. All the affectees may be handled with sypmathetic way.

## 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			X: Y:	16			X: Y:
2			X: Y:	17			X: Y:
3			X: Y:	18			X: Y:
4			X: Y:	19			X: Y:
5			X: Y:	20			X: Y:
6			X: Y:	21			X: Y:
7			X: Y:	22			X: Y:
8			X: Y:	23			X: Y:
9			X: Y:	24			X: Y:
10			X: Y:	25			X: Y:
11			X: Y:	26			X: Y:
12			X: Y:	27			X: Y:
13			X: Y:	28			X: Y:
14			X: Y:	29			X: Y:
15			X: Y:	30			X: Y:

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

Hazards	Tehsils	UCs	Names of Revenue Estates	Names of Villages
Floods	Chiniot, Bhowana & Lalian	UC No. 11, 02, 15, 20,21,22,23,24,03,05,06,07,08,09,10		Hersa Sheikh, Aasian, Abhola Sadhu, Peer Kot, Thatha Sawan, Patraki, Chichar Saidhan, Murad Wala, Burj Umar, Jhangar Galotran, Burj Mal, Burj Ziada, Thatha Shah Behlol, Mian Wal, Qazian, Babu rai, Adhusri, Mustafa Abad, Kot Miana, Chak Sarkar Kot Miana, Kot Roshan, Thatha Mehmood, Mathrooma, Rashida, Bukharian, Kot Umar, Kikar Wala, Maral Wala, Thatha Muhammad Shah, Harsa Nahra, Meeru Kay, Shah Fateh Ali, Abulkay, Balar Kay, Noshera, Kurk Muhammadi, Thatha Kundal, Darutta Kharlan, Taja Bair Wala, Lodhray, Hussain Khan, Samundar, Wara, Mangini, Chak Mathrooma Pakka, Kot Amir Shah, Jhalar Mehr Shah, Burj Bahbal, Dhrangar, Jhalar Wahab, Dawar, Sangra, Kalas, Mughlay Wala, Bahadar Viran, Dohmi, Thathi Shah Alam, Ahmad Nagar, Bagh Shah Behlol, Pilowal Sayedan, Channi Khizar, Kull, Maroo Bhatian, Thatha Shah Jamal, Tibbi Nalera, Shaikhan, Jhalar Natho

				Shah, Tindian Wala, Kalri, Kaloka.
Urban Flooding				
Flash Floods				
Hill Torrent				
Tornado				
Earthquake				
Drought				
Epidemic				
Environmental Hazards (industrial accidents, severe pollution etc.)				

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

S#	Name and Location	GPS Coordinates	Health Facility Type (Primary, Secondary, Tertiary )	Name and Contact No of Focal Person	Hazard Vulnerability (Floods, Earthquake etc.)
1	DHQ Hospital, Chiniot	Sargodha Road Chiniot	DHQ		
2	THQ Hospital Bhowana	Bhowana City	THQ		
3	THQ Hospital, Lalian	Lalian City	THQ		
4	RHC Ahmad Nagar	Ahmad Nagar	RHC		
5	RHC Barana	Mouza Barana	RHC		
6	BHU 126/JB	Chak No.126/JB	BHU		
7	BHU Ahmad Abad.	Mouza Ahmad abad	BHU		
8	BHU 153/JB	Chak No.153/JB	BHU		
9	BHU Rajoa	Mouza Rajoa	BHU		
10	BHU Harsa Sheikh	Mouza Harsa Sheikh	BHU		
11	BHU 134/JB	Chak No.134/JB	BHU		
12	BHU Mathooma	Mouza Mathrooma	BHU		
13	BHU 148/JB	Chak No.148/JB	BHU		
14	BHU 143/JB	Chak No.143/JB	BHU		
15	BHU Pir Panja	Mouza Pir Panja	BHU		
16	BHU Bahiwal	Mouza Bahiwal	BHU		

S#	Name and Location	GPS Coordinates	Health Facility Type (Primary, Secondary, Tertiary )	Name and Contact No of Focal Person	Hazard Vulnerability (Floods, Earthquake etc.)
17	BHU Hast Khiwa	Mouza Hast Khiwa	BHU		
18	BHU Kot Qazi	Mouza Kot Qazi	BHU		
19	BHU Jabana	Mouza Jabana	BHU		
20	BHU Sangra	Mouza Sangra	BHU		
21	BHU Anayat Pur	Mouza Anayat Pur	BHU		
22	BHU Langar Makhdoom	Mouza Langar Makhdoom	BHU		
23	BHU Kalri	Mouza Kalri	BHU		
24	BHU Kandiwal	Mouza Kandiwal	BHU		
25	BHU Kanwain Wala	Mouza Kanwain wala	BHU		
26	BHU Adlana	Mouza Adlana	BHU		
27	BHU 237/JB	Chak No.237/JB	BHU		
28	BHU Obhan	Mouza Obhan	BHU		
29	BHU 157/JB	Chak No.157/JB	BHU		
30	BHU 191/JB	Chak No.191/JB	BHU		
31	BHU 241/JB	Chak No.241/JB	BHU		
32	BHU 223/JB	Chak No.223/JB	BHU		
33	BHU 245/JB	Chak No.245/JB	BHU		

S#	Name and Location	GPS Coordinates	Health Facility Type (Primary, Secondary, Tertiary )	Name and Contact No of Focal Person	Hazard Vulnerability (Floods, Earthquake etc.)
34	BHU Muhammadi Sharif	Mouza Muhammadi Sharif	BHU		
35	BHU Mangini	Mouzan Mangini	BHU		
36	BHU T.M Shah	Mouza T.M. Shah	BHU		
37	BHU 221/JB	Chak No.221/JB	BHU		
38	BHU 203/JB	Chak No.203/JB	BHU		
39	BHU 225/JB	Chak No.225/Jb	BHU		
40	BHU 205/JB	Chak No.205/JB	BHU		
41	MCHCenter No. 1		MCH		
42	MCH Center No.2		MCH		
43	Rural Dispensary Murad Wala	Mouza Murad Wala	RD		
44	Rural Dispencary No. 139	Chak No.1139/JB	RD		
45	Rural Dispensary No. 244	Chak No.244/JB	RD		
46	Rural Dispensary Bukharian	Mouza Bukharian	RD		
47	Rural Dispensary Mamoola	Mouza Mamoola	RD		
48	Rural Dispensary Thathi Bala Raja.	Mouza Thatti Bala Raja	RD		

S#	Name and Location	GPS Coordinates	Health Facility Type (Primary, Secondary, Tertiary )	Name and Contact No of Focal Person	Hazard Vulnerability (Floods, Earthquake etc.)
49	Rural Dispensary Chak No. 128/JB	Chak No.128/JB	RD		
50	Rural Dispensary Wallah	Mouza Wallah	RD		
51	Rural Dispensary Ganja Talla	Mouza Ganja Talla	RD		
52	Rural Dispensary Thatha Fateh Ali	Thatta Fateh Ali	RD		
53	Rural Dispensary Chak No. 151/JB	Chak No.151/JB	RD		
54	Rural Dispensary Chak No. 210/JB	Chak No.210/JB	RD		
55	Rural Dispensary Lodhrau	Mouza Lodhrai	RD		
56	Rural Dispensary Kot Wasawa	Mouza Kot Wasawa	RD		
57	Rural Dispensary Kot Amir	Kot Amir	RD		
58	Rural Dispensary Chak No. 202/JB	Chak No.202/JB	RD		
59	Rural Dispensary Chak No. 243.	Chak No.243/JB	RD		

S#	Name and Location	GPS Coordinates	Health Facility Type (Primary, Secondary, Tertiary )	Name and Contact No of Focal Person	Hazard Vulnerability (Floods, Earthquake etc.)
60	Rural Dispensary Chak No. 146	Chak No.146/JB	RD		
61	Rural Dispensary	Kot Ahmad Yar	RD		
62		X: Y:			
63		X: Y:			
64		X: Y:			
65		X: Y:			
66		X: Y:			
67		X: Y:			
68		X: Y:			
69		X: Y:			
70		X: Y:			
71		X: Y:			
72		X: Y:			
73		X: Y:			
74		X: Y:			
75		X: Y:			
76		X: Y:			
77		X: Y:			

S#	Name and Location	GPS Coordinates	Health Facility Type (Primary, Secondary, Tertiary )	Name and Contact No of Focal Person	Hazard Vulnerability (Floods, Earthquake etc.)
78		X: Y:			
79		X: Y:			
80		X: Y:			
81		X: Y:			
82		X: Y:			
83		X: Y:			
84		X: Y:			
85		X: Y:			
86		X: Y:			
87		X: Y:			
88		X: Y:			
89		X: Y:			

## ANNEX IV: LIST OF VULNERABLE EDUCATIONAL INSTITUTIONS

S#	Name	Institute type (School, College etc.)	GPS Coordinates	Enrollment	Incharge Name	Contact Number
1	GPS BABU RAI	School	CHINIOT			
2	GPS DHUSRI	School	CHINIOT			
3	GPS JHANGER GLOTRAN	School	CHINIOT			
4	GPS BURJ MAL	School	CHINIOT			
5	GPS BURJ UMAR	School	CHINIOT			
6	GES HERSA SHEIKH	School	CHINIOT			
7	GES ASIAN	School	CHINIOT			
8	GPS KOT MIANA	School	CHINIOT			
9	GPS JUSRAT	School	CHINIOT			
10	GPS BUKHARI	School	CHINIOT			
11	GPS PILOWAL SYDAN	School	LALIAN			
12	GPS THATTA GHULAM	School	LALIAN			
13	GPS KHARKAN	School	LALIAN			
14	GPS MARU BHATTIAN	School	LALIAN			
15	GPS DOABA MARU	School	LALIAN			
16	GPS SHEIKHAN	School	LALIAN			

17	GPS JHALLAR NATHU SHAH	School	LALIAN			
18	GES KOT AMEER SHAH	School	LALIAN			
19	GPS JHANGER SHAH BEHLOL	School	LALIAN			
20	GPS YAKKAY WALA	School	LALIAN			
21	GPS CHANGRAN WALA	School	LALIAN			
22	GPS YAKKAY KI	School	LALIAN			
23	GPS PIR CHIRAGH SHAH	School	LALIAN			
24	GPS PATHAN KOT	School	LALIAN			
25	GPS BASTI ALI KAY	School	LALIAN			
26	GPS KALAS	School	LALIAN			
27	GPS SALOL KAY	School	LALIAN			
28	GES HARSA BULLAH	School	BHOWANA			
29	GES LODIA	School	BHOWANA			
30	GPS MUHAMMADI SHARIF	School	BHOWANA			
31	GPS KANGRAN WALA	School	BHOWANA			
32	GPS FATEH KOT TAJA	School	BHOWANA			
33	GPS JAMIA ABAD	School	BHOWANA			
34	GPS JAMIA M SHARIF	School	BHOWANA			
35	GPS TIBA HASHMAT	School	BHOWANA			

36	GPS NOSHERA	School	BHOWANA			
37	GPS T.I MANGINI	School	BHOWANA			
38	GE/S CHAH M KHAN WALA	School	BHOWANA			
39	GE/S TM SHAH	School	BHOWANA			
40	GPS RAZA NAGAR	School	BHOWANA			
41	GPS ZAMEER ABAD	School	BHOWANA			
42	GPS MARAL WALA	School	BHOWANA			
43	GPS PUMP M BOOTA	School	BHOWANA			
44	GHS Ahmad Nagar	School	LALIAN			
45	GHS Thatti Bala Raja	School	LALIAN			
46	GHS Kalri	School	LALIAN			
47	GHS Yara Kay	School	LALIAN			
48	GGHS Ahmad Nagar	School	LALIAN			
49	GGHS Kalri	School	LALIAN			
50	GGP/S BABU RAI	School	CHINIOT			
51	GGP/S ASIAN	School	CHINIOT			
52	GMP/S KIKAR WALA NO	School	CHINIOT			
53	GGP/S JUND WALA	School	CHINIOT			
54	GGE/S RASHIDA	School	CHINIOT			
55	GGE/S BUKHARIAN	School	CHINIOT			
56	GMP/S THATA MEHMOOD	School	CHINIOT			
57	GGP/SDHIUSR	School	CHINIOT			
58	GGPS KOT ROSHAN	School	CHINIOT			
59	GGPS KOT SIPRA	School	CHINIOT			

60	GGP/S HERSA BULLAH 1	School	BHOWANA			
61	GGP/S LODIA	School	BHOWANA			
62	GGP/S KILA QANGRAN	School	BHOWANA			
63	GMPS HARSA NAHRA	School	BHOWANA			
64	GMPS BALAR KAY	School	BHOWANA			
65	GMPS SAJAN KAY	School	BHOWANA			
66	GMPS SAI KAY SALOL KAY	School	BHOWANA			
67	GMPS OBHAN	School	BHOWANA			
68	GMPS SAMUNDAR	School	BHOWANA			
69	GME/S BURKHURDAR	School	BHOWANA			
70	GMP/S TAJA BER WALA	School	BHOWANA			
71	GGP/S THATTA RAHMOO	School	BHOWANA			
72	GMP/S DIPHER KEY	School	BHOWANA			
73	GME/S WARA	School	BHOWANA			
74	GMES SULEMAN	School	BHOWANA			
75	GGP/S MUHAMMAD SHAH WALI	School	BHOWANA			
76	GGPS KOT AMEER SHAH	School	LALIAN			
77	GMPS NOURANGEY WALA	School	LALIAN			
78	GGPS PILO WAL SADIAN	School	LALIAN			
79	GGPS THATTI ALAM SHAH	School	LALIAN			
80	GMPS TINDIAN WALA	School	LALIAN			
81	GMPS KHOKHRAN WALA	School	LALIAN			

82	GMPS AHMED WALA	School	LALIAN			
83	GMPS PILOWAL SIDDIQA	School	LALIAN			
84	GMPS THATTA SHAH JAMAL	School	LALIAN			
85	GMPS HUSSAIN ABAD	School	LALIAN			
86	GMPS GALOTRAN WALA	School	LALIAN			
87	GMPS HAMBOANA	School	LALIAN			
88	GMPS THATTA REHMUN	School	LALIAN			
89	GMPS BHEKH	School	LALIAN			
90	GMPS GADHLAN WALI	School	LALIAN			
91	GGPS DHARANGER	School	LALIAN			
92	GGPS JHALLAR MEHR SHAH	School	LALIAN			
93	GGPS DARA PATHER	School	LALIAN			
94	GGPS JHALLAR WAHAB	School	LALIAN			
95	GGPS SATTI WAL	School	LALIAN			
96	GGPS KHARKEN	School	LALIAN			
97	GMPS BURJ BAIBAL	School	LALIAN			
98	GMPS HAJI USMAN	School	LALIAN			
99	GMPS THATTI KHUDA YAR	School	LALIAN			



## 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	Madina Sugar Mills	Faisalabad Road Chiniot	X: Y:				
2	Safina Sugar Mills	Lalian	X: Y:				
3	Ramzan Sugar Mills	Jamia abad	X: Y:				
4	PRC Ramzan Sugar Mills (1)	Jamia abad	X: Y:				
5	PRC Ramzan Sugar Mills (2)	Jamia abad	X: Y:				
6	Bhatta Rice Mills		X: Y:				
7	Shan Rice		X: Y:				
8	Chenab Rice		X: Y:				
9	Hafiz Rice		X: Y:				
10	Al-Madina Rice		X: Y:				
11	Hameed Sons Rice		X: Y:				
12	Rehman Rice		X: Y:				
13	Five Star		X: Y:				
14	Iqbal Rice Mills	Faisalabad road Chiniot	X: Y:				
15	Chiniot Rice Mills		X: Y:				
16	Ever Green Rice		X: Y:				

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
17	Latif and Sons		X: Y:				
18	Bakhshi Rice Mills		X: Y:				
19	Al-Akhwan Rice Mills		X: Y:				
20	Tanveer Rice Mills		X: Y:				
	Loona Rice Mills						
	Ayesha Rice Mills						
	Ahmed Rice Mills						
	Rung Shah Rice Mills						
	Mubarak Shah Rice Mills						
	Tayyab Textile Mills	Faisalabad road					
	Sarfraz Textile Mills	Faisalabad road					
	Tahir Rafique Textile Mills	Faisalabad road					
	Muslim Cotton Factory						
	Hassan Cotton Factory						
	Hamza Enterprises						
	Chenab Board Gatta Factory						
	Ahmed Straw Board Gatta Factory						
	Ahmed Enterprises						
	Hayyati Glass Gatta Factory						
	Yaseen Oil Mills	Jhumra road Chiniot					
	Madina Oil Mills						

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
	Makki Madni Oil Mills						
	Rafhan Mills						
	Faisal Feeders						
	Laghari Floor Mills	Faisalabad road					
	Engro Foods Private						
	Nestle Pakistan Limited Bhowana	Bhowana					
	Hassan Flour Mill Wallha	Mouza Walha					
	Rahseed Rice Mill Chanab Nagar	Chenab Nagar					
	Al Rahseed rice Mill Pelowal	Mouza Pelowal					
	Sahab Rice Mill Chanab Nagar	Chenab Nagar					
	Tahir Rice Mill Ahmad Nagar	Ahmad Nagar					
	Sultan Rice Mill Kallowal	Kallowal					
	Tahir Rafique Textile Mills	Faisalabad road					
	Shan Industries	Sarr wala Road Chiniot					

## ANNEX VI: LIST OF NGOS 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	Islamia Hospital Noghaza Road Chiniot 047-6334189			Health (Hospital)	M. Asif	
2	Anjuman Islah-e- Muslemeen Noghaza Road Chiniot 0321-6712946			Education Vocational (High School) (Vocational Centre)	Shahid Ahmad	
3	Public Welfare Society Chak No. 13/14 JB Chiniot 0346-3302009			Health (Free Eye Camp)	Mehr Maqsood Ahmad	
4	Shadab Welfare Society Chak No. 125/JB Chiniot 0300-7700640			Vocational (Vocational Center)	Mher Sakandar Hayyat	
5	Anjuman Shehrian Coocha Shaheen Chiniot 0321-7708107			Vocational	Rizwan ul Haq Chohan	
6	Chennab Officer 09 Club Road Chiniot 0321-7918079			Sports (Chennab Officer Clun)	Asad Nissar Bhati Advocate	
7	Chennab Welfare Society Mohallah Thatti Garbi Chiniot 0343-7380153			Education (Middel School)	Mohammad Javed	
8	Idara Khair-ul-Bashar City Thana Road Chiniot 0311-8719448			Health (Hospital) Education (Computer Eductaion Center)	Abdul Rashid	
9	Shaheen Welfare Society Mohallah Thatti Garbi Chiniot 0342-7708668			Education (Primary School)	Harool Malik	

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.
10	Human Rights Welfare Council Jhumrah Road Chiniot 0321- 7704471			Health(Free Tibi Camp)	Shoukat Ali Azad	
11	Ulfat Life Welfare Society Chak No. 126/JB Chinot 0331-4365686			Health (Hospital)	Khalid Abdallah	
12	Free Legal Aid Welfare Society District Bar Chiniot 0321-7918131			General Welfare	Ch. Badar Munir	
13	Al-Flah Welfare Society Mohallah Kamangran Chiniot 0315-5729032			Sports	Imtiaz Khan Lodhi	
14	Chaman Welfare Society Jhang Road Chiniot 03007703800			Education (Primary School)	Ameer Umer Chaman	
15	Lucky Rescue Water Sports Organization Chennab River Chiniot 0321-7702006			Sports	Muhammad Adrees	
16	Islami Flahi Council Jhang Road Chiniot 0300-7703313			General Welfare	Khizer Abbas	
17	Haji Sons Welfare Foundation Lahore Road Chiniot 0300-7709171			Health Hospital)	Muhammad Saleem	
18	Pakistan Anti Gioter and Patients Welfare Servcies Mohallah Usman Abad Chiniot 0300-7716100			Health (Homeo Dispensary)	Dr. Sarfraz Ali Azizzada	

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.
19	Anjuman Imdad-e-Marizan City Thana Road Chiniot 0312-5832144			Health (Dispensary)	Sheik Nadeem Ahmad	
20	Appa Gulzar Memorial Welfare Soceity Mohallah Kamangran 0342-7736237			General Welfare	Allah Bux	
21	Sher Welfare Oranization Mohallah Thatti Garbi Chiniot 0300-7711899			Education (Middel School)	Malik Saleem Akhter	
22	Anjuman Behbood-e- Marizan DHQ Hospital Chiniot 0333-4559104			Health	Mian Buksh Elahi	
23	T.B Association TB Clinic Chiniot 0321-7704471			Health (TB Clinic)	Shoukat Ali Azad	
24	Public Welfare Organization Thana Road Lalian 0332-7054346			Women Empowerment (Dastakari Center)	Abdul Ghaffar President	
25	Sahara Welfare Society Moza Wallah Tehsil Lalian 0340-0623657			Health (Medical/Eye camps)	Umar Hayat	
26	Islah-e-Muashra Society kalowal 0300-9621867			Health & Education (Medical camps & free education at School)	Mahr Bashir Ahmad	
27	Jhoke Aid Welfare Society Hujra Road Lalian 0340-6946514			Disabled Chidren & General Welfare, Provision of free education material to students	Ghulam Mustafa Lali	
28	Blind Welfare Association Gole Bazar Chenab Nagar 0332-7066841			Blinds' Welafre (Self help based activities for blinds)	Abdul Hameed Khaleeq	

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.
29	Social Welfare Agency Jamia Muhammadi Sharif 047-6322212			Vocational Education (Madrasa and Orphanage)	Moulana Rehmat Ullah	
30	Pioneer Welfare Organization, Irshad wala solang bhowana 0341-7826086			Health (Dispensary)	Muhammad Ali	
31	Guardian Welfare Organization Jamia Muhammad Sharief bhowana. 0346-6716773			Education (School)	Ghulam Rasool	

## ANNEX VII: CONTACT LIST OF MAIN STAKEHOLDERS/ DEPARTMENTS

S#	Designation	Person Name	Telephone (Office)	Telephone (Residential)	Mobile
1	Focal Person for Disasters				
2	Commissioner	Ishrat Ali	041-9201717	041-9201701-2	0304-0920054
3	RPO	Rifat Mukhtar Raja	041-9200610-11	"	"
4	DC	Muhammad Riaz	047-9210111	047-9210105-6	0304-0920089
5	DPO	Syed Husnain Haider	047-9210022	047-9210033	03237543444
6	ADC	Tariq Khan Niazi	047-9210101	"	0300-9601764
7	DEO Rescue 1122	Tahira Khan	047-9210123	"	03004179020
8	DO Civil Defence	Muhammad Sadeeq	047-6331299	"	0300-7699704
9	SNA	Umar Hayyat	047-9210116	"	0300-6662293
10	AC - Chiniot	Madam Aisha Yaseen	047-9210095	"	0322-8447028
11	AC –Lalian	Fazal Abbas	047-6610080	"	0300-7998832
12	AC –Bhuwana	Munawar Abbas	047-6201371	"	0321-9434844
13	AC -	"	"	"	"
14	AC -	"	"	"	"
15	AC -	"	"	"	"
16	Tehsildar – Chiniot	Muhammad AKram			0321-6425140
17	Tehsildar –Lalian	Muhammad AKram			0321-6425140
18	Tehsildar –Bhawana	Saeed Anwar			0300-9501022
19	Tehsildar -	"	"	"	"
20	Tehsildar -	"	"	"	"
21	Tehsildar -	"	"	"	"
22	Chief Officer –MC Chiniot	Rana Muhammad Nawaz	047-9210141		0300-7659385
23	Chief Officer –MC Lalian	Muhammad Faisal	"	"	03006687104
24	Chief Officer – MC Bhawana	Rana Muhammad Nawaz	"	"	0300-7659385
25	Chief Officer – MC Chenab Nagar	Muhammad Faisal	"	"	03006687104
26	Chief Officer – District Council	Rana Muhammad Nawaz	"	"	0300-7659385
27	Chief Officer -	"	"	"	"

S#	Designation	Person Name	Telephone (Office)	Telephone (Residential)	Mobile
28	CEO Education	Zulfiqar Hussain	047-9210089	"	0333-6603400
29	Chief Engrn. Irrigation	Syed Al Hassan Hashmi	048-9230446	"	0300-6007033
30	XEN Irrigation	Syed Qalab Abbas	041-9200470	"	03007608353
31	XEN Buildings	Muhammad Mansha	047-6330111	"	0343-7895096
32	XEN Highways	Muhammad Shahbaz	047-9210133	"	0305-8258794
33	DO Agriculture	Mahfoz Ahmad	047-9210171	"	0301-7043098
34	CEO Health	Dr. Mushtaq Bashir	047-9210160	"	0300-7899009
35	DMO	Imran Asmat Panu	047-6330013	"	0301-8665636
36	Incharge DHQ Hospital	Dr. Anjam Iqbal	047-9210155	"	0300-7899009
37	Veterinary Officer	Sohail ahmad	047-9210152	"	0333-6503982
38	ADC(G) Chiniot	Imran Asmat Panu	047-9210107	"	0307-8665636
39	(DDMC) PDMA Chiniot	Moaaz bin Haleem	047-6336359	"	0301-8663423
40	"	"	"	"	"

## ANNEX VIII (A): LIST OF VOLUNTEERS

S#	Volunteer Name	CNIC	Address	Contact Number and Email	Blood Group	Time Required to be on-board
1						
2						
3						
4						
5						
6						
7						
8						
9						
10						
11						
12						
13						
14						
15						
16						
17						
18						
19						
20						
21						
22						
23						
24						
25						
26						
27						
30						

**ANNEX VIII (B) : LIST OF SWIMMERS/DIVERS**

S#	Name	CNIC	Address	Contact Number and Email	Blood Group	Time Required to be on-board
1						
2						
3						
4						
5						
6						
7						
8						
9						
10						
11						
12						
13						
14						
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23						
24						
25						
26						
27						
30						

## 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
<b>NA99</b>	Ghulam Muhammad Lali		0333-9704444	PP93	Taimoor Ahmad Lali		0321-9493111
<b>NA100</b>	Qaisar Ahmed Sheikh		0333-4092693	PP94	Muhammad Alyas Chinioti		0301-7962820
				PP95	Syed Hassan Murtaza		0300-7709072
				PP96	Saleem Bibi Bharwana		--

## ANNEX X: LOCAL GOVERNMENT

### District and Tehsil Level

S#	Designation	District/Tehsil Name	Name	Contact Number	Mobile Number
1	DDLG Chiniot	Chiniot	Rana Javeed Ahmad		0306-7006500
2	ADLG Chiniot	Chiniot	Ghulam Bashir		0333-4942605
3					
4					
5					
6					
7					
8					
9					
10					
11					
12					
13					
14					

### Town Level

S#	Tehsil	TC	Chair	Chair Contact	Vice Chair	VC Contact
1						
2						
3						
4						
5						
6						
7						
8						
9						
10						
11						
12						
13						
14						
15						

S#	Tehsil	TC	Chair	Chair Contact	Vice Chair	VC Contact
16						
17						
18						
19						
20						
21						
22						
23						
24						
25						
26						
27						
28						
29						
30						
31						
32						
33						
34						
35						
36						
37						
38						
39						
40						
41						
42						
43						
44						
45						
46						

# ANNEX XI: DATA COLLECTION PROFORMAS

## 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)
----	------	-------------	------	---------	----------------	---------------	--------	----------------------	--------------	----------------	-------------	-----------------	---------------------

## P2: Deceased Person Reporting Proforma

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
----	------------------	---------------	---------	----------	--------	-----	------	----------------	---------------	----------------	----------------	---	---	--------------------------

## P3: Injurd Person ReposrtingProforma

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
----	-----------------	---------------	---------	----------	--------	-----	------	-----------------	----------------	--------------------------------------	--------------------------

**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.

**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

**P6: Relief Distribution Tracking Proforma**

District: \_\_\_\_\_

Date: \_\_\_\_\_

S#	Location/ Destination	Arrival Date and time	Items	Quantity	Items short (if any)	Items sent by	Driver name	Received by	Bilty no

**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

**P8: Relief camp registration Proforma**

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 proforma**

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

District: \_\_\_\_\_

Date: \_\_\_\_\_

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

**P10: Control Room**

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

District: \_\_\_\_\_

Focal Person: \_\_\_\_\_

Date: \_\_\_\_\_

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

<b>Land</b>	<b>3.0-4.5 square meter per person</b>
<b>Shelter</b>	3.5 square meter per person
<b>Water</b>	15-20 liters per person per day
<b>Food</b>	2100 kcal per person per day
<b>Toilet</b>	One per family of 6-10 persons
<b>Health Centre</b>	One per 20,000 persons
<b>Child Friendly Spaces</b>	2-4 year olds- 15 children:2 facilitators
	5-9 year olds-20 children : 2 facilitators
	10-18 year olds- 30 children :2 facilitators
<b>Hospital</b>	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)
<b>SARGODHA ZONE</b>			
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
<b>Total in feet.</b>			<b>25,413</b>
<b>Total in Miles.</b>			<b>4.81</b>
<b>PMO BARRAGES</b>			
1	Kalabagh H/Works Division	Jinnah Barrage	25,080
<b>Total in feet.</b>			<b>25,080</b>
<b>Total in Miles.</b>			<b>4.75</b>
<b>FAISALABAD DIVISION</b>			
1	Khanki Division	Left Marginal Bund	21,000
2	-do-	Right Marginal Bund	33,650
3	Jhang Division	Jhang Flood Protection Bund	71000
4	Qadirabad Barrage Division	Left Marginal Bund	64938
5	-do-	Right Marginal Bund	106300
<b>Total in feet.</b>			<b>296888</b>
<b>Total in Miles.</b>			<b>56.22</b>
<b>BAHAWALPUR ZONE</b>			
1	Punjad Head works Division	Right Marginal Bund	70554
2	-do-	Left Marginal Bund	65169
3	-do-	Colony Protection Bund	15,000
4	Khanpur Canal Division	Minchin Flood Bund	115300
<b>Total in feet.</b>			<b>266,023</b>
<b>Total in Miles.</b>			<b>50.23</b>
<b>MULTAN ZONE.</b>			
1	Trimmu Division	Right Marginal Bund	54,000
2	-do-	Left Marginal Bund	46,000
3	Sulemanki Division	Left Marginal Bund	47,500
4	-do-	Right Marginal Bund	63,000
5	Shuja Canal Division	Right Bank of Shujabad Branch	48,000
6	-do-	Akbar Flood Bund	21,710
<b>Total in feet.</b>			<b>280,210</b>
<b>Total in Miles.</b>			<b>53.07</b>
<b>D.G.KHAN ZONE</b>			
1	Taunsa Barrage	Right First Defence Bund	23,500
2	-do-	Left Marginal Bund	133,200
3	-do-	Shahwala Groyne	66,000
4	Muzaffargarh Canal Division	Muzaffargarh Flood Bund	188000
5	-do-	Doaba Flood Bund.	19000
6	-do-	Khangarh Flood Bund	153,000
7	-do-	Shehr Sultan Flood Bund	134000
8	Jampur Construction Division	Jampur Flood Bund	170720
9	-do-	Laskani Flood Bund	26365
<b>Total in feet.</b>			<b>913,785</b>
<b>Total in miles</b>			<b>173.06</b>

<b>LBDC(IP)</b>			
1	Balloki Head works Division	Left Marginal Bund	28,350
2	do	Right Marginal Bund	26,500
<b>Total in Feet</b>			<b>54,850</b>
<b>Total in miles</b>			<b>10.38</b>
<b>LAHORE ZONE</b>			
1	FLOOD Bund Division Narowal	Jassar Highway Bund	20,000
2	do	Rayya flood Bund	40,000
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	11,250
6	Marala Division UCC	Left Marginal Bund	68,639
7	do	Right Marginal Bund	6316
8	Lahore Drainage Div.	Shahdara Flood Protection Bund	15,750
<b>Total in Feet</b>			<b>169,295</b>
<b>Total in miles</b>			<b>32</b>
<b>Grand total in miles</b>			

**INFORMATION REGARDING FLOOD BUND CATEGORY B**

S#	Name of Division	Name of Embankment / Bund	Length (ft.)
<b>SARGODHA ZONE</b>			
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
<b>Total in feet.</b>			<b>35,000</b>
<b>Total in miles</b>			<b>6.63</b>
<b>FAISALABAD ZONE</b>			
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
<b>Total in feet.</b>			<b>165,000</b>
<b>Total in miles</b>			<b>31.25</b>
<b>BAHAWALPUR ZONE</b>			
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
<b>Total in feet.</b>			<b>290,000</b>
<b>Total in miles</b>			<b>54.92</b>
<b>MULTAN ZONE</b>			

1	Trimmu Division	-do-	80,000
2	Suleimanki Division	-do-	50,000
3	Shujabad Canal Division	-do-	60,000
	<b>Total in feet.</b>		<b>190,000</b>
	<b>Total in miles</b>		<b>35.98</b>
<b>D.G.KHAN ZONE</b>			
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
	<b>Total in feet.</b>		<b>630,000</b>
	<b>Total in miles</b>		<b>119.32</b>
<b>LBDC (IP)</b>			
1	Balloki Headworks Division	-do-	40,000
2	Okara Division	-do-	40,000
3	Sahiwal Division	-do-	20,000
	<b>Total in feet.</b>		<b>100,000</b>
	<b>Total in miles</b>		<b>18.94</b>
<b>LAHORE ZONE</b>			
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
	<b>Total in feet.</b>		<b>422,000</b>
	<b>Total in miles</b>		<b>79.92</b>
<b>PMO BARRAGES</b>			
1	Jinnah Barrage	-do-	20,000
	<b>Total in feet.</b>		<b>20,000</b>
	<b>Total in miles</b>		<b>3.79</b>
	<b>Grand Total (in miles)</b>		<b>350.76</b>

## 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	9.5	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	11	1	1.5	2	4	6
	Qadirabad	9	1	1.5	2	4	6
	Trimmu	8.75	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	4.25	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 Mailsi Syphon	3 4	0.5 0.75	0.8 1.1	1.2 1.5	1.75 2.25	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.