

DISTRICT DISASTER MANAGEMENT PLAN 2021

Division: SAHIWAL

District: OKARA



Head Sulemanki



Earthquake



Floods



Fire incident

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Approved by: Deputy Commissioner Okara

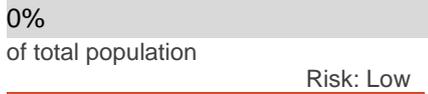


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Estimated number of people at risk of **hill torrent** in 2021



Risk: Low

XX

Estimated number of people at risk of Floods in 2021



Risk: Low

XX

Estimated number of people at risk of earthquake in 2021



Risk: Low

XX

Estimated number of people at risk of epidemic in 2021



Risk: Medium

EXECUTIVE SUMMARY

Okara is vulnerable to a variety of Calamities but geographical location and climatic conditions make it vulnerable to Moon Soon Floods.

Floods in the District have caused loss of life, heavy loss of property, infrastructure and livelihood of people. The availability of resources, preparedness, planning and institutional / organizational capacity has always been an asset of District Okara. The purpose of this plan is to clarify the roles & responsibilities of different stakeholders / departments to introduce enhanced coordination for immediate response and fast rehabilitation process.

The plan classifies small, medium and large scale untoward situations for a well coordinated and articulated response strategy. The plan integrates the SOP's of various Government Department to propose a consistent approach for reporting damages, need and assessment of post disaster requirements.

The plan has been designed on risk management standards for risk minimization. The plan identifies the environmental risks of the District and how to affectively manage these risks.

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).
- To develop the culture of prioritizing and adapting the risk safety measures amongst the society in the wake of any emergency.
- To inculcate the sense of preparedness among the residents of the district and train them to a certain degree of self help for a challenging situation.
- To devise policies and procedures to upgrade the safety kits, technical, human and material resource, in all the hazard prone areas of the district and lay out effective plan to the resource bank efficiency in times of disaster.
- To strengthen and upgrade the early warning system and communication channels to implement the directives of the help lines of all the operation centers.
- To develop synergy and harmonious interaction of all the stakeholders to develop an alarming front against any disaster like situation.
- To execute the preparedness agenda of drills and exercises on regular basis.
- To monitor and evaluate the inventory both qualitatively and quantitatively.
- To devise and activate chain of command and control centre for steering trigger mechanism.

DISTRICT PROFILE

Socio-Economic Indicators (Average)

| S.No. | Particulars | Numbers |
|-------|--|-------------------------------|
| 1. | Population (Census 2017) | 3039139 |
| 2. | No. of Tehsils | 3 |
| 3. | No. of UCs | 140 |
| 4. | No. of Revenue Estates | 933 |
| 5. | Population Density (people per km ²) | 690 |
| 6. | Family Size | 6.1 |
| 7. | Pop Growth Rate | 1.63 |
| 8. | PCI | 3356.5617 |
| 9. | District GDP/Annual Income | - |
| 10. | Poverty Rate | 47.0 |
| 11. | Patient/Doctor Ratio | 10/55 |
| 12. | AMR | 355 |
| 13. | IMR | 35/1000 |
| 14. | MMR | 83/100000 |
| 15. | Literacy Rate | 51.6% |
| 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 | 15155 crimes reported in 2020 |

Population (Census 2017)

| Total | Male | Female | Transgender | Vulnerable People (PLWs, disabled, aged) |
|---------|---------|---------|-------------|--|
| 3039139 | 1538741 | 1449769 | 168 | 50461 |

Source/Note: Click here to enter text.

| Number of Dwelling Units | Kaccha (Mud/clay) | Pakka (Bricks&Mortar) |
|--------------------------|-------------------|-----------------------|
| 613620 | 61120 | 552500 |

Source/Note: Click here to enter text.

Area (in acres) 1085615

| Total Area of District in Km ² | Area under cultivation | Cultivation in Settled Area | Cultivation in Baid Area |
|---|------------------------|-----------------------------|--------------------------|
| 4377 | 839841 | 179822 | 7477 |

Literacy Rate

| Overall | Rural | | Urban | | Total | |
|---------|-------|--------|-------|--------|-------|--------|
| | Male | Female | Male | Female | Male | Female |
| 51.6% | 58.8% | 33.0% | 76.0% | 61.1% | 62.6% | 39.4% |

Source/Note:

Government Schools

| | | Schools | Enrollment |
|--------------------------|-------------|---------|------------|
| Total/ Overall | | 1420 | 391234 |
| Boys | Primary | 481 | 67829 |
| | Middle | 78 | 26437 |
| | High | 141 | 90521 |
| | Higher Sec. | 7 | 7264 |
| Girls | Primary | 436 | 59584 |
| | Middle | 157 | 46003 |
| | High | 106 | 85226 |
| | Higher Sec. | 6 | 7212 |
| Co-Education | Primary | 0 | 0 |
| | Middle | 0 | 0 |
| | High | 0 | 0 |
| Special Education | 8 | 1158 | |

Private Schools

| | | Schools | Enrollment |
|--------------------------|-------------|---------|------------|
| Total/ Overall | | 975 | 187502 |
| Boys | Primary | - | - |
| | Middle | 388 | 53854 |
| | High | 165 | 21758 |
| | Higher Sec. | 14 | 2568 |
| Girls | Primary | - | - |
| | Middle | 163 | 57869 |
| | High | 154 | 25486 |
| | Higher Sec. | 21 | 4258 |
| Co-Education | Primary | 69 | 21585 |
| | Middle | - | - |
| | High | - | - |
| Special Education | 1 | 124 | |

Higher/Technical/Professional Education (Public & Private)

| Particulars | College | Universities | Professional | Technical | Commerce | Total |
|--------------------------|---------|--------------|--------------|-----------|----------|-------|
| No of Institution | 38 | 1 | 0 | 0 | 5 | 44 |
| No of Students | 34363 | 15800 | 0 | 0 | 1837 | 52000 |

Health Facilities

| Particulars | Primary | Secondary | Tertiary | Private Hospital | Total |
|-----------------------------|---------|-----------|----------|------------------|---------|
| No. of Facilities | 144 | 4 | - | 38 | 186 |
| Annual OPDs | 1739420 | 1459148 | - | - | 3198568 |
| No of beds | 394 | 485 | - | - | 879 |
| Doctors Available | 132 | 272 | - | 129 | 533 |
| Paramedical staff | 877 | 389 | - | - | 1266 |
| Ambulances available | - | - | - | 15 | 15 |
| Mobile Medical Units | | | | | - |

Livestock: Small Animals (goats, sheep etc.):131494 Big Animals (cows, buffalos, camel etc.) 217879

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 |
|-------------|-----------|---------|--------------|-------------------------|----------|-------------|------------------|---------------|-----------------------|---------------|
| 53% | 12% | 3% | 0.3% | 10% | 10% | 0.5% | 0.2% | 1.5% | 2.5% | 7.5% |

Disaster History - Floods (since 1970)

Flood damages in this area have an old history which starts from the year 1955. During the year 1955 a heavy flood in River Ravi at Balloki Headworks was recorded as 204360 Cs. A big area and infrastructure was damaged in Okara and Renala Tehsils. Again in 1988, an unprecedented discharge of about 389345 cusecs in Ravi at Balloki Headworks caused heavy damages to human and animal lives, crops and houses. The town of Renala Khurd and Basti Lal Shah were also affected due to breach in LBDC. Similarly during 1988, a peak flood of 399543 cusec was

experienced at River Satluj which caused damages in the river bed. No major floods have been experienced in district okara since 1988.

Disaster History – Other Disasters (since 1970)

| Sr. | Year | No. of People Affected | No. of Deaths | No. of Revenue Estates Affected | Houses Damages (Partially) | Houses Damages (Fully) | Compensation Paid (Rs.) | Financial Impact (Including Infrastructure Damages) |
|-----|------|------------------------|---------------|---------------------------------|----------------------------|------------------------|-------------------------|---|
| 2 | 2013 | 3224 | - | 108 | 10 | - | 1,95,000/- | - |
| 2 | 2014 | 57 | - | - | 258 | 321 | 1,28,00,000/- | - |
| 3 | 2017 | 5 | 2 | 3 | 1 | 1 | 26,20,000/- | - |
| 4 | 2019 | 12 | 3 | 1 | - | 1 | - | - |
| 5 | 2020 | - | - | - | - | - | - | - |

General Information

| Particulars | Detail |
|---|---|
| Neighboring districts and their vulnerabilities | Sahiwal (Flood) Pakpattan (Flood & Terrorist Attack) |
| Topographical Features | Coordinates: 30.801380°N 73.448334°E Union Councils - • Total Area 4377 (S.Q KM) |
| Weather/Climate pattern | e.g. max. and min. temperature, annual precipitation, storms, heat waves, snow fall etc. The climate of District is extreme in winter i.e very cold as Temp falls to 1°C while the summer is very hot as Temp rises to 47°C. Average annual rainfall is 468 mm per year as per MET Department Okara Statistics of last 8years. The wind storms have also been observed w.e.f. the month of April to end of August. |
| Major Rivers | Name of river, passing through areas along with length in the district River Ravi runs 40 km in district through northern boundary in Tehsil Renala & Okara River Sutlej runs 70 km in district through Southern boundary in Tehsil Depalpur |
| Major Nullahs / Streams | Name of river, passing through areas along with length in the district Old Sukh Beas River (Nullah) passes through District Okara having length of 60Km Lower Bari Doab Canal passes through District Okara having length of 44.26Km |
| Motorway/Highway | Vulnerable points of motorway/highway May please be treated as Nil |
| Railways | Vulnerable points of Railway May please be treated as Nil |
| Geological features | e.g. fault line, mountainous areas etc. May please be treated as Nil |

Dams (including small dams)

May please be treated as Nil

Major Embankments/Bunds

| Name of Embankment | Length (Miles) | Starting Point (Revenue Estate /Tehsil Name) | Ending Point (Revenue Estate /Tehsil Name) | Name of Critical/ vulnerable Points | GPS Location of Critical/ Vulnerable Points | Remarks |
|------------------------------|----------------|--|--|-------------------------------------|---|--------------|
| Jandraka Flood Bund | 18.05 | Mazhar Abad Basti Kaiser / Okara | ThathaChannu / Okara | RD 75+000 to RD90+250 | X:30-18 to 31-8 Y: 73-14 to 74-9 | Satisfactory |
| Upstream Left Guide Bank. | 0.07 | Suleimanki / Depalpur | Suleimanki / Depalpur | -- | -- | Satisfactory |
| Upstream Right Guide Bank. | 0.07 | Suleimanki / Depalpur | Suleimanki / Depalpur | -- | -- | Satisfactory |
| Downstream Left Guide Bank. | 0.20 | Suleimanki / Depalpur | Suleimanki / Depalpur | -- | -- | Satisfactory |
| Downstream Right Guide Bank. | 0.20 | Suleimanki / Depalpur | Suleimanki / Depalpur | -- | -- | Satisfactory |
| Right Marginal Bund | 12.60 | Suleimanki / Depalpur | Suleimanki / Depalpur | -- | -- | Satisfactory |
| Station Spurs | 1.20 | Suleimanki / Depalpur | Suleimanki / Depalpur | -- | -- | Satisfactory |
| Dharanga Spurs | 2.31 | Suleimanki / Depalpur | Suleimanki / Depalpur | -- | -- | Satisfactory |
| Left Marginal Bund. | 9.50 | Suleimanki / Depalpur | Suleimanki / Depalpur | -- | -- | -- |
| T.T. Bund | 1.20 | Suleimanki / Depalpur | Suleimanki / Depalpur | -- | -- | Satisfactory |
| Jhangar Spurs. | 0.74 | Suleimanki / Depalpur | Suleimanki / Depalpur | -- | -- | Satisfactory |
| New Hasta Spurs. | 2.70 | Suleimanki / Depalpur | Suleimanki / Depalpur | -- | -- | Satisfactory |
| Suleimanki Spurs. | 0.30 | Suleimanki / Depalpur | Suleimanki / Depalpur | -- | -- | Satisfactory |
| Malleki Spurs. | 0.25 | Suleimanki / Depalpur | Suleimanki / Depalpur | -- | -- | Satisfactory |
| Jodheki Spurs. | 0.30 | Suleimanki / Depalpur | Suleimanki / Depalpur | -- | -- | Satisfactory |
| Sujeiki Spurs. | 0.60 | Suleimanki / Depalpur | Suleimanki / Depalpur | -- | -- | Satisfactory |
| Tulleki Spurs. | 0.82 | Suleimanki / Depalpur | Suleimanki / Depalpur | -- | -- | Satisfactory |
| Ferozpur Flood Bund | 5.73 | -- | -- | -- | -- | -- |
| New Mari Amb Flood Bund | 3.20 | -- | -- | -- | -- | -- |
| Jamlera Flood Bund | 8.30 | -- | -- | -- | -- | -- |

Breaching Section

| Name of River | Name of Breaching Section | Location with GPS Coordinates | Likely Affected Population | Likely Affected Mouzas | Remarks |
|---------------|---|--|----------------------------|------------------------|---|
| River Sutlej | Breaching Section at RD.18000 to 18500 of RMB | Mahmood Kot / Dharanga 575.00 30.420060 N, 73.837790 E | 1121 | Waso Salam Ka | When the water level attains the value of RL.575.0 River is rising at upstream nose of LGB or Discharge through the weir would be 3.25 Lac CS |
| | | | 1300 | Sujeke | |
| | | | 898 | Mallay Kay | |
| | | | 921 | Judheke | |
| | | | 735 | Dona Mathela Salam Ka | |
| | | | 535 | KutabSaru | |
| | | | 315 | Qila Bhagela | |
| | | | 1300 | Nathu Kay Abdal | |
| | | | 325 | Kund Sardar Propia | |
| | | | 540 | Walla Sheikhu Ka | |
| | | | 920 | Tali Jamal | |
| | | | 950 | SharinRohela | |
| | | | 530 | RakhAbdal kay | |
| | | | 510 | Abdal Kay | |
| | | | 450 | Daraz Kay | |
| | | | 1600 | Nama Jinde Ka | |
| | | | 300 | Kund Ameer Singh | |
| | | | 1100 | Qaim Jinde Ka | |
| | | | 1325 | RakhThakra | |
| | | | 1112 | MalluSheikhu Ka | |
| | | | 750 | Ezzat Kay Kala | |
| | | | 1120 | MoliaChisti | |
| | | | 840 | Noor Shah | |
| | | | 1525 | Mohib Ali Utaar | |
| | | | 850 | Ratte Kay | |
| | | | 450 | ChorMahtam | |
| | | | 500 | Sojan Singh Wala | |
| | | | 560 | Lalu Guddar | |
| | | | 360 | Chak Lalu | |
| | | | 300 | Mahar Sona | |
| | | | 200 | Mohammad Yar Chisti | |
| | | | 220 | GunjBukhsh Sani | |
| | | | 320 | Thakar Kay Manga | |
| 370 | KundThakar Kay Jagvera | | | | |
| 340 | Dara | | | | |
| 320 | Chak Dara | | | | |
| 150 | Kandar Kay | | | | |
| 120 | Jhangar | | | | |
| 1200 | Pana Mahar | | | | |
| 750 | Jamsher Mahar | | | | |
| 850 | Ali Kay | | | | |
| 750 | Dullay Kay Mahar | | | | |
| 620 | Qasim Kay Mahar | | | | |
| 525 | Nehal Mahar | | | | |
| 630 | Ali Kay Rohela | | | | |
| 300 | Moazzam | | | | |
| 350 | MenayWali | | | | |

| | | | | | |
|--|--|--|--------------|------------------|--|
| | | | 630 | Ali Kay Rohela | |
| | | | 300 | Moazzam | |
| | | | 350 | MenayWali | |
| | | | 150 | SattiaJhangar | |
| | | | 480 | Bhai Khan | |
| | | | 150 | GunjBukhshBodla | |
| | | | 160 | Ameera Tejay Ka | |
| | | | 600 | Thakar Kay Banda | |
| | | | 5500 | Dharanga | |
| | | | 980 | Nikki Maneki | |
| | | | 1200 | MehtabGarh | |
| | | | 300 | RakhBholewal | |
| | | | 1100 | Bholewal | |
| | | | 1500 | ChurraManeka | |
| | | | 1183 | Mahnant Darshan | |
| | | | 1551 | MathelaBhidai | |
| | | | 738 | BukanGuddar Ka | |
| | | | 2829 | Bhidai Uttar | |
| | | | 200 | Chak Devi Datta | |
| | | | 335 | RakhJawayaBlouch | |
| | | | 933 | Bula Chisti | |
| | | | 915 | Kalu Wah | |
| | | | 833 | Noor Shah | |
| | | | 448 | Wan Nama Jindeka | |
| | | | 2763 | Mohib Ali Uttar | |
| | | | 8038 | Pir Ghani | |
| | | | 3365 | 39/Sp | |
| | | | 3100 | FridKot | |
| | | | 709 | RakhAbdal Ky | |
| | | | 763 | Izzat ky kala | |
| | | | 965 | MoliaChisti | |
| | | | 523 | Nama Jindeka | |
| | | | 908 | Billi Mar | |
| | | | 818 | ChakDogar | |
| | | | 1500 | Jalil Maneka | |
| | | | 77594 | Total 79 | |

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

May please be treated as Nil

Airport / Landing Strips

May please be treated as Nil

Govt. storage facilities/warehouses in the district

May please be treated as Nil

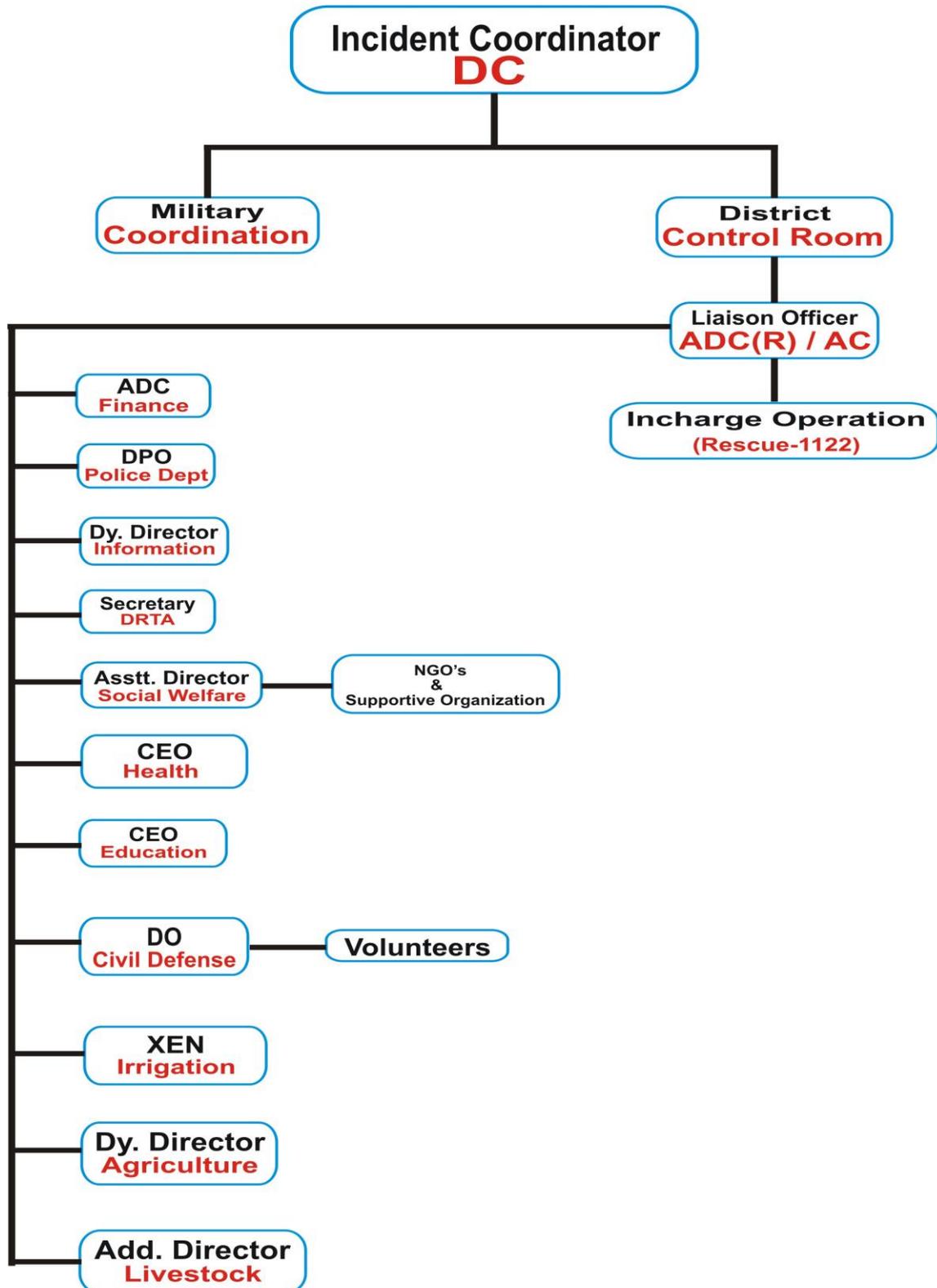
District baseline/reference map



Source: THE URBAN UNIT P & D DEPARTMENT, PUNJAB

COORDINATION MECHANISM

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



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

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

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

- a) prepare a disaster management plan including district response plan for the district;
- b) coordinate and monitor the implementation of the National Policy, Provincial Policy, National plan, Provincial Plan and District Plan;
- c) ensure that the areas in the district vulnerable to disasters are identified and measures for the prevention of disasters and the mitigation of its effects are undertaken by the departments of the Government at the district level as well as by the local authorities;
- d) ensure that the guidelines for prevention, mitigation, preparedness and response measures as laid down by the National Authority and the Provincial Authority are followed by all departments of the Government at the district level and the local authorities in the district;
- e) give directions to different authorities at the district level and local authorities to take such other measures for the prevention or mitigation of disasters as may be necessary;
- f) lay down guidelines for preparation of disaster management plans by the departments of the Government at the districts level and local authorities in the district;
- g) monitor the implementation of disaster management plans prepared by the departments of the Government at the district level;
- h) lay down guidelines to be followed by the departments of the Government at the district level;
- i) organize and coordinate specialized training programmes for different levels of officers, employees and voluntary rescue workers in the district;
- j) facilitate community training and awareness programmes for prevention of disaster or mitigation with the support of local authorities, governmental and non-governmental organizations;
- k) set up, maintain, review and upgrade the mechanism for early warnings and dissemination of proper information to public;
- l) prepare, review and update district level response plan and guidelines;
- m) coordinate with, and give guidelines to, local authorities in the district to ensure that pre-disaster and post-disaster management activities in the district are carried out promptly and effectively;
- n) review development plans prepared by the departments of the Government at the district level, statutory authorities or local authorities with a view to make necessary provisions therein for prevention of disaster or mitigation;
- o) identify buildings and places which could, in the event of disaster situation be used as relief 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 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, CEOs, 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 Deputy Commissioner (Rev). 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 (Chairman)**
 - ii. District Police Officer
 - iii. Additional Deputy Commissioner (Rev)
 - 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. Additional Deputy Commissioner (General)
 - viii. 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)

A Disaster Emergency Control Room working round the clock will be established at district level for effective coordination and mutual support among the different departments and agencies.

Functions of Control Room:

RECEIPT OF WARNINGS:

Warnings of natural disaster e.g, floods will be issued in the first instance by the Bureau of Meteorology and the Officer Incharge is responsible to ensure that the information is immediately forwarded to the Chairman of the District Disaster Management Authority. However, in case of earthquake manmade disaster like fire or blast, warning or intimation would be issued by the designated Control Room (Police, Rescue 1122 etc) to the chairman DDMA who will pass the directions to the concerned departments and further inform the high command.

WARNING DISTRIBUTION:

Upon the implementation of this plan, all public warnings will be distributed through the Disaster Coordination centre upon recommendation of the relevant control authority and on the authorization of the Chairman.

PUBLIC INFORMATION:

The distribution of the contact or telephone numbers to the public for disaster information will be the responsibility of the person ideally the Additional Deputy Commissioner (Rev) at the discretion of the Chairman.

COORDINATION AMONG DIFFERENT DEPARTMENTS AND AGENCIES:

The Control room will be responsible for the coordination among different departments and agencies. The required resources will be mobilized and provided at the operational site. Any requests for assistance from outside the district are to be made by the Chairman DDMA.

REPORTING:

It is also the responsibility of the Control Room to collect all the information from the operational sites and after compilation, present the report to the Chairman DDMA for onward submission.

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

After mobilization of all District Resources in case of disaster, supply and need gaps will be assessed and the Deputy Commissioner will decide if military intervention is necessary and for which kind of operations army will be contacted and that will be done after proper intimation and approval of PDMA or high command.

After military involvement the strategy will be devised or amended in a way to smoothly run the operations in collaboration of District Administration and Army.

Volunteer Network

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

The office of Civil Defence will provide the volunteers list and brief about the mechanism to activate them.

RISK ANALYSIS

1. Potential hazards of the district

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

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*

HISTORY OF FLOOD

Floods have been a major hazard in the history of District Okara since last three decades. As there are two rivers flowing in the territory of the District ; River Sutlej & River Ravi

In 1988, an unprecedented water discharge of about 281,000 cusec in River Ravi and 400,000 cusec in Sutlej caused heavy damage to human lives, livestock, crops and houses. The protection bunds had to be breached to save the Sulemanki and Balloki Barrages. Furthermore, in the same year town of Renala Khurd witnessed washing away of main Bazar and Basti Lal Shah due to breach in Lower Bari Doab Canal (LBDC).

The major impact was displacement of people, the 2nd biggest issue was loss of livelihood that was mainly based on agriculture. This not only made them vulnerable to poverty but also to poor health and hygiene problems. Moreover, the development process had been affected badly. The surplus which was supposed to be spent on development projects, had been used for response and rehabilitation process.

There is medium potential risk of earthquake as District Okara is situated near Nankana Sahib that is situated on the fault line hence makes all the adjacent Districts prone to earthquakes. However, high risk hazard is flood which hits the district almost every alternate year at two points (Ravi & Sutlej).

Triggers:

Rivers like Sutlej and Ravi are the sources of flood in the District. Major flood is generally associated with the monsoon low depression that develops in the Bay of Bengal and move across India in west/north – westrly direction to enter Pakistan. Heavy rains, release of excessive water more than capacity by India in River Sutlej and River Ravi can trigger floods. Apart from riverine floods that particularly affect District, Flash floods also hit nearby villages which may cause erosion. In recent years, vulnerability of Okara to floods has increased due to climate change, rapidly changing weather patterns, due to global warming. The settlements inside or near the Delta of Rivers, the canal irrigation network and interrupted drainage system are some of the major reasons which can lead towardsevenurbun flooding.

Tectonic movement of earth can trigger earthquake and not only the districts or areas situated on the fault line are vulnerable to devastation but also the neighboring districts share the same risk.

Factors which can trigger up an incident / natural calamity into a disaster can be late reponse, inadequate or inappropriate help. Poor camp management and record keeping lapses in security system, incostitent supply of food and water, poor hygiene or sanitary conditions can lead towards serious health issues / outbreak of epidemics.

Moreover, in case of major fire incident, poor infrastructure, unplanned business set ups, failure to follow building safety codes, lack of fire safety & fighting training, equipments, no evaluation drills and staff not following the SOP's and warning, Personal Protective Equipments negligence is the main factor that can trigger a man made disaster.

CLASSIFICATION OF FLOOD

Following is the Classification of Flood:

RIVER RAVI

| | | | |
|----|--------------------------|----------------|------------|
| a) | Low Flood | 0.40 to 0.65 | Lac Cusecs |
| b) | Medium Flood | 0.65 to 0.90 | -do- |
| c) | High Flood | 0.90 to 1.35 | -do- |
| d) | Very High Flood | 1.35 to 1.80 | -do- |
| e) | Exceptionally High Flood | 1.80 and above | -do- |

RIVER SUTLEJ

| | | | |
|----|--------------------------|----------------|------------|
| a) | Low Flood | 0.50 to 0.80 | Lac Cusecs |
| b) | Medium Flood | 0.80 to 1.20 | -do- |
| c) | High Flood | 1.20 to 1.75 | -do- |
| d) | Very High Flood | 1.75 to 2.25 | -do- |
| e) | Exceptionally High Flood | 2.25 and above | -do- |

HIGHEST FLOODS**RIVER RAVI**

| YEAR | MAXIMUM DISCHARGE (IN Cs) |
|------|---------------------------|
| 1955 | 2,04,360 |
| 1957 | 1,80,205 |
| 1988 | 3,89,345 |
| 2013 | 97,970 |
| 2014 | 1,18,000 |
| 2015 | 65,960 |
| 2016 | 37,165 |
| 2017 | 9,400 |
| 2018 | 5,380 |
| 2019 | 34,900 |
| 2020 | 37,250 |

RIVER SUTLEJ

| YEAR | MAXIMUM DISCHARGE (IN Cs) |
|------|---------------------------|
| 1942 | 3,25,000 |
| 1943 | 3,09,000 |
| 1947 | 3,60,000 |

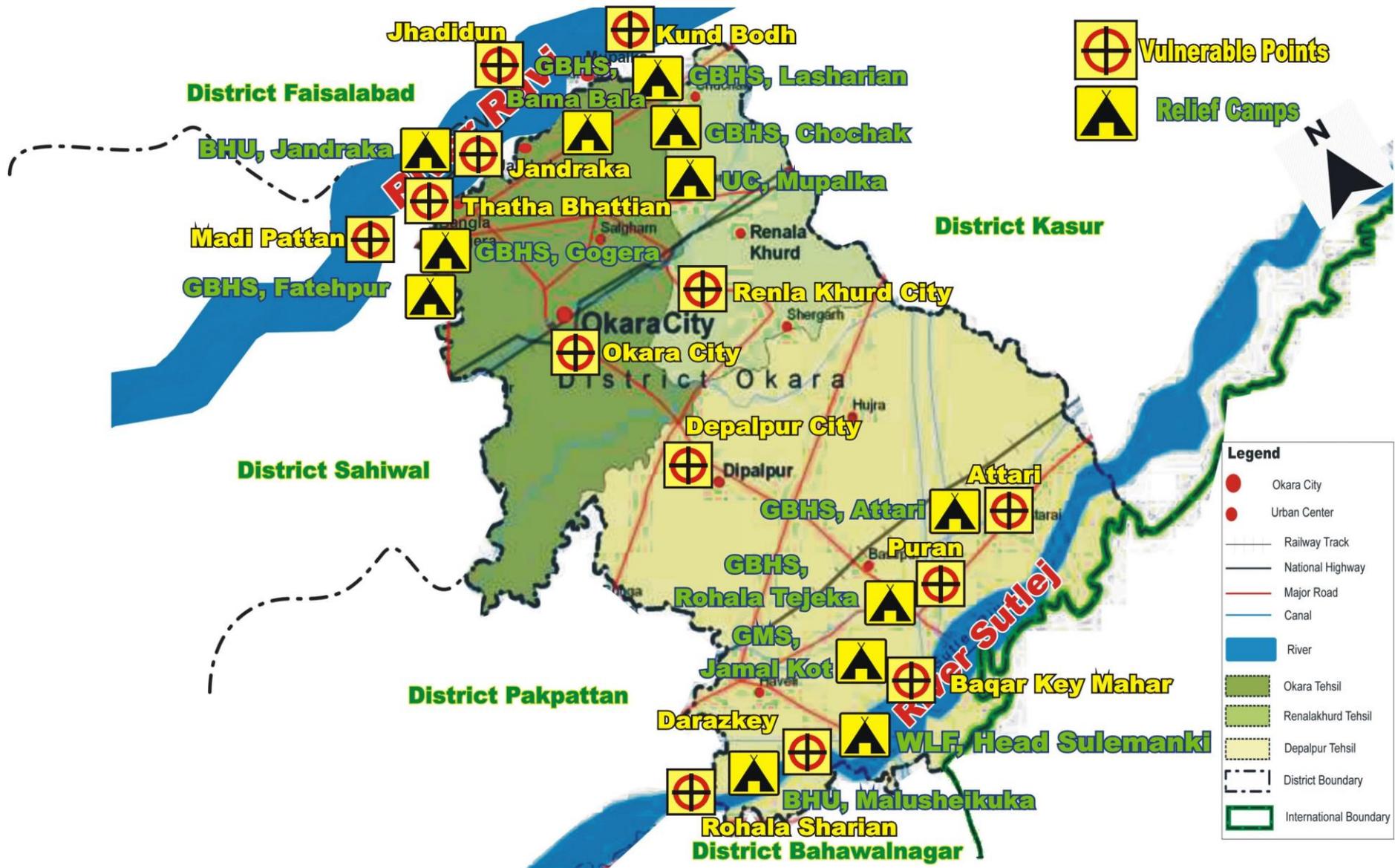
| | |
|------|----------|
| 1950 | 3,32,000 |
| 1955 | 4,22,000 |
| 1988 | 4,00,000 |
| 1995 | 3,02,000 |
| 2008 | 1,02,000 |
| 2009 | 5,000 |
| 2010 | 58,300 |
| 2011 | 70,125 |
| 2012 | 21,587 |
| 2013 | 82,000 |
| 2014 | 26,595 |
| 2015 | 61,009 |
| 2016 | 32,858 |
| 2017 | 16,000 |
| 2018 | 8,000 |
| 2019 | 67,000 |
| 2020 | 11,897 |

Vulnerable areas of District

- Tehsil Okara (06)
 - Kund Bodh
 - Jhaidun
 - Jandraka
 - ThathaBhattian
 - Madi Pattan
 - Areas of City
- Tehsil Renala Khurd (01)
 - City Area
- Tehsil Depalpur (06)
 - Attari
 - Puran
 - Baqar Key Muhar
 - Darazkey
 - RohailaSharian
 - City Area

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)

RELIEF CAMPS

○ Total Number of Relief Camps = 12

Okara: 04

Depalpur: 05

Renalakhurd: 03

NUMBER OF VOLUNTEERS

• Civil Defence 20

• Total 20

NO OF NGO'S Associated with Health & Education

• 34

4. Strategic Reserves

| Items | Available | Functional | Non-Functional | Extra Demand |
|---|-----------|------------|----------------|--------------|
| Boats | 20 | 20 | - | 2 |
| OBM | 19 | 19 | - | 1 |
| De-watering sets | 41 | 39 | 2 | 2 |
| Chlorinators | 44 | 44 | - | - |
| Fog Machine | 17 | 17 | - | - |
| Tractors | 33 | 32 | 1 | - |
| Sucker Machines | 5 | 5 | - | - |
| Jetting Machine | 5 | 5 | - | - |
| Disposal Station | 14 | 14 | - | - |
| Spray Pumps | 20 | 20 | - | - |
| Front Blade | 1 | 1 | - | - |
| Navigators/GPS Tracker | - | - | - | 8 |
| GIS devices | - | - | - | 1 |
| Life Jackets | 573 | 573 | - | 20 |
| Life Ring | 141 | 141 | - | 20 |
| Life Lines | 10 | 10 | - | 50 |
| Scuba diving suit with complete accessories | 3 | 3 | - | 6 |
| First Aid Kits | 10 | 10 | - | 10 |
| Rescue Bag | 10 | 10 | - | 4 |
| Safety Harnesses | 10 | 10 | - | 2 |
| Ambulances | 20 | 20 | - | 1 |
| Fire Brigade | 7 | 7 | - | 1 |
| Water Tanks / Bouzers | 6 | 6 | - | 1 |
| Extendable Ladders | 5 | 5 | - | 3 |
| Hydraulic Cutter | - | - | - | 4 |
| Sonar Rader | - | - | - | 1 |
| Jumping Sheet | 6 | 6 | - | 5 |
| Dumpers | 2 | 2 | - | 1 |
| Excavators | - | - | - | 1 |
| Cranes | - | - | - | 1 |
| Bulldozer | - | - | - | 1 |
| Boat Carrier / Trolleys | 24 | 23 | 1 | 3 |
| Pickups/Jeeps/ 4x4 vehicles / Mini Trucks | 13 | 13 | - | 2 |
| Searchlight | 10 | 10 | - | 30 |
| Tent | 1150 | 607 | 50 | - |
| Mosquito Net | 200 | - | 200 | 50 |
| Plastic Mat | 497 | - | - | 23 |
| Blanket | 497 | - | - | - |
| Generator Sets | 8 | 8 | - | 4 |
| Gas-Cutters | 1 | 1 | - | 1 |
| Floating Rope | 4 | 4 | - | 41 |

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.)

- 1- Insecurity of workers working during disaster
- 2- Lack of knowledge of other agencies role & responsibilities
- 3- Lack of communication difficulty in access after increase of flow to 3 lac cusic in river Jhelum
- 4- Lack of inter agency coordination
- 5- Recognition of different abbticals associated with different locations.
- 6- Increase work load
- 7- Water rescue operation is allowed in day light only
- 8- Lack of information sharing

MITIGATION STRATEGY

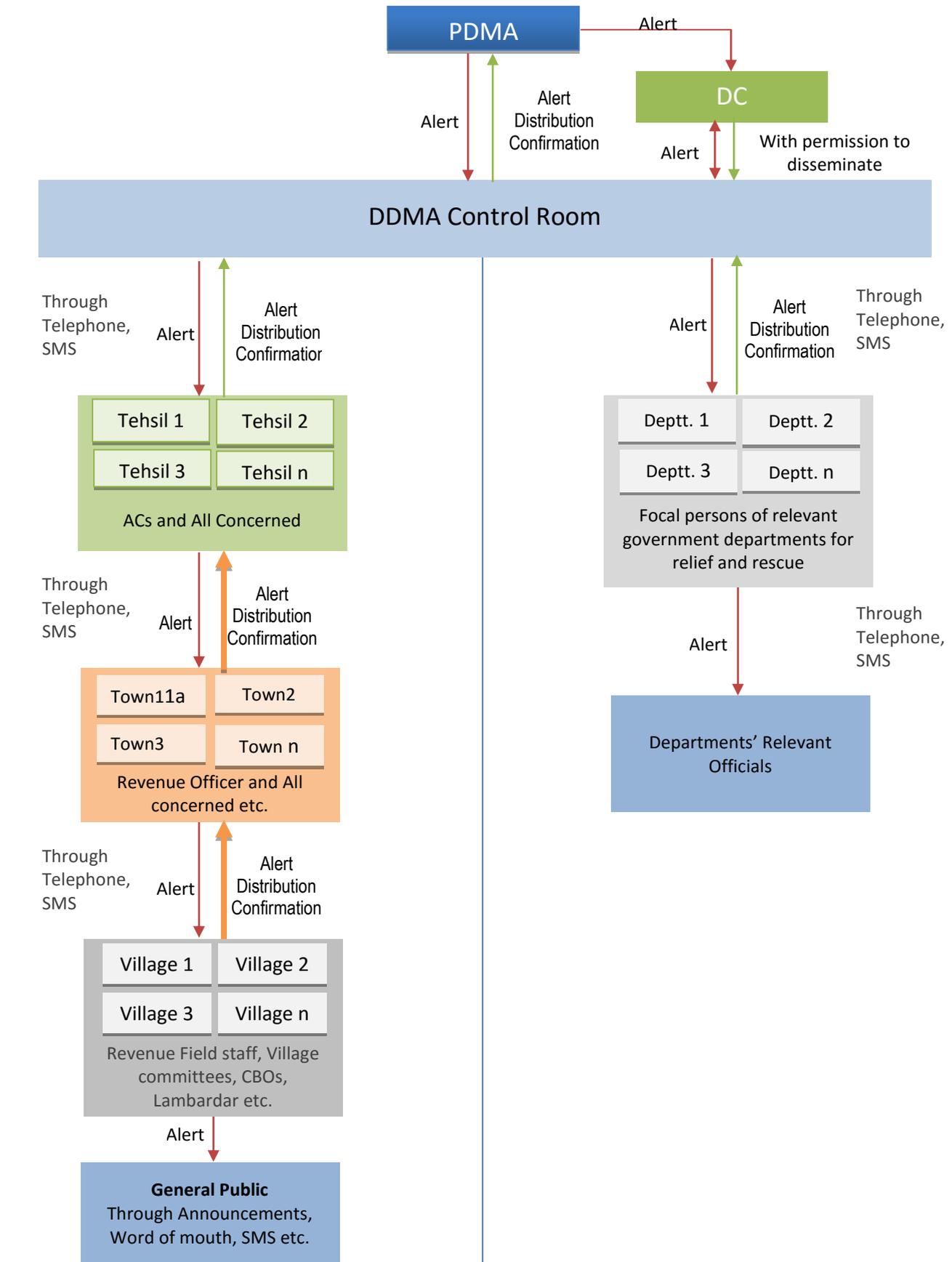
- ✓ Briefly describe what measure could be taken to reduce the impact of the potential disasters.
- ✓ Strategic pre-positioning of available relief stocks
- ✓ Public education and community awareness

| Hazards | Mitigate Actions | Responsible Department |
|--|--|--|
| Floods | Liaison with Irrigation and wapda authorities through FMC Embankment of bunds Community awareness Permanent Resetelment of vulunerable area | Revenue Department,Irrigation, Civil Defence,Health, Education,Agriculture,Livestock,Community Development |
| Urban Flooding | Cleaning of sewerage Community awareness | Concerned Municipal Corporation / Committees Rescue-1122 Civil Defence |
| Flash Floods | Construct surrounding bunds around vulunerable areas Don't allow people to construct their houses at vulunerable areas. The de-silting of nullahs, canals and rivers. Diverting water of nalluh and canals. | Revenue Department,Irrigation, Civil Defence,Health, Education,Agriculture,Livestock,Community Development Concerned Municipal Corporation / Committees |
| Hill Torrent | - | - |
| Glacial Lake Outburst Flood (GLOF) | - | - |
| Landslide | - | - |
| Tornado | - | - |
| Earthquake | Constructing earthquickresistence buildings Evacuation Drills | District Govt Rescue-1122 |
| Drought | - | - |

| | | |
|---|--|--|
| Epidemic | Vaccination Health Education Collection of proper data Awareness | District Govt. Health Education Rescue-1122 |
| Fire Incidents | Survey of vulnerable buildings Evacuation Plan & Drills Survey of vulnerable factories Assurance of implementation of Fire Safety Assurance of SOP's Use of Personal Protective Equipments Implementation of building codes. Training of employeed staff Community Awearness Handling of Proper disposal material | Civil Defesnce Building Department Labour Department Concerned Municipal Corporation / Committees Rescue-1122 Civil defence Environment |
| Other Major Accidents (Building Collapse, road traffic accidents, train accident, Stampede, plane crash) | Identification & removal of black spots Community awarearness Implementation of traffic rules Permanent Resetelment of vulnerable area | Civil Defence Rescue-1122 Traffic police District Govt. |
| Environmental Hazards (industrial accidents, severe pollution etc.) | Training of employeed staff. Community awarearness Survey of vulnerable buildings Survey of vulnerable factories Handling of Proper disposal material | Environment Rescue-1122 Civil Defence Building Department LabourDepartment Concerned Municipal Corporation / Committees |

EARLY WARNING

Information Flow Diagram



Alertness Levels

Following four levels alertness have been established:

Level-D

(Disaster threat is perceptible)

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

Level-C

(Alert)

(Warning issued but likelihood of occurrence is less than 100%)

Activities to be undertaken in level D

+

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

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, local bodies etc) facilities shall work 24/7 with full staff strength. DDMA shall monitor the situation on hourly basis.

Level-B

(High Alert)

(Disaster threat is imminent)

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.

Level-A

(Red Alert)

(Disaster is materialized)

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.

RECEIPT OF WARNING

The early warning is received from resources like PDMA, Pakistan Metrological Department (heavy rains / wind or storms) and Hydrological Department Wapda (mangla dam, flood / dam out flow), Rescue 122 (Road accidents, Fires, Building Collapse, Drowning), Civil defense & police (riots, violence, terrorist activities), Health (epidemics) through emails, phone calls & sms. Hydrological department

The main source of early warning for flood is Head Ganda Singhwalagenerating information collected from flood warning station Bhakra Dam (India).

The District Control Room is established in office of the DC Office and ADC(R) is the focal person of District Control Room.

FUNCTIONS OF CONTROL ROOM

- Information collection & dissemination
- To establish Coordination among departments.
- Communicate with concerned department (depending upon the nature & gravity of the warning)
- Dispatch & Tracking of Resources
- Warning distribution among govt department, public & media

The information received at district control room is dispatched to the concerned department (focal person / district head) through email, sms or phone call depending upon the severity of the warning after getting clearance from chairman DDMA. The information to the relevant department is communication into three phases:

Phase1

Notices are served through patwari and gardawar to the concerned vulnerable area regarding alternate arrangements for expensive in case of emergency evacuation.

Phase 2

Mock exercises and drills are conducted through relevant departments regarding evacuation.

Phase 3

In this phase the warnings are issued through sirens, announcements through loud speaker, mega phone and electronic media when DDMA issues high alert of level B.

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.*

Evacuation & Medical Assistance:

Emergency Evacuation is the priority in case of any Disaster to not only evacuate the people from hazardous areas but also shift them to safer places e.g camps to save them from further suffering. Keeping in view the nature of disaster mobile medical teams would be dispatched for immediate medical help

Responsibilities of Departments / Agencies:

On receipt of early warning or onset of disaster, Municipal Corporation/Committee, Rescuer 1122, Police, Civil Defense, Health Department would immediately respond to evacuate people from hazardous areas and simultaneously accommodate them in camps, once the evacuees reach camp, all concerned departments e.g Health, Municipal Corporation/Committee, WAPDA, Police, Livestock and civil defence would setup their mobile units to meet the basic human need of the affected people and livestock.

Support from Pakistan Army:

The Chairman DDMA decide when Pakistan Army shall be requested to intervene and support the response to a disaster. He requests in case if District Resources cannot meet the response needs e.g in case of evacuation more boats and man power is required to evacuate large number of people in short period of time. Moreover, in case of earthquake or building collapse etc when search and rescue needs extra resources as per severity of disaster Pakistan Army can be requested to assist.

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*

Collection of DATA:

Municipal Corporation/Committee concerned on direction of Additional Deputy Commissioner (Rev) will assess the damage and losses union wise so that data compilation is done in an organized manner. Once it is compiled, it would be verified from other responding department too, the purpose is to avoid any fictitious or wrong information to be added in the final damage and loss assessment report. The Additional Deputy Commissioner (Rev) communicates the final report to the Chairman DDMA (The DC) and he will communicate to the higher authorities.

Priority Needs:

Keeping in view the nature and severity of disaster priority needs will be decided. In case of floods after safe evacuation the foremost take is to temporarily settle the displaced people into camps and provide them with basic

facilities e.g. foods, health, water & sanitation, security and any other specific need (e.g. disable persons, unaccompanied children facilitation etc).

Activities for Effected Population:

Affected or displaced people will be provided by shelter and other basic facilities. All the departments will provide help as per already defined responsibilities in a coordinated manner and submit daily activity report for assessment of need and supply gaps analysis.

Assistance Provide:

Shelter, food, water and sanitation facilities, health (physical and psychological) security, livestock management and other specific assistance as per any special need.

Standardization:

Standardization of all food packages, tents, blankets etc will follow the International Standards for Humanitarian Assistance by International Organization of Migration which minimum standards are defined those meet the requirements of needs for a dignified living even in camps.

Humanitarian Assistance:

Administration Desk for better management of camps following complaint cells, food distribution cell, desk for unaccompanied children and handicapped individuals to addren all the displaced people in a well coordinated manner to avoid duplication and better assessment of gaps. In case, if any duplication or failure to provide sufficient assistance all the designated camps will teletheir details and identify the issue and rectify where necessary to avoid any long term is he.

Minimum standards:

Minimum International Stadards for Humanitrain Assistance will be followed to respect the human dignity.

Capacity of District:

District Okara can accommodate 100 families in case of any disaster.

For the shake of effective and realistic approach, all the stakeholder departments will be trained and provided with charter of Humanrtarian Assistance that contains all the guidelines how to addren these sensitive issues. Moreover, in face of disaster, all the concered departments will follow the same guidelines in Humanrtarian Assistance set up and furnish a certificate of implementing the standards in true letter and spirit. Aftereads, the monitoring committee will verify if the Humanrtarian Assistance guidelines have been followed or not.

Camps:

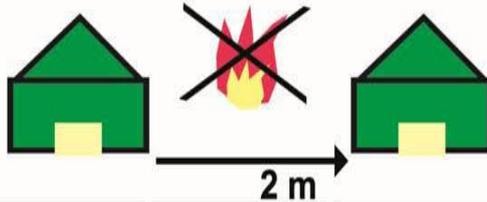
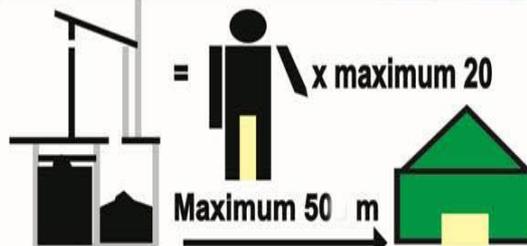
Camps would be established in areas accessible by metaled roads so that provision of essential facilities is not difficult. The scale of these settlements may vary from a few tents to larger groups of 50 tents.

Camp sites selected should be safe, accessible and far from other hazards and risks areas. The following specifications are the minimum standards of the services that are to be provided to the inhabitants of tent villages:

TOOL 27 - SPHERE STANDARD MATRIX (CAMP MANAGEMENT IN PRACTICE BOOKLET)

TECHNICAL STANDARDS AND PRACTICE

Standards guide planning and set-up of sites, to provide a safe, secure and healthy environment for the camp residents, and access to a minimum level of services.

| Type of Facility | | SPHERE Indicator | |
|------------------|-------------------------|---|---|
| Camp Area | Total open space | 30-45 m ² per person |  30 - 45 m ² |
| | Fire breaks | 2 m - minimum distance between tents |  |
| Living Area | Covered floor area | 3.5 m ² per person |  |
| | Water Points | 1 water tap per 250 people 500 m from tent |  |
| | Latrines | 1 per 20 people 50 m away from tent |  |
| | Refuse Disposal | 100 m from tent |  |
| Water Use | Total Basic Water Needs | 7.5 - 15 liters per person per day Survival water intake need; basic hygiene; basic cooking. |  |

ANNEX-I: IDENTIFIED SITES FOR DISPLACED PERSONS

| S# | Location | No. of persons which can be accommodated | GPS Coordinates |
|----|--|--|---------------------|
| 1 | Govt. Boys High School Lasharian, Tehsil Okara | 500 | X: 31.05 Y:73.52 |
| 2 | BHU Jandraka Tehsil Okara | 200 | X: 31.06 Y:73.43 |
| 3 | Govt. Boys Higher secondary School Gogera. Tehsil Okara | 2000 | X: 30.96 Y:73.32 |
| 4 | Govt. Boys High School Fatehpur Tehsil Okara | 700 | X: 30.95 Y:73.28 |
| 5 | Govt Boys High School Attari Tehsil Depalpur. | 300 | X: 30.60 Y:74.04 |
| 6 | Govt Boys High School Rohelatejeka Tehsil Depalpur. | 500 | X: 30.52 Y:73.95 |
| 7 | Govt. Middle School, Jamal kot Tehsil Depalpur. | 1500 | X: 30.45 Y:73.83 |
| 8 | Wild Life Park Head sulemanki, canal band Tehsil Depalpur. | 1200 | X: 30.37 Y:73.86 |
| 9 | BHU Malhushekhuka Tehsil Depalpur. | 200 | X: 30.36 Y:73.71 |
| 10 | Govt. Boys High School, Chuchak Tehsil Renala Khurd | 500 | X: 31.06 Y:73.62 |
| 11 | Union Council Office Mupalky Tehsil Renala Khurd | 500 | X: 31.05 Y:73.36 |
| 12 | Govt Boys High School Opposite Tehsil Office Renala Tehsil Renala Khurd. | 1500 | X: 30.87 Y:73.59 |

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

| Hazards | Tehsils | UCs | Names of Revenue Estates | Names of Villages |
|----------------|--|---|--|-------------------|
| Floods | Okara, Renala Khurd, Depalpur | UC. No. 1, 2, 3, 4, 5, 12, 14, 23, 26 (Tehsil Okara), UC. No. 103 to 111 (Tehsil Depalpur), UC.Mupalky, (Tehsil Renala Khurd) | Names of revenue Estates are given below. | -Do- |
| Urban Flooding | Okara, Renala Khurd, Depalpur | UC. No. 89 to 100 (Tehsil Okara), UC. No. 103 to 111 (Tehsil Depalpur), UC. No. 36, 39, 102 (Tehsil Renala Khurd) | 1/4L, 1-A/4L, 2/4L, 5/4L, 54/2L, Depalpur, Baseerpur, Havali, Hujra, Mandi Ahmad Abad, 21/2L, 22/2L, 28/2L. | -Do- |
| Flash Floods | | | | |
| Hill Torrent | | | | |
| Tornado | | | | |
| Earthquake | | | | |
| Drought | | | | |
| Epidemic | | | | |

| | | | | |
|---|--|--|--|--|
| Environmental Hazards (industrial accidents, severe pollution etc.) | | | | |
|---|--|--|--|--|

LIST OF VILLAGES LIKELY TO BE AFFECTED DUE TO FLOODS / RAINS

Keeping in view the past experiences the following villages are likely to be affected due to floods and rains.

TEHSIL OKARA

| Sr. | Name of Settlement | Zone | Population (Census) |
|-----|--------------------|------------------------------|---------------------|
| 1 | Mangan | Very High & Exceptional High | 3099 |
| 2 | Lashari | Very High & Exceptional High | 9465 |
| 3 | Dula | Very High & Exceptional High | 1599 |
| 4 | Thatta Lakhan | Very High & Exceptional High | 1804 |
| 5 | Jhedu | Medium & High | 73 |
| 6 | Thatta Sher | Very High & Exceptional High | 37 |
| 7 | Bohar Wala | Very High & Exceptional High | 438 |
| 8 | Arazi Mansoor Ke | Very High & Exceptional High | 92 |
| 9 | ThattaGehna | Very High & Exceptional High | 162 |
| 10 | Thatta Manak | Very High & Exceptional High | 923 |
| 11 | Maroola | Very High & Exceptional High | 3759 |
| 12 | Bama Zareen | Very High & Exceptional High | 759 |
| 13 | Lehi Zareen | Very High & Exceptional High | 1976 |
| 14 | Barwana | Very High & Exceptional High | 883 |
| 15 | KundBohar | Medium & High | 335 |
| 16 | Bonga Kharak Singh | Very High & Exceptional High | 960 |
| 17 | Jandraka | Very High & Exceptional High | 12859 |
| 18 | JawayiaKhitchi | Very High & Exceptional High | 1029 |
| 19 | Godha Khitchi | Very High & Exceptional High | 633 |
| 20 | Nota Khitchi | Very High & Exceptional High | 864 |
| 21 | JheduMangh | Very High & Exceptional High | 550 |
| 22 | ArazziBahar Shah | Very High & Exceptional High | 979 |
| 23 | Awan Bhulu | Very High & Exceptional High | 307 |
| 24 | Arazi JheduMemora | Very High & Exceptional High | 58 |
| 25 | Bhojian | Very High & Exceptional High | 3548 |
| 26 | Sharin | Very High & Exceptional High | 4951 |
| 27 | Thattanam Dar | Very High & Exceptional High | 1230 |
| 28 | HamandaKe | Very High & Exceptional High | 2395 |
| 29 | Baigke | Very High & Exceptional High | 1102 |
| 30 | Mari | Very High & Exceptional High | 199 |
| 31 | Chanumattam | Very High & Exceptional High | 1243 |
| 32 | DilluWattoo | Very High & Exceptional High | 300 |
| 33 | Fateh pur | Very High & Exceptional High | 7519 |
| 34 | Sona proka | Very High & Exceptional High | 780 |
| 35 | Gogera | Very High & Exceptional High | 11677 |

| | | | |
|----|---------------|------------------------------|---------------|
| 36 | Mansoor ke | Very High & Exceptional High | 459 |
| 37 | Dheruke | Very High & Exceptional High | 2191 |
| 38 | Othwal Khalsa | Very High & Exceptional High | 2253 |
| 39 | Jethiana | Very High & Exceptional High | 3828 |
| 40 | Massan Ke | Very High & Exceptional High | 2999 |
| 41 | Inayat Ke | Very High & Exceptional High | 2252 |
| 42 | Feroze | Very High & Exceptional High | 2394 |
| 43 | Peer Ali | Medium & High | 3944 |
| 44 | Padhar | Very High & Exceptional High | 1503 |
| 45 | Anoke | Very High & Exceptional High | 210 |
| 46 | MankiKhitchi | Very High & Exceptional High | 496 |
| | | TOTAL | 101116 |

TEHSIL DEPALPUR

| SR | NAME OF VILLAGE | ZONE | Population (Census) |
|----|------------------|--------------------|---------------------|
| 1 | Bunga Amir singh | Very High | 3763 |
| 2 | Sander ke | Very High | 2416 |
| 3 | Saddar bala | Very High | 232 |
| 4 | Kawnimauja | Very High | 717 |
| 5 | Baggi Patni | Exceptionally High | 423 |
| 6 | Bodal Darya Ka | Exceptionally High | 13 |
| 7 | Jodha | Very High | 108 |
| 8 | Barianwala | Exceptionally High | 199 |
| 9 | Azeem ke | Exceptionally High | 0 |
| 10 | Mujahid ke | Very High | 1583 |
| 11 | Ghulam | Very High | 551 |
| 12 | Khewabazeedake | Very High | 877 |
| 13 | DhollRukna | Very High | 849 |
| 14 | BulandaTejeka | Exceptionally High | 121 |
| 15 | Chah Dhan Wala | Exceptionally High | 176 |
| 16 | Lalu Guddar | Exceptionally High | 575 |
| 17 | Bharoola | Very High | 518 |
| 18 | Naul | Very High | 127 |
| 19 | Dona Ahmad | Very High | 366 |
| 20 | Dona taja | Very High | 69 |
| 21 | Chaklalu | Exceptionally High | 11 |
| 22 | Dona Ghorka | Very High | 153 |
| 23 | MalavaMahtam | Exceptionally High | 151 |
| 24 | GhareebNaja ka | Medium & High | 252 |
| 25 | Rehman Saunka | Medium & High | 1069 |
| 26 | Hama Ladhu ka | Medium & High | 336 |
| 27 | Attari | Very High | 5086 |
| 28 | Basti karam | Medium & High | 545 |
| 29 | Puran | Very High | 1038 |
| 30 | Tallibhaggar | Exceptionally High | 456 |
| 31 | Chahbaggar | Exceptionally High | 133 |
| 32 | Bhamunauabad | Exceptionally High | 302 |
| 33 | Faqiria | Very High | 299 |
| 34 | Jamsher Mahar | Exceptionally High | 320 |
| 35 | Ali keRohaila | Exceptionally High | 3717 |

| | | | |
|----|----------------------------------|--------------------|------|
| 36 | Mallayke | Very High | 684 |
| 37 | Dhullayke Mahar | Very High | 774 |
| 38 | Qasimke Mahar | Exceptionally High | 1078 |
| 39 | Chakdara | Exceptionally High | 430 |
| 40 | KundthakarkeJagvira | Exceptionally High | 708 |
| 41 | Kanderke | Exceptionally High | 490 |
| 42 | Jhanger | Exceptionally High | 710 |
| 43 | Mohammad Usman | Medium & High | 0 |
| 44 | Chak Muhammad Pira | Exceptionally High | 107 |
| 45 | Moazam | Medium & High | 105 |
| 46 | Suleimanki | Exceptionally High | 862 |
| 47 | Mahar Sona alias NakiKe | Exceptionally High | 377 |
| 48 | Muhammad yar Chishti | Exceptionally High | 255 |
| 49 | Gung bukhshsani | Medium & High | 634 |
| 50 | Gung Bukhsh alias Pacca Chishti | Very High | 160 |
| 51 | Jewanpur | Exceptionally High | 50 |
| 52 | Khokar | Exceptionally High | 54 |
| 53 | Satiajhangar | Very High | 222 |
| 54 | Muhammad amira Muhammad Islam | Exceptionally High | 0 |
| 55 | Chak Muhammad Usman | Exceptionally High | 54 |
| 56 | Minaywali | Medium & High | 920 |
| 57 | Barayke | Exceptionally High | 448 |
| 58 | Rattayke | Very High | 4201 |
| 59 | Chormahtam | Exceptionally High | 1115 |
| 60 | Sujansinghwal | Medium & High | 1006 |
| 61 | Mohibali hither | Medium & High | 317 |
| 62 | Qaim Jinday ka | Exceptionally High | 1797 |
| 63 | Nama Jinday ka | Medium & High | 2741 |
| 64 | Rakhthakra | Medium & High | 507 |
| 65 | Izzat ke kala | Very High | 1614 |
| 66 | MalluSheikhu ka | Exceptionally High | 1823 |
| 67 | Bhai khan Sheikhu ka | Very High | 1416 |
| 68 | Moliachishti | Very High | 1722 |
| 69 | Noor shah | Medium & High | 834 |
| 70 | Wasusalam ka | Exceptionally High | 577 |
| 71 | Sujeke | Exceptionally High | 2143 |
| 72 | Jodhayke | Exceptionally High | 223 |
| 73 | Dona Mathel Salam ka | Exceptionally High | 756 |
| 74 | Kund Amar Singh | Exceptionally High | 29 |
| 75 | Qutab saru | Exceptionally High | 761 |
| 76 | Qila Bhagela | Exceptionally High | 0 |
| 77 | Nathukeabdal | Very High | 566 |
| 78 | Darazke | Exceptionally High | 394 |
| 79 | Walla Sheikhu ka | Exceptionally High | 771 |
| 80 | Tahljamal | Exceptionally High | 438 |
| 81 | ShehrinRohela | Very High | 613 |
| 82 | Rakhabdalke | Medium & High | 339 |
| 83 | Dalilke | Medium & High | 4136 |

| | | | |
|-----|----------------------|--------------------|---------------|
| 84 | Gunjbukhshbodla | Exceptionally High | 153 |
| 85 | Wan sarakwali | Medium & High | 1134 |
| 86 | Chakpir | Medium & High | 2136 |
| 87 | Kund sardar paroopia | Exceptionally High | 81 |
| 88 | Baqarke Mahar | Exceptionally High | 491 |
| 89 | Jaimalbazeeday ka | Exceptionally High | 1970 |
| 90 | Sabu ke Mahar | Exceptionally High | 1086 |
| 91 | Ameera Tejay ka | Medium & High | 1889 |
| 92 | Thakarkemakhna | Exceptionally High | 1005 |
| 93 | Dharanga | Medium & High | 3121 |
| 94 | Dara | Exceptionally High | 430 |
| 95 | Mahar Baqar | Medium & High | 279 |
| 96 | Thakarkebanda | Very High | 1391 |
| 97 | Dargan | Medium & High | 1400 |
| 98 | 2/D | Medium & High | 4804 |
| 99 | Sangooke | Medium & High | 494 |
| 100 | Rajowal | Medium & High | 13899 |
| 101 | Hans hitharswala | Medium & High | 1206 |
| 102 | Kharralkalan | Medium & High | 8691 |
| 103 | Qila Sonda Singh | Medium & High | 8095 |
| 104 | Thakarke manga | Very High | 633 |
| 105 | Pana Mahar | Exceptionally High | 2781 |
| 106 | Nehal Mahar | Exceptionally High | 5725 |
| 107 | ChakBaqarke Mahar | Exceptionally High | 491 |
| | | TOTAL | 130897 |

TEHSIL RENALA KHURD

| Sr. | Name of Settlement | Zone | Population (Census) |
|-----|--------------------|------------------------------|---------------------|
| 1 | Mupalkey | Very High & Exceptional High | 10676 |
| 2 | Chakar keorar | Medium & High | 227 |
| 3 | Chakar ke par | Very High & Exceptional High | 699 |
| 4 | Tattar | Very High & Exceptional High | 512 |
| 5 | Salabat | Very High & Exceptional High | 434 |
| 6 | Gobafazal | Very High & Exceptional High | 1380 |
| 7 | Jehdujomion | Very High & Exceptional High | 96 |
| 8 | Jora | Very High & Exceptional High | 1108 |
| 9 | Melu-ke | Very High & Exceptional High | 1530 |
| | | TOTAL | 16662 |

http://www.pbscensus.gov.pk/sites/default/files/bwpsr/punjab/OKARA_SUMMARY.pdf

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 AKBAR | X: 30.89 Y:73.28 | PRIMARY | DR. ZUFLIQAR ALI DDHO OKARA 0322-6926286 | FLOOD |
| 2 | BHU FATEH PUR | X:30.95 Y:73.28 | PRIMARY | DR. ZUFLIQAR ALI DDHO OKARA 0322-6926286 | FLOOD |
| 3 | RHC GOGERA | X: 30.94 Y:73.32 | PRIMARY | DR. ZUFLIQAR ALI DDHO OKARA 0322-6926286 | FLOOD |
| 4 | BHU JANDRAKA | X: 31.07 Y:73.44 | PRIMARY | DR. ZUFLIQAR ALI DDHO OKARA 0322-6926286 | FLOOD |
| 5 | BHU LASHARIAN | X: 31.05 Y:73.52 | PRIMARY | DR. ZUFLIQAR ALI DDHO OKARA 0322-6926286 | FLOOD |
| 6 | BHU KUND BOHAR | X: 31.09 Y:7.54 | PRIMARY | DR. ZUFLIQAR ALI DDHO OKARA 0322-6926286 | FLOOD |
| 7 | BHU ROHELA TEJEKA | X: 30.52 Y:73.94 | PRIMARY | DR. ZAHID HAIDER DDHO TEHSIL DEPALPUR 0336-8311425 | FLOOD |
| 8 | BHU MAHANT DARSHAN | X: 30.39 Y:73.80 | PRIMARY | DR. ZAHID HAIDER DDHO TEHSIL DEPALPUR 0336-8311425 | FLOOD |
| 9 | RHC MANDI AHMED ABAD | X: 30.65 Y:74.01 | PRIMARY | DR. ZAHID HAIDER DDHO TEHSIL DEPALPUR 0336-8311425 | FLOOD |
| 10 | BHU BHEELA GULAB SINGH | X: 30.70 Y:74.06 | PRIMARY | DR. ZAHID HAIDER DDHO TEHSIL DEPALPUR 0336-8311425 | FLOOD |
| 11 | BHU JAMAL KOT | X: 30.45 Y:73.83 | PRIMARY | DR. ZAHID HAIDER DDHO TEHSIL DEPALPUR 0336-8311425 | FLOOD |

| S# | Name and Location | GPS Coordinates | Health Facility Type (Primary, Secondary, Tertiary) | Name and Contact No of Focal Person | Hazard Vulnerability (Floods, Earthquake etc.) |
|----|--|---------------------|--|--|--|
| 12 | BHU MEHLU SHEIKHU KA | X: 30.36 Y:73.71 | PRIMARY | DR. ZAHID HAIDER DDHO TEHSIL DEPALPUR 0336-8311425 | FLOOD |
| 13 | THQ DEPALPUR | X: 30.66 Y:73.66 | PRIMARY | DR. ZAHID HAIDER DDHO TEHSIL DEPALPUR 0336-8311425 | FLOOD |
| 14 | BHU MUPALKAY | X: 31.09 Y:73.60 | PRIMARY | DR. EHSAN ELAHI DDHO TEHSIL RENALA KHURD 0324-4904648 | FLOOD |
| 15 | RHC SHAHBHOR | X: 30.70 Y:73.40 | PRIMARY | DR. ZUFLIQAR ALI DDHO OKARA 0322-6926286 | URBAN FLOOD |
| 16 | DHQ HOSPITAL CITY OKARA | X: 30.81 Y:73.44 | SECONDARY | DR. NABEEL SALEEM MS 0306-6029789 | URBAN FLOOD |
| 17 | DHQ HOSPITAL SOUTH CITY OKARA | X: 30.78 Y:73.48 | SECONDARY | DR. MUBASHER GILLANI MS 0300-6957656 | URBAN FLOOD |

ANNEX-IV: LIST OF VULNERABLE EDUCATIONAL INSTITUTIONS

| S# | Name | Institute type (School, College etc.) | GPS Coordinates | Enrolment | Incharge Name | Contact Number |
|----|------------------------------|---|--------------------|-----------|--------------------|-------------------|
| 1 | GPS MEHLO KAY | SCHOOL | X:31.11 Y:73.63 | 140 | GHULAM RASOOL SHAH | 0344-7622001 |
| 2 | GPS THATHA WAHAB KA | SCHOOL | X:31.01 Y:73.36 | 141 | AHMAD HASSAN | 0343-5081129 |
| 3 | GPS THATHA BHATIAN | SCHOOL | X:30.97 Y:73.31 | 78 | TASADQ HUSSAIN | 0331-7313267 |
| 4 | GPS THATHA NAMDAR | SCHOOL | X:0.00 Y:0.00 | 63 | MUSHTAQ AHMED | 03452840266 |
| 5 | GPS SABOKAY MAHAR | SCHOOL | X:30.49 Y:73.91 | 98 | NASIR HUSSAIN | 0346-4329910 |
| 6 | GPS BAKAR KAY MAHAR | SCHOOL | X:30.47 Y:73.89 | 95 | MUHAMMAD AMIN | 0347-4500533 |
| 7 | GPS GHULLAM AHMED SHAHEED | SCHOOL | X:30.45 Y:73.89 | 46 | MUDASSAR AHMAD | 0345-4760539 |
| 8 | GPS PUHAN | SCHOOL | X:30.53 Y:73.96 | 155 | ATTIQU UR RAHMAN | 0300-6295953 |
| 9 | GGPS WASOO SALAM KA | SCHOOL | X:30.38 Y:73.82 | 70 | BUSHRA KHAIR DEEN | 0300-2488086 |
| 10 | GGPS MEHLO KAY | SCHOOL | X:31.11 Y:73.63 | 109 | NABYA NOREEN | 03426201512 |
| 11 | GHS JANDRAKA | SCHOOL | X:31.07 Y:73.44 | 883 | M. MUSHTAQ | 0302-4950696 |
| 12 | GGHS JANDRAKA | SCHOOL | X:31.06 Y:73.43 | 1253 | REHANA KOUSAR | 0304-4569942 |
| 13 | GGPS SHAREEN | SCHOOL | X:30.92 Y:73.26 | 173 | NAZIA AMEER | 0335-1861314 |
| 14 | GGPS QAIM JINDE KA | SCHOOL | X:30.36 Y:73.67 | 107 | UM-E-HABIBA | 0309-1194486 |
| 15 | GGES NAMA JINDAY KA | SCHOOL | X:30.37 Y:73.66 | 134 | FARZANA KHIZAR | 0307-6152540 |
| 16 | GGPS ABADI | SCHOOL | X:30.72 | 92 | NASIM AKHTER | 0334-7861461 |

| S# | Name | Institute type (School, College etc.) | GPS Coordinates | Enrolment | Incharge Name | Contact Number |
|----|-------------------------|---|--------------------|-----------|------------------|-------------------|
| | | | Y:73.61 | | | |
| 17 | GMPS KUNDMORH | SCHOOL | X:31.09 Y:73.54 | 119 | MUHAMMAD SARWAR | 0345-4374588 |
| 18 | GHS ATTARI | SCHOOL | X:30.60 Y:74.04 | 425 | LIAQAT ALI | 0303-7862930 |
| 19 | GHS RATTAYKAY | SCHOOL | X:30.34 Y:73.61 | 369 | NOOR MUHAMMAD | 0301-4569448 |
| 20 | GHS MEHLOO SHEKHUKA | SCHOOL | X:30.36 Y:73.71 | 316 | UMER FAROOQ | 0333-6942660 |
| 21 | GHS ROHELA TAJEKA | SCHOOL | X:30.52 Y:73.95 | 481 | SHAHZAD ALI | 0347-4437638 |
| 22 | GGHS HEAD SULEMANKI | SCHOOL | X:30.38 Y:73.84 | 652 | SAEEDA PARVEEN | 0300-4415717 |
| 23 | GHS CHAK GANDA SINGH | SCHOOL | X:30.56 Y:73.95 | 261 | M. AMEEN JAVED | 0346-7508198 |
| 24 | GGPS GHULAM | SCHOOL | X:30.60 Y:74.04 | 98 | SHABNAM SIDDIQUE | 0312-7970998 |
| 25 | GGES ATTARI | SCHOOL | X:30.60 Y:74.04 | 175 | SAIMA PARVEEN | 0345-4313184 |
| 26 | GGPS DONA AHMED | SCHOOL | X:0.00 Y:0.00 | 75 | AQSA KHALID | 0304-6835787 |
| 27 | GGPS BASTI BAHADUR | SCHOOL | X:30.45 Y:73.84 | 55 | RAZIA YOUSAF | 0302-5969721 |
| 28 | GGPS DULAY KE MOHAR | SCHOOL | X:30.49 Y:73.89 | 48 | SHAHEEN AKHTER | 0315-8285828 |

ANNEX-V:LIST OF INDUSTRIES WITH THEIR RISK LEVEL

No major Industry exists in District Okara with Chemical, Biological, Radiological, Nuclear hazards.

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 | Maria and Michele Modugno Foundation, Rehmpur 6/4-L, Okara | Local | District Okara | Educational and Health etc. | Adil Parvaiz | 0300-4080057 |
| 2 | AL Furqan Welfare Society, Faisal Colony No. 1, Okara | Local | District Okara | Educational | Abdul Majid | 0321-6953500 |
| 3 | AnjumanFaizan-e-Ghousia Depalpur | National | Punjab | Educational, Health | Murad Ali Shah | 0301-4429292 |
| 4 | Noble Aims Educational Society, 73 Aziz Yaqub Town, Main Street, Okara | Local | District Okara | Educational | Ch. Kamran Saeed | 0333-6930721 |
| 5 | Khair ul Fazal Welfare Trust Society 36-37/2-RA Tehsil & District Okara | Local | District Okara | Health | Haji Munir Ahmed | 0321-4359990 |
| 6 | Sofa Education SoeictyAyub Park Okara | Local | District Okara | Education | Ch. M. Sharif | 0313-6510766 |
| 7 | Ok Barbers and Hair Dresser Chairitable Society Gali No. 01 D, Block Okara | Local | District Okara | Charitable | Zafar Iqbal | 0301-7304208 |
| 8 | Iqra Science Model Education Society, 41 Model Town, Okara | Local | District Okara | Education | Abdul Hameed | 0331-7454293 |
| 9 | Shaheen Educational and Welfare Foundation, Faridabad Okara | Local | District Okara | educational | Safdar Abbas | 0320-1748288 |
| 10 | The Educators. Al Aleem Canal Campus Society, Near Canal rest house, Okara | Local | District Okara | Education | Abdul Rehman | 0300-6955114 |
| 11 | Schollars Education Promotion Society Inside Scholar Public School Sahiwal Road, Okara | Local | District Okara | Education | Munawar Javed | 0321-6963502 |
| 12 | Unique Education Society, Tehsil Road, Opposite Company Bagh, Okara | Local | District Okara | Education | Abdul Khaliq | 0322-6954959 |

| 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. |
|----|---|--|---------------------------------------|--|---------------------------|--------------|
| 13 | AnjumanBehbood e Insaniat Society Ghafoor Colony, 27 walisarak, Okara | Local | District Okara | Education | Ch. Khalid Madoood | 0345-7500295 |
| 14 | Kishwar Educational Society Depalpur | Local | District Okara | Education | Mian M. Abdullah | 0345-6968201 |
| 15 | AnjumanMuhiban-e- Muhammad waAal-e- Muhammad Imam Bargah Qasr-e- Hussain Basirpur Tehsil Depalpur | Local | District Okara | Relegious | Syed Mukhtar Abas | 0300-8801005 |
| 16 | Professional Faroogh-e- TaleemSociety, Nau Bahar Colony, Depalpur | Local | District Okara | Educational | Rao Inam Ali Khan | 0300-6967460 |
| 17 | Gems Educational Society Haveli Road, Hujra Shah Muqem, Tehsil Depalpur | Local | District Okara Tehsil Depalpur | Education | Ahmed Ali | 0300-7952103 |
| 18 | Shah Muqem Education Society Chowk Hujra Shah Muqem Tehsil Depalpur | Local | Tehsil Depalpur District Okara | Education | Amanat Ali | 0345-6699777 |
| 19 | Reflections of Hope, Foundation H# 669 St# 03 C, Block Anwar Shaheed Colony, Renala Khurd, | Local | Renala Khurd | Charitable | Tariq Masih | 0300-7957944 |
| 20 | Anjuman Falah e Millat Firdous Town, G.T Road, Okara | Local | District Okara | Religious Education & Charitable | Eng. Salman | 0302-8460846 |
| 21 | Mouasatul Hassan Al Khairiya Foundation Near Kothi Bagh WaliBhuman Shah Tehsil Depalpur | Local | Tehsil Depalpur District Okara | Charitable | Abdul Haseeb ul Hassan | 0300-8089098 |
| 22 | Mile Stone Educational Society 251-Main Sabir Pia town, Depalpur Chowk okara | Local | Distirct Okara | Educational | Rana Mazhar Rafique | 0300-6953003 |
| 23 | HazratGhousBala Peer Welfare Foundation, Basement Gillani Hospital Faisalabad Rd, Okara | Local | District okara | Education & Health | Syed Ali Abbas Shah | 0301-8699310 |
| 24 | Foundation for Awarenes and Civic Engagement, Suit No. 306, 3rd Floor Waqar | Local | District Okara | Education / Charitable | Altaf Hussain | 0305-8839930 |

| 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. |
|----|--|--|---|--|-------------------------|--------------|
| | Center, MA Jinnah Road, Okara | | | | | |
| 25 | Rice Grain Traders Welfare Association, 85-A, Grain market Okara | Local | District Okara | Charitable | Rana Abdul Basit | 0300-6959104 |
| 26 | haram Helping Hand Foundation, Faisalabad Road, Street No. 1, Rehmatpur, Okara | Local | District Okara | Charitable | Memona Tariq | 0321-6955885 |
| 27 | AnjumanArhtian Sabzi Mandi Okara | Local | Sabzi Mandi Okara (Arhtian) | Charitable | Ch. M. Ashraf | 0300-6959490 |
| 28 | AnjumanittehadArhtian Sabzi Wa Fruit Market Okara 86-87 Sabzi Mandi Road, Okara | Local | Sabzi Mandi Okara (Arhtian) | Welfare | Ch. M. Tahir | 0321-6950048 |
| 29 | Arhtian Association New Fruit & Vegetable Mandi Depalpur, | Local | New Fruit & Vegetable Mandi Depalpur, (Arhtian) | Welfare | Malik Qasim Ali Jani | 0301-8824002 |
| 30 | HaqiqiAnjumanArhtian Fruit & Sabzi Mandi Depalpur | Local | Arhtian Fruit & Sabzi Mandi Depalpur | Welfare | Haji Gulzar Hussain | 0300-6979030 |
| 31 | MarkziAnjumanTajran Okara | Local | District Okara | Welfare | Ch. Saleem Sadiq | 0300-6959590 |
| 32 | AL-ShifaSociety G.T Road, Akhtarabad Tehsil Renala Khurd, Okara | Local | District Okara | Welfare | Eng. Salman | 0302-8460846 |
| 33 | MarkziAnjumanTajran Renala Haqiqi, Renala Khurd, Okara | Local | Renala Khurd | Welfare | Ch. Shakeel Ahmed | 0300-6959686 |
| 34 | AnjumanArhtian, Ghalla Mandi, Okara | Local | Okara | Welfare | Ch. Habib ul Haq | 0300-6950007 |

ANNEX-VII: CONTACT LIST OF MAIN STAKEHOLDERS/ DEPARTMENTS

| S# | Designation | Person Name | Telephone (Office) | Telephone (Residential) | Mobile |
|----|----------------------------|---------------------|--------------------|-------------------------|--------------|
| 1 | Focal Person for Disasters | Tahir Ameen | 044-9200256 | | 0300-4144050 |
| 2 | Commissioner | Nadir Chattha | 040-9200491 | | 0304-0920056 |
| 3 | RPO | Arslan Malik | 040-9200011-333 | 044-9200027 | |
| 4 | DC | Madam Saba Asghar | 044-9200025-26 | 044-9200352 | 0341-0922063 |
| 5 | DPO | Khalil Shahzad | 044-9200351 | | 03321600777 |
| 6 | ADC (R) | Madam Saba Ashgar | 044-9200251 | | 0333-4518682 |
| 7 | DEO Rescue 1122 | Zafar Iqbal | 044-9200009 | 044-9200231 | 0333-4044279 |
| 8 | DO Civil Defence | Waqar Akbar | 044-9200259 | | 0323-6462689 |
| 9 | SNA | Afzal Hussain | 044-9200255 | | 0315-7741331 |
| 10 | AC – Okara | Ahmed Saeed Manj | 044-9200252 | | 0300-6319242 |
| 11 | AC – Depalpur | Asif Hussain | 0444-540425 | | 0300-8884454 |
| 12 | AC – Renala Khurd | Rizwan Ashraf | 044-2636089 | | 0300-6493193 |
| 13 | Tehsildar - Okara | Asif Javed Virk | 044-9200253 | | 0300-6493193 |
| 14 | Tehsildar – Depalpur | Tariq Sharif | -- | | 0300-6920511 |
| 15 | Tehsildar - Renala Khurd | Rai Hussain Nawaz | 044-2636146 | | 0305-6457800 |
| 16 | CO – MC Okara | Rana M. Naveed | 044-9200454 | | 0301-6907744 |
| 17 | CO –MC Depalpur | M. Farooq | 0444-544364 | | 0300-8997559 |
| 18 | CO –MC Renala Khurd | Fiaz Hashmi | 0442-635215 | | 0300-9479295 |
| 19 | CEO Education | SohailAzhar | 044-9200051 | | 0312-5577777 |
| 20 | XEN Irrigation LBDC | Huzaifa Shoukat | 044-9330009 | | 0303-4937504 |
| 21 | XEN Irrigation Sulemanki | Tasawur Ayyub | 0444-780155 | | 0321-4166103 |
| 23 | DD Agriculture | Shahbaz Ahmad | 044-9200264 | | 0345-4309136 |
| 24 | CEO Health | Dr. Abdul Majeed | 044-9200136 | | 03000-425657 |
| 25 | DMO | Tahir Ameen | 044-9200256 | | 0300-4144050 |
| 26 | MS DHQ Hospital | Nabeel Saleem | 044-9200090 | | 0306-6029789 |
| 27 | ADL | Dr. Rana Abdul Rauf | 044-9200268 | | 0337-9683047 |

ANNEX-VIII: LIST OF VOLUNTEERS

| S# | Volunteer Name | CNIC | Address | Contact Number | Blood Group | Time Required to be on-board |
|-----|--|-----------------|--|----------------|-------------|------------------------------|
| 1. | M. Irfan s/o M. Mushtaq | 35302-9132072-3 | Fateh Noor Town, Okara | 0312-4812822 | B+ | 24 Hour |
| 2. | Waseem Haider s/o M. Rafiq | 35302-8281811-5 | 1/4L Okara | 0322-6953245 | B+ | 24 Hour |
| 3. | Asim Javed s/o M. Javed | 35302-5226064-3 | H#98, MC CIA Stap Glass Factory Okara | 0322-7003017 | AB+ | 24 Hour |
| 4. | M. Rafiq s/o Umar Din | 35302-4661691-3 | Basti Shah Din, 2 Chak Okara | 0321-6981619 | B+ | 24 Hour |
| 5. | Khurram Shahzad s/o M. Shahbas | 35302-5902429-9 | 54/2L Okara | 0307-7456419 | O+ | 24 Hour |
| 6. | Abdul Sattar s/o Fateh Muhammad | 35303-0952543-3 | 10/1L Renala Khurd | 0340-4331734 | B+ | 24 Hour |
| 7. | Asad Ali s/o M. Iqbal | 35302-0632500-5 | St#1, Garden Town, Okara | 0308-5332309 | B+ | 24 Hour |
| 8. | Moazzam Mehmood s/o M. Izhar ul Hassan | 35301-5605513-7 | Mohalla Farooq Nagar, Shergarh, Tehsil Depalpur | 0301-7302435 | O+ | 24 Hour |
| 9. | Ali Ahmed s/o M. Hanif | 35302-7502276-9 | 3/4L Okara | 0322-7076360 | B+ | 24 Hour |
| 10. | Sohail Anjum s/o M. Iqbal | 35302-1279400-1 | H#105, St#6, Aziz Park Okara | 0304-7189790 | B+ | 24 Hour |
| 11. | M. Zahid Aqeel s/o Asghar Ali | 35302-1885493-9 | Samadpura, H46, St#03 | 0306-8024162 | B+ | 24 Hour |
| 12. | Amjad Fahim s/o Dost Muhammad | 35302-2623761-3 | H#21, St#1, Mohalla Taj Town, Okara | 0344-6788812 | O+ | 24 Hour |
| 13. | Zulqarnain s/o Zulfiqar Ali | 35302-9463198-5 | 13/1AL Okara | 0303-9642313 | B+ | 24 Hour |
| 14. | Umar Farooq s/o Mushtaq Ahmed | 35302-7238071-5 | Mohalla Ahmedabad, St#2, H#243 Okara | 0306-3791805 | B+ | 24 Hour |
| 15. | Khalid Mehmood s/o Noor Ahmed | 35302-6839094-9 | Mohalla Shafqat Block Okara | 0303-2529390 | B+ | 24 Hour |
| 16. | Imran Maqbool s/o Maqbool Ahmed | 35302-3780813-5 | St#7 Khan Colony Okara | 0305-2877990 | B+ | 24 Hour |
| 17. | M. Haroon Aslam s/o M. Aslam | 35302-0629898-7 | 25/2R Sangoka Okara | 0346-1454113 | B+ | 24 Hour |
| 18. | M. Waqas s/o Abdul Jabbar | 35302-7064750-7 | Bairi Wala Chowk, H#112 St#2 Mohalla Ahmedabad Okara | 0332-7408760 | O+ | 24 Hour |
| 19. | Azhar Hussain Shah s/o Syed Malik Ali Shah | 35301-8304057-5 | 55/GD PO PipliPahar Okara | 0304-9239755 | O+ | 24 Hour |
| 20. | Sabir Iqbal s/o Noor Ahmed | 35302-3843291-3 | Mohalla Shafqat Block Okara | 0303-2529390 | B+ | 24 Hour |

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

| S# | Name | CNIC | Address | Contact Number and Email | Blood Group | Time Required to be on-board |
|----|-----------------------|------------------------|------------------|------------------------------|--------------------|------------------------------|
| 1 | M. Haseeb Khan | 36502-1653221-1 | Sahiwal | 0345-7433268 | B ⁺ ve | 24 Hour |
| 2 | Adnan Khaliq | 35302-2353283-5 | Okara | 0345-9000043 | O ⁺ ve | 24 Hour |
| 3 | Ali Sher | 35302-1903724-4 | Okara | 0323-5424512 | B ⁺ ve | 24 Hour |
| 4 | Ghulam Murtaza | 35303-3628514-7 | Renala Khurd | 0333-6987824 | A ⁺ ve | 24 Hour |
| 5 | Muhammad Imran Shafi | 35032-9114971-1 | Okara | 0321-7096355 | B ⁺ ve | 24 Hour |
| 6 | Muhammad Javed Iqbal | 35302-2240456-1 | Okara | 0321-7086765 | B ⁺ ve | 24 Hour |
| 7 | Muhammad Rizwan Javed | 35302-3036426-1 | Okara | 0304-8175969 | B ⁺ ve | 24 Hour |
| 8 | Nazar Hussain | 35302-4252766-5 | Bangla Gogera | 0304-9829683 | AB ⁺ ve | 24 Hour |
| 9 | Muhammad Azam | 35301-2473917-5 | Depalpur | 0340-6062068 | B+ve | 24 Hour |
| 10 | Zahid Iqbal | 35302-7585282-3 | Bangla Gogera | 0346-7415988 0334-7415988 | O ⁺ ve | 24 Hour |
| 11 | M. Naeem | 35302-8593159-5 | Okara | 0344-6749269 | A+ve | 24 Hour |
| 12 | Faisal Rasheed | 35302-0226457-3 | Okara | 0321-8044144 | B+ve | 24 Hour |
| 13 | Abdul Razzaq | 35303-4942388-7 | Renala Khurd | 0345-7493354 | B+ve | 24 Hour |
| 14 | Imran Akbar | 35302-7931666-5 | Okara | 0346-7427228 | O+ve | 24 Hour |
| 15 | Mubashar Akbar | 35302-5997647-7 | Okara | 0321-6953418 | B+ve | 24 Hour |
| 16 | Nasir Naseer | 35303-1233070-1 | Renala Khurd | 0301-7349502 | O +VE | 24 Hour |
| 17 | M. Abbas | 35302-4988843-7 | Okara | 0342-4166605 | A +VE | 24 Hour |
| 18 | M. Naeem Shahid | 35302-5247250-1 | Okara | 0342-6351963 | B +VE | 24 Hour |
| 19 | Shafqat Ali | 35301-6049144-5 | Okara | 0346-7459469 0343-8111122 | O +VE | 24 Hour |
| 20 | Nasir Bashir | 35301-6396519-3 | Okara | 0300-6016330 | B +VE | 24 Hour |
| 21 | Faheem Iqbal | 36502-6296015-5 | Okara | 0348-8741122 | A +VE | 24 Hour |
| 22 | M. Shafique | 35302-7039173-1 | Okara | 0344-6780369 | A +VE | 24 Hour |
| 23 | Shahid Imran | 35302-9312724-5 | Okara | 0344-6210638 0334-6210638 | O +VE | 24 Hour |
| 24 | M. Imtiaz Ali | 35301-9249655-1 | Depalpur | 0301-7308223 | AB +VE | 24 Hour |
| 25 | M. Sadee | 35302-7057480-3 | Okara | 0301-7121122 | O +VE | 24 Hour |
| 26 | Ghulam Murtaza | 35302-5423970-3 | Okara | 0321-7002367 | B+VE | 24 Hour |
| 27 | Mudassar Hussain | 35301-3179023-9 | Hujra Shah Moqem | 0303-7175067 | B+ve | 24 Hour |
| 30 | Noor Hassan | 35202-9888332-7 | Basirpur | 0345-4392085 | O+ve | 24 Hour |

ANNEX-IX: POLITICAL CONSTITUENCIES

| National Constituencies | | | | Provincial Constituencies | | | |
|-------------------------|---------------------------------|-----------|----------------|---------------------------|-----------------------------------|---|------------------------------|
| Name of constituency | Name of Sitting Parliamentarian | Portfolio | Contact Number | Name of constituency | Name of Sitting Parliamentarian | Portfolio | Contact Number |
| NA-141 | Nadeem Abbas Rabeera | - | 0300-6959550 | PP-183 | JavedAlla-ud-Din | - | 0300-4112779 |
| NA-142 | Riaz Ul HaqJuj | - | 0300-5113380 | PP-184 | SyedaMumint Mohsin (Jugno Mohsin) | - | 0300-8415230 |
| NA-143 | Rao M. Ajmal Khan | - | 0321-4665050 | PP-185 | Iftikhar Hussain Chacher | - | 0345-8412512 0342-0000188 |
| NA-144 | Main Moeen Khan Watoo | - | 0300-4002334 | PP-186 | Noor Ul Ameen Watoo | - | 0300-4020702 |
| | | | | PP-187 | Mailk Ali Abbas Khokhar | - | 0300-4309079 |
| | | | | PP-188 | MianYawar Zaman | - | 0301-8697008 |
| | | | | PP-189 | Ch Muneeb Ul Haq | - | 0300-9895000 |
| | | | | PP-189 (365) | Ijaz Alam Augustine | Minister of Human Rights and Minority Affairs | 0300-6973969 0342-5860783 |
| | | | | PP-190 | Ghulam Raza Rabeera | - | 0300-4270633 |

ANNEX-X: LOCAL GOVERNMENT

District and Tehsil Level

| S# | Designation | District/Tehsil Name | Name | Contact Number | Mobile Number |
|----|---------------|----------------------|---------------------------|----------------|---------------|
| 1 | Chief Officer | Okara | Rana Muhammad Naveed | 044-9200454 | 0301-6907744 |
| 2 | Chief Officer | Depalpur | Muhammad Farooq ul Hassan | 0444-544364 | 0300-8997559 |
| 3 | Chief Officer | Renal Khurd | Fiaz Hashmi | 044-2635215 | 0300-9479295 |

Town Level

| S# | Tehsil | Town | Name | Contact Number | Mobile Number |
|----|----------|------------------|------------------|----------------|---------------|
| 1 | Deplapur | Hujra Shah Muqem | Rao Umar Daraz | - | 0321-1111933 |
| 2 | | Basirpur | Mian Anwar Javed | - | 0300-6965183 |
| 3 | | Haveli Lakha | Inam Ullah | - | 0322-5365021 |

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) |
|----|------|-------------|------|---------|----------------|---------------|--------|----------------------|--------------|----------------|-------------|-----------------|---------------------|
|----|------|-------------|------|---------|----------------|---------------|--------|----------------------|--------------|----------------|-------------|-----------------|---------------------|

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 |
|----|------------------|----------------|---------|----------|--------|-----|------|----------------|---------------|----------------|----------------|---|---|--------------------------|
|----|------------------|----------------|---------|----------|--------|-----|------|----------------|---------------|----------------|----------------|---|---|--------------------------|

P3: Injured 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 |
|----|-----------------|----------------|---------|----------|--------|-----|------|-----------------|----------------|--------------------------------------|--------------------------|
|----|-----------------|----------------|---------|----------|--------|-----|------|-----------------|----------------|--------------------------------------|--------------------------|

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 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 |
|----|-----------------------|-----------------------|-------|----------|----------------------|---------------|-------------|-------------|----------|
| | | | | | | | | | |

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 Performa

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

District: _____

Date: _____

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

P9:NGOs registration performa

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

District: _____

Date: _____

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

P10: Control Room

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

District: _____

Focal Person: _____

Date: _____

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

ANNEX-XII: CAMP MANAGEMENT SOPS

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

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

ANNEX-XIII: FLOOD BUNDS

INFORMATION REGARDING FLOOD BUND CATEGORY A

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

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

INFORMATION REGARDING FLOOD BUND CATEGORY B

| S# | Name of Division | Name of Embankment / Bund | Length (ft.) |
|------------------------|----------------------------|--------------------------------|----------------|
| SARGODHA ZONE | | | |
| 1 | Rasul Headworks Division | Important / Vulnerable Reaches | 10,000 |
| 2 | Bhakkar Division | -do- | 10,000 |
| 3 | Layyah Division | -do- | 10,000 |
| 4 | Jhelum Division | -do- | 5,000 |
| | Total in feet. | | 35,000 |
| | Total in miles | | 6.63 |
| FAISALABAD ZONE | | | |
| 1 | Khani Division | -do- | 20,000 |
| 2 | Jhang Division | -do- | 50,000 |
| 3 | Qadirabad Barrage Division | -do- | 60,000 |
| 4 | Burala Division | -do- | 35,000 |
| | Total in feet. | | 165,000 |
| | Total in miles | | 31.25 |
| BAHAWALPUR ZONE | | | |
| 1 | Punjad Headworks Division | -do- | 90,000 |
| 2 | Khanpur Canal Division | -do- | 100,000 |
| 3 | Bahawalpur Canal Division | -do- | 50,000 |
| 4 | Rahimyar Canal Division | -do- | 50,000 |
| | Total in feet. | | 290,000 |
| | Total in miles | | 54.92 |
| MULTAN ZONE | | | |
| 1 | Trimmu Division | -do- | 80,000 |
| 2 | Suleimanki Division | -do- | 50,000 |
| 3 | Shujabad Canal Division | -do- | 60,000 |
| | Total in feet. | | 190,000 |
| | Total in miles | | 35.98 |

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

ANNEX XIV: RIVER DISCHARGE RATES

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

ANNEX-XV: LIST OF BASIC TERMS

Acceptable risk

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

Biological hazard

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

Capacity

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

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

Capacity building

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

Climate change

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

Coping capacity

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

Disaster

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

Disaster risk management (DRM)

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

Disaster risk reduction/disaster reduction

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

Early warning

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

Emergency management

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

Forecast

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

Geological hazard

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