Disaster Risk Management Plan

District Sialkot Government of Punjab

November, 2008

District Disaster Management Authority
DCO Office Sialkot
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Technical Assistance: National Disaster Management Authority (NDMA)
United Nations Development Programme (UNDP)

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Foreword

National Disaster Management Authority (NDMA) was established under the Ordinance 2006 to ensure the appropriate policies, strategies and programmes for risk management and reducing the effects of hazards in all the districts of Pakistan. UNDP is in close coordination with the NDMA and Provincial Disaster Management Authorities (PDMAs) to devise the District Disaster Risk Management Plans as well as to impart the trainings and education on DRR to district officials to have more conceptual clarity and understanding about the disaster trends and proposed actions for taking into consideration before, during and after the disaster situations.

Keeping in view the past emergencies and practices to reduce their effect on human life, infrastructure, livestock, economy and health, District Sialkot was selected from the province Punjab to have the Disaster Risk Management Plan (DRMP) as this district is prone to emergencies of different types at any time of the year.

The primary objective of the plan is to save and prevent needless sufferings of the population, protect vital infrastructure installations, livestock, machinery, equipment and stock of resources from different nature of disasters. The plan aims to outline the roles of the district authorities and other implementing agencies operating in the district. The plan will serves as a guide of the DDMA for use and training of district officials and concerned organizations in preparation and in the event of an emergency.

All the district departments have been consulted during the planning process to find the maximum local situation in order to have the information about hazard vulnerability, response mechanisms and the roles of stakeholders. Civil defense department remained very helpful to approach maximum district departments and civil society organizations to get the district specific information. There have been several challenges to get maximum district information as during the time the General Elections took place. All information collected was reviewed and shared with district officials. The Disaster Risk Management Plan (DRMP) consists of different sections, overview of the district, purpose and scope of the plan, hazards assessment, and district risk management practices, past disaster experience, institutional mechanism in the light of National Disaster Management Framework and the SOPs for Disaster Risk management in the District Sialkot. DDRMP should be reviewed annually for having the improvement to address the issues.

We thank all the District officials and departments, civil society and community groups who extended their cooperation in this whole process. Further more we would appreciate suggestions and comments for the further improvements in this plan.


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Message By DG PDMA

National Disaster Management Authority (NDMA) was established under the Ordinance 2006 to ensure the appropriate policies, strategies and programmes for risk management and reducing the effects of hazards in all the districts of Pakistan. UNDP is in close coordination with the NDMA and Provincial Disaster Management Authorities (PDMAs) to devise the District Disaster Risk Management Plans as well as to impart the trainings and education on DRR to district officials to have more conceptual clarity and understanding about the disaster trends and proposed actions for taking into consideration before, during and after the disaster situations.

Keeping in view the past emergencies and practices to reduce their effect on human life, infrastructure, livestock, economy and health, District Sialkot was selected from the province Punjab to have the Disaster Risk Management Plan (DRMP) as this district is prone to emergencies any time of the year. Sialkot is the first District in Punjab province to prepare a comprehensive District Disaster Risk Management Plan with risk assessment and vulnerability analysis of the district to meet the future disasters in the district.

The plan addresses the vulnerability of various hazards in the district of floods, epidemics, road accidents, and fire, chemical and industrial disasters. A separate volume on Standard Operating Procedures (SOPs), details of the roles of various district departments have been determined during, before and after an emergency. The primary objective of the plan is to save and prevent needless sufferings of the population, protect vital infrastructure installations, livestock, machinery, equipment and stock of resources from different nature of disasters. The plan also outlines the roles of various stakeholders and key players in the district. It will be an instrumental guide of the DDMA for disaster risk mitigation, management and planning in the district at various levels.

The NDMA and PDMA foresee that all stakeholders contribute effectively for the establishment of district disaster risk management mechanism for developing the capacities and strategies. The involvement of the District based NGOs and community-based organizations are very vital for the smooth implementation of the District Disaster Risk Management Plan.

The role of UNDP team along with the district officials to produce this plan has been remarkable. All the district departments have been consulted during the planning process to explore maximum local information about hazard vulnerability, response mechanisms and the roles of stakeholders in the district. After having established the District Disaster Management Authority mechanism in the district, district Sialkot will be taken as model amongst other districts of Province Punjab to plan and implement disaster risk management initiatives for reduction in risk of vulnerability.

Finally, I extend my gratitude and congratulate the district officials, civil society organizations who contributed their cooperation, time and knowledge in planning the District Disaster Risk Management Plan of the district Sialkot.

Major ® Rizwan ullah Baig
Director General
PDMA Punjab.


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Message By DCO Sialkot

Sialkot is an industrial district of Province Punjab and is located at 125km from Lahore and in the north-east of Pakistan along with Indian Border. The district is major producer of leather, sports and surgical goods and is major exporter of these products. The floods in the district are normal features of its *Nullahs* due to heavy rains. The district administration puts its maximum efforts to respond to the emergencies with its resources and capacities. Along with floods there are many other hazards that cause emergency situations in the district. I pay my gratitude to the NDMA and PDMA who selected District Sialkot as first district in Punjab province to plan District Risk Management Plan (DRMP).

The Disaster Risk Management Plan (DRMP) consists of different sections, overview of the district, purpose and scope of the plan, hazards assessment, and district risk management practices, past disaster experiences, institutional mechanisms in the light of National Disaster Management Framework and the Standard Operating Procedures (SOPs) for disaster risk management in the district. The Plan targets at identifying risks and hazards in Sialkot district for taking measures to reduce the vulnerability and aiming the maximum safety of the population, natural resources, and infrastructures caused by potential natural & man-made disasters.

The draft plan was presented to all stakeholders in combined consultation for taking inputs in order to incorporate into the final plan. However, District Disaster Management Committee would assist in reviewing the threat of various disasters, assessing the vulnerability of the district, evaluating the preparedness, and considering suggestions for improvement of the district disaster management plan. DDRMP should be reviewed on annual basis to add new techniques and experiences to the plan.

The district government extended full cooperation to develop the plan as per the guidelines of the NDMA along with the planning expert team. Civil defense department remained very helpful to approach maximum district departments and civil society organizations to get the district specific information.

As a preparedness measure the district government is working on the construction of adequate speed breakers, caution signboards and guard-stones on highways, the setting up of traffic-aid posts at strategic locations, trauma care facilities in district hospitals, bypass roads, identification of accident-prone spots, improvement and strengthening of roads and bridges at district level to mitigate and minimize the effects of disasters.

I wish to thank NDMA, UNDP, District Departments and civil society organizations to help produced the District Disaster Risk Management plan and hope that this plan would contribute to reduce the risks in the district.

Capt. Atta Muhammad
District Coordination Officer
District Sialkot


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Message By District Nazim

I like to take this opportunity to thank all who contributed to produce the District Disaster Risk Management Plan of district Sialkot. The plan will defiantly serve as useful guide for the government functionaries working on disaster, especially on flood emergencies. It is hoped that with this detailed plan emergency of any magnitude can be tackled efficiently and effectively. It is action oriented, flexible, workable and district specific for all kinds of emergencies. The plan will definitely provide avenues to the district government to work closely with the civil society bodies during, before and after disaster situations in the district Sialkot. We thank the NDMA for selecting the District Sialkot as pilot district for the development of Disaster Risk Management Mechanism,

Finally, I would like to acknowledge all those who worked to develop the District Disaster Risk Management Plan. I am thankful to Almighty Allah who enabled us to develop this plan for district Sialkot.

Akmal Cheema
District Nazim Sialkot


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Vision, Mission and Objectives

Vision

The least loss of life, property and resources of the vulnerable population / groups due to natural or man made disasters in district Sialkot.

Mission

Establishment of a standard plan to facilitate and build the capacity of district Government of Sialkot, line departments and communities for pre-disaster preparedness, immediate, coordinated and effective disaster response, relief and rehabilitation.

Objectives

- To provide a basis for the establishment of polices and procedures which will assure maximum and efficient utilization of all resources in district Sialkot to minimize the loss of life and /or injury to the population, and protect and conserve resources, facilities and property of the people.
- To prepare communities and institutions to act and be equipped with knowledge and capacities for effective disaster risk management at times of disaster in order to reduce losses and damage to lives and property.
- To strengthen early warning and early response to disaster hazard threats and disaster situations in Sialkot.
- To enhance institutional capacities in district and community levels, including those related to technology, training, and human and material resources.
- To initiate collaboration and coordination and exchange of information among stakeholders involved in early warning, disaster risk management, disaster response, development and other relevant agencies and institutions at all levels, with the aim of fostering a holistic approach towards disaster risk reduction and sustainable development.
- To conduct regular disaster preparedness exercises, including evacuation drills, with a view to ensuring rapid and effective disaster response and access to essential food and non-food relief supplies, as appropriate, to local needs.
- To initiate emergency funds, where and as appropriate, to support response, recovery and preparedness measures as part of a sustainable way to disaster risk management.
- To include communities, in disaster risk management for the development of specific mechanisms to engage active participation and ownership of relevant stakeholders.


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Commonly Used Terms & Concepts

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 personal 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 state 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

The comprehensive approach to reduce the adverse impacts of a disaster. It 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 risk 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.

Hazard

A potentially damaging physical event or phenomenon that may cause the loss of life or injury, property damage, social and economic disruption or environmental degradation. Hazards can include natural (geological, hydrometeorological and biological) or induced by human processes (environmental degradation and technological hazards). Hazards can be single, sequential or combined in their origin and effects. Each hazard is characterised by its location, intensity, frequency and probability.

Hazard analysis

Identification, studies and monitoring of any hazard to determine its potential, origin, characteristics and behaviour.

Land-Use planning

Branch of physical and socio-economic planning that determines the means and assesses the values or limitations of various options in which land is to be utilized, with the corresponding effects on different segments of the population or interests of a community taken into account in resulting decisions. Land-use planning can help to mitigate disasters and reduce risks by discouraging high-density settlements and construction of key installations in hazard-prone areas, control of population density and expansion.

Mitigation

Structural and non-structural measures undertaken to limit the adverse impact of natural hazards, environmental degradation and technological hazards.

Natural hazards

Natural processes or phenomena occurring on the earth that may constitute a damaging event.

Natural hazards can be classified by origin namely: geological, hydro meteorological or biological. Hazardous events can vary in magnitude or intensity, frequency, duration, area of extent, speed of onset, spatial dispersion and temporal spacing.

Preparedness

Activities and measures taken in advance to ensure effective response to the impact of hazards, including the issuance of timely and effective early warnings and the temporary evacuation of people and property from threatened locations.

Prevention

Activities to ensure complete avoidance of the adverse impact of hazards

Public awareness

The processes of informing the general population, increasing levels of consciousness about risks and how people can reduce their exposure to hazards. This is particularly important for public officials in fulfilling their responsibilities to save lives and property in the event of a disaster.

Recovery

Decisions and actions taken after a disaster with a view to restoring or improving the pre-disaster living conditions of the stricken community, while encouraging and facilitating necessary adjustments to reduce disaster risk.

Relief / response

The provision of assistance during or immediately after a disaster to meet the life preservation and basic subsistence needs of those people affected. It can be of an immediate, short-term, or protracted duration.

Resilience / resilient

The capacity of a community, society or organization potentially exposed to hazards to adapt, by resisting or changing in order to maintain an acceptable level of functioning. Resilience can be increased by learning from past disasters for better future protection and to improve risk reduction measures.

Retrofitting (or upgrading)

Reinforcement of existing buildings and structures to become more resistant and resilient to the forces of natural hazards.

Risk

The chances of losses (deaths, injuries, property, livelihoods, economic activity disrupted or environment damaged) resulting from interactions between hazards and vulnerable social conditions. Risk is expressed as Risk = Hazards x Vulnerability. Some experts also include the concept of exposure to refer to the physical aspects of vulnerability.

Risk assessment / analysis

A methodology to determine the nature and extent of risk by analysing potential hazards and evaluating existing vulnerability that could pose a potential threat to people, property, livelihoods and the environment.

Structural / non-structural measures

Structural measures refer to any physical construction to reduce or avoid possible impacts of hazards, which include engineering measures and construction of hazard-resistant and protective structures and infrastructure.

Non-structural measures refer to policies, awareness, knowledge development, public commitment, and methods and operating practices, including participatory mechanisms and the provision of information, which can reduce risk and related impacts.

Sustainable development

Development that meets the needs of the present without compromising the ability of future generations to meet their own needs. It contains within it two key concepts: the concept of "needs", in particular the essential needs of the world's poor, to which overriding priority should be given; and the idea of limitations imposed by the state of technology and social organization on the environment's ability to meet present and the future needs. (Brundtland Commission, 1987).

Technological hazards

Danger originating from technological or industrial accidents, infrastructure failures or certain human activities, which may cause the loss of life or injury, property damage, social and economic disruption or environmental degradation.

Some examples: industrial pollution, nuclear activities and radioactivity, toxic wastes, dam failures; transport, explosions, fires, spills.

Vulnerability

The conditions determined by physical, social, economic, and environmental factors or processes, which increase the susceptibility of a community to the impact of hazards.

Wildland fire

Any fire occurring in vegetation areas regardless of ignition sources, damages or benefits.

These terms and concepts have been adapted from the United Nations International Strategy for Disaster Reduction (UNISDR) list of terms and concepts. An effort has been made to simplify them for better

Acknowledgment

This document has been developed through an extensive process of consultation with district stakeholders. Acknowledgment is due to the following district administration officials, departments and stakeholders who participated in the consultation process for the development of this plan.

S#	Name	Designation/ Responsibility	Department/ Organization
1	Capt. (Retd) Atta M. Khan	DCO	District Administration
2	Saif Anwar Jappa	DO Coordination	District Administration
3	Awais Manzoor Tarar	DDO Coordination	District Administration
4	Muhmmad Adil	DO Civil Defense	Civil Defense
5	M Zaman Shah	Instructor	Civil Defense
6	Ehsan Ahmed Khan	EDO Agriculture	Agriculture
7	Ali Arshad	District Flood Controller	Revenue
8	Khalid Saleem	EDO Revenue	Revenue
9	Amir Ijaz Akbar	DO Revenue	Revenue
10	Dr. Arhsad Dar	EDO Health	Health
11	Dr. M Javed Warriach	District Officer Health	Health
12	Dr. Capt. M Iqbal	Medical Superintendent	Health
13	Dr. Gul Nawaz Raja	MS THQ Pasrur	Health
14	Dr. Capt (R) M. Aslam	MS Government AIM Hospital	Health
15	Dr. M Arshad	EDO Education	Education
16	Capt. (Retd) M. Ameen	DPO	District Police
17	Shahzad	Inspector Police	Traffic Police
18	M Nawaz Khan	DO Social Welfare	Social Welfare
19	Muhammad Asif Ali	Gender Specialist	Social Welfare
20	Muhammad Nawaz Khan	DO	Social Welfare
21	Naheed Tufail	Supervisor	Social Welfare
22	Abida Kausar	Supervisor	Social Welfare
23	Javed Khalid	EDO works and Services	Works and services
24	Sher Bahadur	EDO F& P	Finance & Planning
25	Mian Shahid Maqsood	Tehsil Officer	TMA Pasrur
26	Muhammad Younis Bhatti	Tehsil Officer	TMA Pasrur
27	Adnan Rafiq	Tehsil Officer	TMA Samberial
28	Muhammad Irshad Nagi	DDO	Environment
29	Saeed Siaf Hussain	Assistant Food Controller	District Food Controller
30	Javaid Gill	EDO CD	Community Development
31	Muhammad Akram	Emergency Officer	Punjab Emergency Services Rescue 1122
32	A Hameed Qasim	AD LG	Local Government
33	Muhammad Adil	Station Manager	FM RADIO 104
34	Arhsad Baryar	Executive Director	KOSHISH NGO
35	Arhsad	Program Coordinator	BEDDARIE NGO
36	Hina	President	BEDDARIE NGO
37	Syeda Farah Azmi	Director	ROSHNI NGO
38	Shakir Hussain	Executive Director	SKILL NGO
39	Shalim Kamran	Planning & Preparedness Coordinator	NDMA
40	Muhammad Shoaib Butt	Office Manager	KOSHISH Welfare Society
41	Shamoun Khokher	Regional Coordinator	Caritas Sialkot Region
42	Amjad Gulzar	Planning / NDMA	Planning Expert
43	Irfan MAqbool	NDMA	Training Coordinator
44	Mohi ul din	NDMA	Deputy Director


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Abbreviations

ADLG	Assistant Director, Local Government	**MO**	Medical Officer
BHU	Basic Health Unit	**NDMA**	National Disaster Management Authority
CBO	Community Based Organizations	**NDMF**	National Disaster Management Framework
CCB	Citizen Community Board	**NDMO**	National Disaster Management Ordinance
CNG	Compressed Natural Gas	**NESPAK**	National Engineering Service of Pakistan
DCMC	District Crises Management Cell	**NGOs**	Non-Government Organizations
DCO	District Coordination Officer	**NOC**	No Objection Certificate
DMIS	Disaster Management Information System	**PARC**	Pakistan Agriculture Research Council
DNCA	Damage Needs Capacity Assessment	**PDMA**	Provincial Disaster Management Authority
DO	District Officer	**PHC**	Primary Health Care
DDO	Deputy District Officer	**PKR**	Pakistan Rupees
DFCC	Disaster Flood Control Center	**PMD**	Pakistan Meteorological Department
DPO	District Police Officer	**PTA**	Parents Teacher Association
DDMA	District Disaster Management Authority	**RTI**	Respiratory Tract Infections
DRM	Disaster Risk Management	**RHC**	Rural Health Center
DRR	Disaster Risk Reduction	**STD**	Sexual Transmitted Diseases
DEOC	District Emergencies Operations Center	**SHO**	Station House Officer
EOC	Emergency Operation Center	**SOP**	Standard Operating Procedures
EDO	Executive District Officer	**TDMC**	Tehsil Disaster Management Committee
EWS	Early Warning System	**TMA**	Tehsil Municipal Administration
FFC	Federal Flood Commission	**UC**	Union Council
FCC	Flood Control Center	**UCDMC**	Union Council Disaster Management Committee
FRO	Flood Relief Officer	**UNDP**	United Nations Development Program
HVCA	Hazard Vulnerability Capacity Analysis	**UNICEF**	United Nations Children's Fund
IT	Information Technology	**UN-ISDR**	UN- International Strategy for Disaster Reduction
ICRC	International Committee of the Red Cross	**WAPDA**	Water and Power Development Authority
IFRC	International Federation of Red Cross and Red Crescent Societies	**WFP**	World Food Program
IOM	International Organization for Migration	**WHO**	World Health Organizations
LGO	Local Government Ordinance	**BRBC**	Name of Canal
LPG	Liquid Petroleum Gas		


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Distribution of Copies

Copies of the Plan will be disseminated to the following officials / departments:

- Chief Minister
- District Nazim
- District Coordination Officer
- Naib District Nazim
- District Assembly
- District Police Officer
- District Line Departments
- Tehsil Municipal Administration
- Provincial & District Relief Commissioner
- NDMA
- PDMA Punjab
- Civil Defense
- District Flood Controller
- Pakistan Red Crescent Society
- Municipal Authorities
- Police Stations
- National Volunteer Movement
- District Hospitals (Public & Private)
- Meteorological Department
- Educational Institutes
- Armed Forces & Rangers
- Rescue 15, 1122
- Media (news papers, periodicals, Radio & TV channels)
- Edhi Foundation
- Religious Groups & Leaders
- Corporate Sector
- NGOs/ INGOs
- Public Libraries
- Union Council Secretariat
- Citizen Community Boards
- Village Groups


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Introduction

To seek betterment and improvement in everything is a human nature and this fact provoked human beings to new discoveries which resulted in the revolution of scientific inventions that totally changed the life on earth. For rapid development the natural resources of the earth were and are being used mercilessly. Increased population, wars, conflicts, and all kinds of pollution resulted in degradation of earth environment. Global warming affected ozone layer due to which uncertain & rapid climatic changes happened. All these factors increased disasters (natural & man-made) which preyed millions of human beings, livestock, and infrastructure and so on.

Although the efforts were done in every disaster to minimize the sufferings of the affected victims but, only after the disaster has played havoc. During last decade serious efforts were initiated to do the needful before any disaster. Different terminologies popped out such as Disaster Preparedness, Disaster Management, Disaster Risk Management/Reduction, etc primarily focusing on making arrangements through collaboration of different stakeholders to keep the wrath of disaster as minimum as possible.

Earthquake of October 2005 added fuel to the fire and provoked the urgency of having a mechanism to deal with disasters. Realizing the need and importance of disaster risk management for sustainable, social, economic and environmental development the Government of Pakistan (GoP) also initiated establishing appropriate policy, legal and institutional developments, strategies and programs to streamline and systemize the efforts for disaster risk management. GoP has established policy and institutional mechanisms at national, provincial and district levels. The President of Pakistan issued a National Disaster Management Ordinance (NDMO) on 21st of December 2006. Under the Ordinance a National Disaster Management Authority (NDMA) had been established. The National Commission has notified the provincial, district and *tehsil* governments to establish disaster management authorities at provincial, district and *tehsil* levels. In order to develop capacities of the newly established national, provincial and district Disaster Management Authority, UNDP is working closely with the National Disaster Management Authority. District Sialkot has been selected for the planning initiative aiming to outline the roles and responsibilities of the district authorities and other implementing agencies in relation to disaster risk management at district level.

The Plan targets at identifying risks and hazards in Sialkot district for taking measures to reduce the vulnerability and aiming the maximum safety of the population, natural resources, installations etc from the potential natural & man-made disasters.


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Purpose and scope of the plan

The primary purpose of the plan is a) to build capacity of stakeholders regarding pre disaster preparedness b) to save vulnerable population, protect vital infrastructure installations, livestock, machinery, equipment and stock of resources from damage and destruction by floods, epidemics and other natural & man-made disasters and c) to streamline and systemize comprehensive rehabilitation.

District Disaster Risk Management Plan has been designed to institutionalize the roles and responsibilities of different stakeholders of the District Sialkot regarding pre-disaster preparedness, to respond the emergency situation and disaster risk management activities. The plan focuses to build and enhance the capacity of concerned departments, agencies, organizations and other community groups to effectively prepare and respond to disaster situations. The plan would also be reviewed for the improvement in the light of lessons learnt from the impact of hazards and other disaster situations as they may arise in the District.


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Overview of the District

1.1 The District Sialkot

Sialkot is located in Province Punjab and has distance of 125km from Lahore in the north-east of Pakistan, along the Indian border. It is an industrial city and it famous for its leather, sports and surgical products. The city is not just an industrial fort, but has a colorful culture and is strongly interspersed with its vibrant past.

1.2 Geographical Features

It is bounded on the North by Indian held Jammu & Kashmir, on the North West by District Gujrat, on the South West by the District Gujranwala, on the West East by District Sheikhupura and Narowal. District Narowal was separated from Sialkot in the year 1991.

Its total area is 1200 square miles. In the south east "*Nullah Daik*" separates District Narrowal from District Sialkot and enters Lahore. In west there is a vast plane area which is very fertile. The earth at the surroundings of "*Nullah Daik*" and river "Chenab" is also very fertile.

There are two canals in the district namely; Upper Chenab and Marala Ravi Link. These canals were derived from River Chenab and Marala Head Works in continuously 1937 and 1955. In 1949, B.R.B canal was derived from Upper Chenab at Bambanwala.

1.3 Climate

Sialkot is hot and humid during the summer and cold during the winter. The summer season starts from April and continues till October, while the duration of winter season is from November to March. June is the hottest month. The maximum and minimum temperature during the month of June is about 40 and 25 degree Celsius respectivlity. January is the coolest month. The maximum and minimum temperature during the month of January is about 19 and 5 degree Celsius repectively. The months of November and March are pleasant. *"Source Dsitrit Profile"*

i. Rainfall

The average rainfall is about 980 milimetres. The highest rainfall is from July to September. The mean maximum and minimum temperatures and precipitation recorded at Sialkot are given in the following table.

➢ ***Weather Situation***

Weather averages for Sialkot, Pakistan													
Month	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Year
Average high °C (°F)	18 (64)	21 (69)	26 (78)	33 (91)	39 (102)	40 (104)	35 (95)	33 (91)	34 (93)	32 (89)	26 (78)	20 (68)	29 (84)
Average low °C (°F)	5 (41)	8 (46)	12 (53)	18 (64)	23 (73)	26 (78)	26 (78)	25 (77)	23 (73)	17 (62)	10 (50)	5 (41)	16 (60)
Precipitation cm (inch)	4.1 (1.6)	4 (1.6)	4.4 (1.7)	2.1 (0.8)	1.7 (0.7)	6.8 (2.7)	27.1 (10.7)	25.6 (10.1)	13.2 (5.2)	1.4 (0.6)	1.1 (0.4)	2.1 (0.8)	93.6 (36.8)

Source: Weatherbase: Historical Weather for Sialkot, Pakistan . Weatherbase (2008).

1.4 Total Area of District Sialkot

A total area of the district is approximately 3,106 sq. kilometers comprising of 4 Tehsils. The Tehsil wise break-up is as under:-

Sr. No.	Name of Tehsil	Total area in sq. Acres
1.	Sialkot	213,255
2.	Daska	167,288
3.	Pasrur	241,531
4.	Samberial	120,791
	Total sq. Acres	**7 42,865**

- Population

  According to the District profile and statistics as well as the Census of 1998, tehsil-wise break down is as follows:-

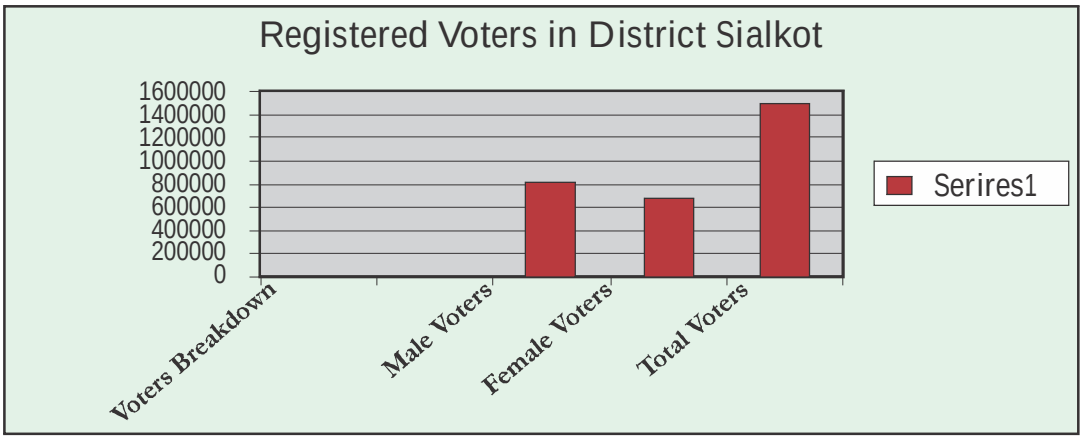
Sr. No.	Name of Tehsil	Population
1	Sialkot	1,208,444
2	Daska	605,570
3	Pasrur	611,871
4	Samberial	297,596
	Total	**2,723,481**

- Administrative Systems

Union Councils				
Tehsil	**Urban**	**Rural**	**Total**	**Villages**
Sialkot	18	32	50	518
Samberial	03	14	17	151
Daska	06	23	29	234
Pasrur	04	24	28	524
Total	**31**	**93**	**124**	**1427**

- Registered Voters in District Sialkot

Constituency	Male	Female	Total
NA-110	1,47,489	1,28,480	2,75,969
NA-111	1,68,550	1,38,915	3,07,465
NA-112	1,67,079	1,35,853	3,02,932
NA-113	1,63,764	1,28,509	2,92,273
NA-114	1,66,674	1,38,543	3,05,217
Total	**8,13,556**	**6,70,300**	**14,83,856**



Source; District Profile

1.5 Health and Education

➢ *Health facilities in the district are as under.*

S #	Facilities	Numbers
1	DHQ Hospitals	02
2	THQ Hospitals	02
3	T.B. Hospitals/Clinics	02
4	Rural Health Centres	08
5	Basic Health Units	88
6	Government Rural Dispensaries	02
7	MCH Centres (Govt. + ZC/MC)	14
8	Sub Health Centres	15
9	Zila Council Dispensaries	23

Source: District Health Profile from the EDO Health Office

➢ *Overall Education Status in the District*

S #	Description	Status
1	Literacy Ratio	58.9%
2	Educational Institutions	3,321
3	Total Enrollment	479,820
3.1	Males	279,187
3.2	Females	200,633

1.6 Economy

Labor Force	528,000
Economically Active Population	21.2%
Unemployment Rate	17.6%

1.6.1 Industry

District Sialkot is traditionally a centre of sports goods, surgical instruments, leather goods/garments, cutlery and musical instruments as it has number of manufacturning houses and industries. There are also various types of plastic- and metal-based industries. In view of the existing industries, there exists a good scope for material testing laboratories, forging, electroplating units, hospital furniture, disposable syringes, hospital gloves, steel furniture, cast iron pipe, steel pipes/tubes, galvanized iron pipe, industrial gloves, and special thread for sports goods industries. The goods are exported to Europe, Amercia, Africa and many other overseas markets.

1.6.2 Agriculture

Majority of the popluation in Sialkot District depends on agriculture and the major crops of district Sialkot are wheat, rice and sugercane. Their average annual production over the period 1998-2001 was 453,242,6 and 11 thousand metric tons, respectively. A variety of vegetables are also grown in the district.

➢ Cropping pattern

There are two seasons called *Rabi* and *Khareef*. Wheat, rice and sugercane are the main crops of the district. Study of cropping patterns indicates an increasing stress on food

1 Winter Crops
2 Summer Crops

crops mainly wheat, rice and cotton the cash crop. The rice from District Sialkot covers the major portion of the Pakistan.

- Irrigation

The source of Upper Chanab Canal and Marala Ravi Link Canal is Marala Headworks. It is located in the north-west of the Sialkot District. Upper Chanab Canal irrigates Kharif crops of Daska Tehsil, Marala Ravi Link Canal irrigates part of Sialkot, Pasrur and Daska Tehsils. Rice is in abundance in canal fed areas and is of expellant irrigation from well is carried on throughout the district wherever water can be found except in the Bajwat, Doshhhi and riverine circles where wells are hardly necessary. In the Aik and Charhari circles, constant supply of water is found everywhere. Irrigation from the Degh consists mainly of over spill, but in the lower reaches, lift by Jallars is some times employed.

- Livestock

The population of cattle, buffaloes, sheep and goats was 195, 471, 42 and 137 thousand heads respectively. For poultry, there were 954 broiler, 134 layer and 9 breeding poultry farms, having a rearing capacity of 11,150, 747 and 63 thousand birds respectively. The annual availability of hides and skins is estimated at 536 thousand pieces. In the district of Sialkot there are 92 tanneries, 244 leather garments/products manufacturing units, and more than 900 leather sports goods manufacturing units. There exists a scope for dairy farms, animal/poultry feed and cattle/sheep/goat fattening farms.

Disaster Risks and Hazards Volunerablity in the District

2.1 Hazards Vulnerability

A hazard is defined as the potential occurrence of dangerous phenomena, in a specific time period and geographic area, of a natural phenomenon that may adversely affect human life, property or activity to the extent of causing a disaster. A hazard can be related to numerous causes such as rising water levels, prolonged dry periods, high winds and so on. Methods of predicting various hazards and the likelihood and frequency of occurrence vary widely by type of hazard.

Vulnerability is relatively lack of capacity of a person or social group to anticipate, cope with, resist, and recover from the impact of a hazard. Vulnerability has two components; exposure to hazards (i.e. drought, earthquake, etc.) and difficulty in coping with and recovering from them (due to lack of resources). Vulnerability is related not only to physical factors, but also to a range of social, economic, cultural and political factors. Since human vulnerability is inversely related to the concept of human capacity, structural or physical vulnerability is the extent to which a structure or service is likely to be damaged or disrupted by a hazard event. A building is said to be vulnerable to earthquake tremors if its construction lacks elements which would resist the effects of such tremors.

The concept of hazard, vulnerability, and risk are dynamically related. The relationship of these elements can be expressed as a simple formula which illustrates the concept that the greater the potential occurrence of a hazard is the more vulnerable a population, than the greater the risk. It is also important to note that human vulnerability to disaster is inversely related to human capacity to withstand the effects of disasters. Disasters occur when natural or technological hazards have an impact on human beings and their environment. Those who have more resources both economic as well as social, often have greater capacity to withstand the effects of a hazard than the poorer members of a society. Rapid population growth, urban or mass migration, inequitable patterns of land ownership, lack of education and awareness, and subsistence agriculture or marginal lands lead to vulnerable conditions such as unsafe sitting of buildings and settlements, unsafe homes, deforestation, malnutrition, unemployment, underemployment, and illiteracy.

2.2 District Hazards Priorities

As per data available with Government officials and the consultative process with different district stakeholders identified the following hazards as the most likely to affect the district Sialkot:

S. #	Hazards	Priority		
		High	Medium	Low
1	Flood	■		
2	Environmental Hazards	■		
3	Road Accidents		■	
4	War (Cross border shelling)		■	
5	Epidemics			■
6	Droughts			■

ANNEX 4, Hazards Vulnerability in Union Council

2.2.1 Flood

When rivers overflow their banks they are in flood and cause damage to property and crops. Floods are common and costly natural disasters. Every year Sialkot District has to face the onslaught of flood causing devastation and disruption of normal life activity. During the peak flood season, day-to-day pattern of life is suddenly disrupted and a large number of people plunge into helplessness and sufferings. In this district, the situation sometimes aggravates due to excessive rains, flash floods in 'Nullahs' and high flood in rivers. Three rivers i.e. Chenab, Jammu Tawi and Munaawar Tawi threaten Bajwat in the north. The area in the south of Marala Headworks including some villages of Sambrial is affected by the down-stream discharge of River Chenab. Pasrur Tehsil is mainly hit by flood in Deg Nullah. The influence of river basins, the canal irrigation network and interrupted drainage system are some of the major reasons of flooding in Pakistan. Sialkot district is itself threatened by the flood in Aik & Bhed Nullahs

- Previous Flood Experience

Sialkot being situated in hazard prone region is exposed to many risks and uncertainties that can affect both life and property. Among these risks flood is the major calamities. It's difficult to quantify effect of water stresses on all activities therefore a descriptive approach was used to interpret flood in district flood system of Sialkot.

Due to the twin onslaught of rivers and Nullahs, aggravated with intensive rains, Sialkot District has faced the disaster of flood many a times over the past years.

a) Flood of 1957 caused extensive devastation.
b) In 1975 around 1054 villages were affected and an area of 95,578 acres was devastated.
c) The floods of 1973 affected 672 villages.
d) In 1983, Hajipura Band on Aik Nullah got breached with flood directly hitting city of Sialkot.
e) In 1985, the district had to bear unprecedented flood, when river Chenab at Marala reached the mark of 2,74,130 Cs, Aik at Ura up to 25000Cs, whereas Nullah Deg rose upto 75000 Cs.
f) Similarly during the flood of 1988, Chenab River at Marala reached above 40,000 Cs to 12000 Cs. Respectively. The floods affected and damaged the roads network around Sialkot city, and Daska town was inundated with water 4 feet deep.
g) Floods affected district Sialkot in the year 2005, flood water on the Indian side of the border in Chenab River contributed to flooding in areas in the Punjab on the Pakistan side. The flooding led to a state of emergency being declared in Sialkot, Gujrat, Mandi Bahauddin, Jhang and Chiniot Data about loss of lives and property is not available about this incident.
h) During monsoon 2006, in July & September some parts of the district were in flood as at Hanjili bridge the main stream shifted completely to the left bund.

S. #	Hazards	Priority		
		High	Medium	Low
1	1957			
2	1973			
3	1975			
4	1983			
5	1985			
6	1988			
7	1993			
8	2005			
9	2006			

Previously floods were studied as a hydrological phenomenon and structural and non-structural measures were adopted to deal with this phenomenon. But now the well being of the people of the flood prone areas, their economic growth, and the social urgency for alleviating poverty prevailing in these flood affected areas are the overriding concerns. Adequate attention needs to be paid to these concerns from both national and regional perspectives. The regional approach is of particular significance as activities undertaken in one country may affect, positively or negatively, the extent floods in the other regional countries, particularly the downstream ones.

It is necessary to make full use of the experiences gained from flood management activities in the regional information sharing, and working together to develop approaches and methods to address pertinent floods management issues, nationally and regionally, in open and trusting atmosphere.

- Flood Prone Areas in the District

i. Sialkot Tehsil

The whole of Bajwat area and areas falling south of Head Marala between River Chenab and UCC and villages situated on both sides of Nullah Palkhu from Gohadpur to Uggoki face the threat of the flood. Area falling between Sialkot-Eminabad and Sialkot-Ugoki Roads affected by the flood is approximately 30,000 acres.

a) At the point where River Chenab is joined by River Jammu Tawi, it overflows its banks affecting villages of Sikka, Bella, Gangwal, Papeen, Wadran Bella etc.

b) Nadala enclave where River Chenab and Munawar Tawi converge, many villages including Nadala, Machola, Bhak lial, Hial Minhasan, Simbli Rai, Salepur, Bhatwal, Maheel, Jhumian Ballalan, Ikramabad, Khoonjpur, Beli and Rasalpur are washed away.

ii. Tehsil Daska

Areas between River Chenab and UCC and low-laying area on the eastern side of Marala Ravi links gets flooded due to stoppage of water by high embankment of Marala Ravi Link. A total of about 39,100 acres are affected.

a) At village Uddowar and Pandorian, water is stopped due to non-existence of siphons. This water accumulates mainly due to rains.

iii. Tehsil Sambrial

a) At Pasia and Umarkay, bank of BRBD blocks the water, which gradually accumulates and inundates vast area. One of the existing siphons has been plugged on technical grounds while the other is working.

b) Overflow in Nullah Palkhu and river Chenab inundates majra Kalan, Majra Khurd , Kaulokey, Umerkey, Thatha Moosa, Kartapur, Pandhir, Hussain Pur, Pir Kot, Duburji Chanda Singh, Kishan Garh, Mast Garh, Kot Dina, Kot Malian, Kot Inayat Sahianwala, etc villages in Tehsil Sambrial.

iv. Pasrur Tehsil

Area affected in Pasrur Tehsil spreads over both sides of Deg Nullah as also some areas on eastern side of M.R. Link, Tolling about 4940 acres. *(Source District Flood Controller)*

a) Villages situated in bed and on bank of Deg Nullah are usually affected. They include Khalil Pur, Kishanpur, Kot Virk, Haft Hanjlies, Kang, Kassowal, Bagh, Begampur, Bhikhikay, mian Cheema and Makhanpur.

b) Mohallah Kot Kuba, Grain Market, Mohallah Bahadur Pura and normal School in Pasrur city.

c) Ban Bajwa and Adamkey Nagra near M.R. Link are affected where canal had to be cut in the past in order to save village inhabitants.

➢ Communication Infrastructure likely to be affected;

The following roads and railway lines etc. are affected by floods:-

a. Roads

1. Sialkot-Daska Road by Nullah Aik, at Haji Pura.
2. Sialkot-Eminabad Road by Nullah Aik, near Behari Colony
3. Sialkot-Pasrur Road by Nullah Aik near Bhieko Chhor.
4. Sialkot-Ugoki Road by Nullah Aik, near Ugokil
5. Gondal-Chaprar Road by Tawi near Chaprar
6. Saidpur-Phuklian Road by Nullah Deg, near Chak Khoja.
7. Pasrur-Chawinda Road by Hassri & Deg Nullahs near Lappay wali Mattike.
8. Pasrur-Daska Road by Hassri & Deg Nullahs near Kotli Bawa Faqir Chand.

b. Railway lines

1. Railway track between Sialkot & Gunna Kalan stations Jodhay Wali.
2. Railway track between Alhar Chawinda stations Chawinda.
3. Railway track between Chawinda and Pasrur stations Malopatial.

(Source; District Flood Plan 2006, by District Flood Controller)

The flood period normally starts form 1st July and continues up to 2nd week of October. However, requisite preparation starts from the month of June and extends up to the month of October, Strenuous efforts are made to mobilize all human and material resources to preempt disaster situation and carry out relief work in an organized manner. For this purpose, a comprehensive Flood Disaster & Relief Plan has been chalked out to save and protect the life and property of the people from flood.

2.2.2 Environmental Hazards

Modern era of advancement, at one hand, has discovered new perspectives regarding totally new concept of life but at the other hand, the rapid industrialization and rising population has caused serious threats to the earth and environment. Poisonous industrial and non-industrial waste is a real danger to the global environment, while mismanagement regarding environment is deteriorating. In developing countries like Pakistan, although the problem is getting attention but still majority of the people is not aware of the fear and threats.

- A large number of industries discharge deadly and toxic waste into storm-drains, open Nullahs. These include leather tanning units, pharmaceuticals, petrochemicals, refineries, chemical, textile, paper and pulp, engineering works and thermal power plants. The natural water courses in different cities have become a putrid and toxic gutter due to discharge of effluents.
- Solid waste also finds its way into the water system. The chemical analysis reveals that there are traces of heavy metals such as chromium and nickel in the vegetable samples.
- Consequently, it is responsible for the many water borne diseases that plague the country and account for 60% of infant deaths.
- The industrial waste is also used to irrigate some vegetable and fruit farms. These fruit and vegetables show a presence of metals and other toxins. A two phased study suggests that water in Sialkot district has the following.

Phase I	Phase II
Bacterial contamination (40), odour, sodium (10), sulfate (10) & TDS (10)	Bacterial contamination (40), arsenic (10%), Iron (30), odour, hardness (10), & TDS (10)

Source; http: / /www.ictp.com.pk / index.htm

- Sewage: The discharge of sewage and contaminated water in rivers and water bodies not only affects marine production, use of such water for agriculture results in the contamination of the food chain.
- In Pakistan, sewage water is re-channeled to irrigate crops, which contaminates them with pathogens. As a result 50% of the crops are contaminated. Groundwater may also be contaminated by untreated sewage.
- Water borne diseases are the largest killers in the country and health problems resulting from polluted water cost a large amount financial resources.

➢ Tanneries

Tanneries in "Sialkot Cluster" are located in both cluster formation and individual and tanning units. Major sub-clusters are located along "Wazirabad-Samberyal road", "Malkay Kalan, Head Marala road", "Pul Aik, Hajipura Lahore-Daska road" and "Chiti Sheikhan". Whereas individual tanning units have been established along "Defense road", "Pasrur road", "Nakapura", "Sadpure Gondal road" and "Pakikotli, Lahore-Daska road".

With 117 operational tanning units, Sialkot is the second largest tanning cluster of Punjab after Kasur-Lahore. Out of total 117 tannery units, 60 (51%) fall under the

category of medium units, whereas 53 units (45%) are small tanneries. Remaining four units are large tannery establishments, which generally process wet blue to finished leather and leather garments. They create some of the following hazards:

- Risk Management Strategies for Chemical and Industrial Accidents

Technological hazards can be reduced by improving safety standards in plant and equipment design, by anticipating possible hazards in plant design, by developing safe equipment design and operating procedures, by safe and regulated disposal of hazardous materials, and through proper preparedness planning. In addiction risk reduction strategies include using fire-resistant materials, building fire barriers or installing devices to extract smoke, improving detectors and warning systems, engaging in preparedness planning by improving fire fighting and population dispersal capabilities, and emergency relief and evacuation planning for plant employees and nearby settlements. In addiction, on-site and off-site safety plans should be initiated and drills should be conducted in conjunction with local fire departments and other civil authorities. Additionally, display of emergency related telephone numbers like health, fire brigade, Punjab emergency service (Rescue 1122), Civil Defense, Bomb Disposals (Awareness) must be chalked out at all important walls and places. The staff / workers must know to call the emergency numbers in emergency situations. Emergency training is must for all workers / labors working in factories and industries where the accidents are prone to happen.

The effects of a technological disaster may be reduced by providing accurate inventories and maps of storage locations of toxic/hazardous substances and their characteristics to those responding to technological disasters. An important feature of hazard mapping is the determination of possible zones and intensity of contamination. This requires knowledge of the nature of the chemicals and may include a review of historical accident records. In addition, steps taken to limit or reduce the probability of occurrence of a technological disaster. *(Details refer Annex 8)*

- Risk Management Strategies for Gas Leakage and Petrol Pump Fire

The CNG and Petrol pumps must be away from residential areas. These cause heavy loss of money and human lives when it is on fire. Safety and precautionary measures by the owners and management of gas and petrol stations are necessary. The training of all workers / labors is also necessary. The emergency numbers must be chalked out on prominent places.

Additionally, the businesses related to industrial chemicals, pesticides, insecticides ides, fireworks, and gas cylinders must also be away from residential areas. The registration rules must be applied to all such businesses.

2.2.3 Vehicular and Transport Accidents

Vehicular accidents are a regular occurrence in Sialkot. Every year transportation accidents in roads and railway lead to deaths, injuries (temporary & permanent disability) and loss of property. Moreover addition of new airport may cause more traffic flow causing threat of more accidents. However, these are considered as manageable emergency events and not disasters, according to the police. The district

has an emergency reporting system where a dedicated telephone number (115) and a control room manned 24-hours by the police is available to receive all emergency related calls from the district. Due to the accidents death and injury, temporary road closures, may happen anytime of the day. It has also been reported during the consultation process that that the road accidents 7-10 casualties and 12-14 severe injuries, is the common practice in the district. Information validated by the District Police office record

- Capacity

  The district is equipped with private and public ambulances that can perform first-aid and pre-hospital medical services to accident victims. Existing police network; available government hospitals to treat accident victims; ambulance services are available but need to be upgraded

- Vulnerability

  Deteriorating road quality especially after the flood and rainy season; lack of preventive driving skills among drivers and enforcement of vehicle quality standards (example: seatbelts, regular maintenance)

2.2.4 War

District Sialkot due to its strategic importance has always been prone in case of war. Its border joins with Indian held Kashmir and it has faced destruction during wars with India in 1965 & 1971. Though in future, disaster from war is almost zero but even then it is a possible threat.

2.2.5 Epidemics / Communicable diseases

Despite of modern scientific advancement in medical field Epidemics / Communicable diseases are a major threat and it is observed that these are more frequent now-a-days. These can occur anywhere, anytime with large impact, can occur unexpectedly. Frequent mobility and interaction of people from diverse areas and backgrounds increase vulnerability to communicable diseases such as TB, Asthma, HIV/AIDS and STDS. Keeping in view specific nature of district Sialkot which is characterized with heavily army personnel presence, industrial workers and unplanned disposal of chemical wastes of industries communicable diseases, epidemics and STDs are high risk.

This district like others in Pakistan has faced and would continue to face water- borne diseases such as cholera, diarrhea, Respiratory Tract Infections (RTIs), dengue virus, malaria, hepatitis B & C and skin diseases. The district Health Department has also prepared a disaster management plan to deal disastrous situation in the district through its own resources by integrating with other district departments.

- Impact

  Increase in deaths of human beings and live stock, birds, economic loss due to death and disability, loss of employment, brain drain due to deaths or migration, social problems to the remaining family.

Urgent medical services, sufficient food and water; disinfection; containment; quarantine / specialized medical services are some of the humanitarian needs.

2.2.6 Drought

A drought is a period of abnormally dry weather when the average rainfall for a region drops far below the normal amount, for a long time. Drought originates from a deficiency of precipitation over an extended period of time, usually a season or more. This deficiency results in a water shortage for some livelihood activity to a community group, or environmental sector. The severity of the drought depends upon the degree of moisture deficiency and the duration and the size of the affected area.

Drought impacts can be economic such as rise in food price, social for instance migration to other areas, health related such as low in-take causing malnutrition resulting in diseases / epidemics and environmental like destruction of forests by fire breakouts and due to lack of water. Lack of rain and increased temperatures cause burden on both rural agricultural and urban metropolitan areas. Unusual periods of rain-free weeks can spread panic and shrivel crops. Wells, lakes, and streams begin to dry up. People are forced to stop washing cars, cease watering lawns, and employ other water saving measures. Plants and farm crops eventually wither and then die. Animals suffer and may even die because of extreme drought. Forest and grass fires occur more frequently and can spread quickly if dry, arid conditions continue. Absence of moisture and plant life reduction can lead to increased wind erosion. More weeks and months without sufficient rainfall coupled with wind and sunshine can begin to turn a forest into a desert.

The previous climate history of Tehsil Pasrur reflects lower levels of droughts as compared to other three tehsils of the district Sialkot. However, documented evidence is not available for the drought situation. This fact was revealed during the meeting with KOSHISH Welfare Society (NGO) in Tehsil Pasrur. According to them the drought actually falls in a dry region with normally very little rain, which further affects the fodder supplies for livestock.

Although rain shortfall is uncontrollable, drought and desertification can be reduced by improved land and water management practices, such as water conservation practices, infiltration dams, irrigation, forest management and range management (control of land use and animal grazing patterns).

2.3 Crises Situation / Sabotage

Crisis situations are brought about by unpredictable incidents that degenerate to uncontrollable proportions causing chaos and mayhem. Such situation may be brought by incidents such as:

- Bomb blast
- Riots and demonstrations
- Sectarian clashes
- Terrorism / suicide bombing
- Target killing

- Gas leakage / fire
- Road and Industrial Accidents

Such situation may arise any time in the district. To meet such situation a crises management plan by different district departments have been prepared. Police, Civil Defense and health department has always been in such situation to respond such crises.

2.4 Dynamic Pressure that leads to Vulnerability

There are several root causes of increasing vulnerability to various hazards that are;

- Lack of institutional capacity to deal with the disaster risk management initiatives.
- Lack of structure and resources.
- Lack of training, appropriate skills and awareness on disaster risk management both to the community and public servants.
- Environmental degradation, industrialization, air pollution increases hazards risk to diseases.
- Poor social protection.
- Inadequate early warning systems.
- Lack of preparedness and contingency measure for disaster risk management.
- Poor construction materials for settlements (houses, structures, buildings, schools, hospital and bridges).
- Settlements on hazards prone locations.

2.5 Risk Management in the District

- Relief Sector & Sub Sectors

The relief sectors and sub-sectors are mostly situated at higher safer places near flood affected places and are utilized for storage of relief goods as well as to serve as shelter for the flood affected people. These sites / places are connected with Kacha & Paka roads and are easily accessible. If need to be, marooned people and their belongings are shifted to the safer places specifically ear-marked at sub-sector / sector level.

Keeping in view the gravity of the situation, the sectors and sub-sectors have been classified into 'A', 'B' and 'C' (in a decreasing order). The degree of responsibility and the level of officers have correspondingly been fixed. The entire district has been divided into 17 sectors and 34 sub-sectors to attend to the state of emergency caused by floods/rains during the flood season. The staff of different departments like Food, Livestock Dairy Development, Health Department and Revenue etc, have effectively been attached to sector/sub-sector officers to overcome every emergency.

In order to effectively provide relief and rescue each Sector Officer has been given a mobile team of cattle-vaccinators and for human-beings, who are at his sole disposal. This is in addition to the regular vaccination/inoculation programs of livestock and health department. For Sialkot city an additional mobile team consisting of a Deputy District Officers (Registration-I) / FRO, Tehsil Municipal Officer, Tehsil Officer (I & S), Fire Brigade and sweepers will be available to drain out the water accumulated as a result of heavy rains and spills of Aik Nullah

- District Flood Control Center

District Flood Control Center is operational with effect from 15th June, 2006. It is operational round the clock. Information regarding discharge position of Rivers / Nullahs is received by the Center through wireless, which is established at two points in the District. i.e. Police Wireless Control and office of the District Office (revenue) during normal period. Discharge position is communicated and received twice a day. However, during abnormal period frequency of information about the discharge position is increased. Deputy District Officer (Registration-1) nominated by District Coordination Officer would act as Flood Relief Officer. The wireless sets are fitted at the following places:

1. Chenab River Head Marala
2. Aik Nullah Ura

The telephone number of District Flood Control Center is 9250466 and Emergency telephone of Police lines, Sialkot is 9250338.

- District Crises Management Cell

Upon the instruction of the Government of Punjab the District Government, Sialkot has constituted the District Crises Management Cell and Tehsil Crises Management team as under;

- District Officer (Coordination)
- District Officer (Health)
- TMOs of the District
- District Officer Civil Defense
- Deputy District Officer (Revenue)

Telephone and fax numbers of the District Crises Management Cell are as follows;

Telephone: 052-9250456
Fax: 052-9250453

- Warning System

The flood control center receives direct warning from the Provincial Disaster Control Lahore through its own sources. The office at Sialkot processes the received information and transmits it to the Tehsil to which it relates. For this purpose, as already stated, the Deputy District Officer (Revenue) concerned will be equipped with a Telephone & Wireless set. On receipt of warning, they will convey it to the local population through the revenue staff. The local population shall be warned about the approaching flood by the beat of drum and use of loud speakers of mosques. A reasonable period shall be given to the people to get ready to reach safer places. Transfer of population shall be done through mobilization of all possible transport at the disposal of each Deputy District Officer (Revenue) who shall ensure that proper and timely warning is conveyed to the people in the Tehsil.

2.6 Equipment and Machinery available in the District

Detail ANNEX 10

2.7 Actions required to be considered by District Authorities

- Establishment of the DDMA and relevant committees at District level as per the National Disaster Management Ordinance 2006.
- Clarifications of roles and responsibilities of all District Departments and other stakeholders of their involvement pre, during and post disaster involvement and dissemination.
- District Emergency Operation Center fully staffed and resourced.
- District Disaster Risk Management Plan available, updated regularly and disseminated to all concerned.
- District Nazim, DCO, Civil Defense and relevant staff of DDMA must be trained on Disaster / Emergency Management.
- Roles and Function of Lower level (Tehsil, Union Council and Village) during emergencies clarified.
- The command, coordination and organization structure along with efficient trained personnel.
- Effective notification and communication facilities.
- Proper training of concerned personnel.
- Regular mock drill / rehearsal.
- Regular review and updating of plan.
- Report all significant developments to the DDMA, PDMA, NDMA and concerned.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District Disaster Risk Management

3.1 Strategies for Disaster Risk Management

3.1.1 Institutional Mechanism for Disaster Risk Mechanism

The Hazard and Vulnerability Analysis shows that the District's rural areas and two tehsils are vulnerable to flood disasters in different degrees. In view of this, the plans for mitigation and preparedness will have to be evolved while the implementation is to be monitored locally at the Union Council level to reduce the impact of the disasters. A community based monitoring scheme will be more effective but this has to be established in relation to the development of capacities of the Union and village.

The above mentioned steps require formulation of proper mechanism under which establishment of District Disaster Management Authority (DDMA) comprising representatives from all government's respective departments, civil society groups and community groups, corporate sector / individuals is necessary. The DDMA is such a framework which aims to provide policy & procedural guidelines and defines roles and responsibilities of the key stakeholders. Broadly speaking, all stakeholders are expected to execute the functions mentioned below:

- Incorporate risk assessment in the planning and design phases of all new infrastructures.
- Assess sectoral susceptibility of people, infrastructure, assets and services.
- Develop disaster risk management plans.
- Incorporate vulnerability reduction measures for future safety.
- Develop technical capacities of the departments/sectors to implement disaster risk management strategies.
- Deal out resources for disaster risk management.
- Conduct post disaster damage and recovery needs assessment.
- Organize emergency response as per the mandate of the department.
- Organize recovery and rehabilitation as per the mandate.

3.1.2 Hazard and Vulnerability Assessment

There is information available with Different Departments on status of flood affected communities and persons as well on the Rivers and Nullahs. However, information on hazard risk, specific to vulnerable areas and at various levels (tehsils, union council, and village) is still limited. Specifically, information to support planning, identifying priorities and making decisions for risk reduction is not centrally available.

Hazard Vulnerability Capacity Assessment (HVCA) needs to be undertaken at Village, Union Council, Tehsil and District levels. To facilitate this, there is a need to develop a mechanism and system for collecting available information and continuous monitoring of hazard risks and vulnerabilities. Various departments regularly collect data on departmental concerns (i.e. Agriculture department on agricultural statistics; Revenue department on land and taxes; etc.). These existing systems need to be

reviewed to incorporate hazard and disaster risk analysis. Instruments to be developed would enable decision makers at all levels to take effective decisions to develop risk reduction policies, strategies and programmes.

Village, union council and tehsil level maps should include analysis on vulnerability of settlements, housing stock, important infrastructure and environmental resources. They will indicate location of key settlements in hazard-prone areas. The analysis will describe the types of existing housing stock in hazard-prone areas, and the potential of damage to various housing categories. The vulnerability analysis will identify key infrastructure and environmental resources in each local area that are prone to damage and loss from prevalent hazards. Vulnerabilities of various social groups in hazard prone areas will also be analyzed.

The HVCA will inform development of Damage, Needs Capacity Assessment (DNCA) during actual disasters. There will be separate DNCA formats and procedures at various tiers of the government.

A central database should be developed and located at the District Emergency Operations Center (DEOC). The database will be made available to all stakeholders for access for some of the following purposes:

- Review of existing data gathering methods and tools of various departments to include disaster risk analysis.
- Develop HVCA tools and assessment methodologies.
- Iidentify HVCA facilitators from the district personnel and from priority Tehsil, UCs and villages as well as from NGOs/CBOs.
- Conduct 1st Facilitator's Training of HVCA facilitators.
- Collation of HVCAs.
- Develop Damage Needs Capacity Assessment forms/ formats/ questionnaires.
- Set-up, review, up grade /update database of district.

3.1.3 Priority Areas Work mechanism for Disaster Risk Management

The priority areas provide broad descriptions of key strategies to achieve the overall goal of reducing disaster risk and vulnerability. DDRMP refers to the National Disaster Management Framework and has adopted a set of these component objectives to support the District Government and to enhance its capacity at all levels. After having consultative process through the regular meetings with different district stakeholders, following strategies have been planned with detailed activities against the priority areas for reducing the risk and vulnerability in the district.

Priority	Activities	Lead Agency /Responsibility	Support Agency /Department	1st Year	2nd Year	Resource Required
Institutional Management Arrangements	Formation of DDMA in Sialkot	District Nazim; DCO	Planning Department and DO Coordination	✓		planning and coordination manuals
	Consultation on NDMO and the DDMA set-up	District Nazim; DCO Sialkot	PDMA and DO Coordination	✓		copies of NDMO

Priority	Activities	Lead Agency /Responsibility	Support Agency /Department	1st Year	2nd Year	Resource Required
	DDMA orientation sessions for each District Line Department	DCO	DOC, EDO and DDOs of concerned departments	✓		funds for planning workshops and meetings various materials and equipment for training sessions District Emergency Operations Center equipped with telephone (with email services) DEOC 2 computer/printer set for documentation, tables, bulletin and monitoring boards 1 VHF base station / 1 VHF repeater / one VHF handheld for every key staff means of transport and heavy equipment like bulldozers during emergency operations
	Seminars for District Assembly about the DDMA	District Nazim, District Naib Nazim	DCO and Finance & Planning Department	✓		
	workshops on DRM structure, roles and responsibilities at Tehsils, UCs and village levels	F & P Department and DO Coordination	Selected TMOs and UC officials, NGOs	✓		
	Establish and resource a functional District Emergency Operations Center (DEOC).		District Nazim, DCO, concerned line departments	✓	✓	
	Support the Tehsil, Union Council and Village Administration in developing their own Disaster Risk Management plans.		District Nazim, DCO, TMAs, UC council and Village Council	✓	✓	
Hazard and Vulnerability Assessment	Review of existing data gathering methods and tools of various departments to include Disaster Risk Analysis	Revenue Department	DCO, Community Development, TMAs, NGOs, CBOs and CCBs	✓		assessment format and protocols, photocopy machine, computer sets and cameras (digital, still and video) transport and communication facilities during field operations funds for training sessions various materials and equipment for training sessions
	Conduct 1st Facilitator's Training of HVCA facilitators	Revenue Department / DOC	DCO, Community Development, TMAs, NGOs, CBOs	✓		
	Set-up database of district	Revenue Department / DOC Facilitators	Community Development, TMAs, NGOs, CBOs, DEOC	✓		
	Update district database	Revenue Department / DOC / HVCA Facilitators	Community Development, TMAs, NGOs, CBOs, DEOC	✓	✓	
Training, Education and Awareness	Identify a Pool of Trainers of the District coming from Government, NGO and Technical Agencies	District Officer Coordination	All line departments, NGOs, NCHD	✓		transport facilities funds for training activities various materials and equipment for training sessions trainers and experts
	Resource inventory of training materials and curricula already in circulation	District Officer Coordination, Trainers Pool	As appropriate: line departments, NGOs; technical agencies	✓		
	Develop Training Needs Assessment tool/s	District Officer Coordination, Trainers Pool	As appropriate: line departments, NGOs; technical agencies	✓		

Priority	Activities	Lead Agency /Responsibility	Support Agency /Department	1st Year	2nd Year	Resource Required
	TOT for Pool of Trainers	District Officer Coordination, Trainers Pool	As appropriate: line departments, NGOs; technical agencies	✓	✓	
	Design and implementation of Village Awareness-Raising Campaigns	District Officer Coordination, Trainers Pool	DCO, EDOs, Dos, TMAs, UCs, Village leaders, NGOs, technical agencies	✓	✓	
	Review of training curricula and materials	District Officer Coordination, Trainers Pool	DCO, EDOs, Dos, TMAs, UCs, Village leaders, NGOs, technical agencies	✓	✓	
Community and Local Risk Reduction Programming	Identifying and appointment of focal persons at Tehsil, union council and village levels	DCO, Tehsil Nazim, UC Nazim	TMAs, UCs, NGOs, Community Development and Civil Defense	✓		Transport facilities emergency supplies equipped and trained search and rescue unit communication facilities to the health care providers. funds for purchase of relief items warehousing facilities and arrangements camp security arrangements various materials and equipment for training sessions trainers and experts
	Develop Local Planning Framework	Planning Department, Focal Persons,	Selected line agencies, NGOs, TMAs, UCs, DCO	✓	✓	
	Resource generation (funds/trainers): (example: trainers from within and outside government)	Planning & Finance EDO	District Nazim, DCO	✓	✓	
	Develop school-based disaster awareness and preparedness training modules and materials	Focal persons, Education Department	Local teachers, NGOs, PTAs	✓	✓	
	Conduct of school based disaster awareness and preparedness seminars and activities	Focal persons, Education Department, Teachers and NGOs	Media, IT department, education department, NGOs, PTAs	✓	✓	
	replication of local DRM planning in other priority Tehsils in the district	Focal Persons, Planning Department, NGOs	DOC, Tehsil Nazim, UC Nazim, Village leaders, NGOs/CBOs		✓	
Multi-hazard Early Warning System	Identifying and appointment of focal persons at Tehsil, union council and village levels for early warning	Information Dept, DCO, District Nazim,	Tehsil Nazim, UC Nazim, Line Agencies, NGOs, technical agencies, DPO	✓		Transport facilities emergency supplies equipped and trained Search and rescue unit funds for purchase of EW equipment communication facilities during field operations various materials and equipment for training sessions trainers and EW experts functional Emergency Operations Center
	Resource inventory of available communications equipment	IT Dept., Focal Persons	Line agencies, NGOs, UN, other private groups, DPO	✓		
	Develop Standard Operating Procedures (SOPs) on the use and maintenance of communication equipment.	IT Dept., Focal Persons	Line agencies, NGOs, UN, other private groups, DCO, TMA, UCs, DPO	✓		
	Devise Early Warning System from village, union council, Tehsil and district level	IT Dept., Focal Persons	Line agencies, NGOs, UN, other private groups, DCO, TMA, UCs, DPO	✓	✓	

Priority	Activities	Lead Agency /Responsibility	Support Agency /Department	1st Year	2nd Year	Resource Required
	Establish Community EW teams priority flood-prone villages	IT Dept., Focal Persons	Line agencies, NGOs, UN, other private groups, DCO, TMA, UCs, DPO	✓	✓	
	Call media meetings to develop coordination mechanisms regarding EW	IT Dept., Focal Persons	Line agencies, NGOs, UN, other private groups, DCO, TMA, UCs, DPO	✓	✓	
	Media Training on EWS developed and conducted	IT Dept., Focal Persons	Line agencies, NGOs, UN, other private groups, DCO, TMA, UCs, DPO	✓	✓	
Mainstreaming Disaster Risk Reduction into Development	Workshops to develop mechanism to integrate DRR in ADP planning	Finance and Planning Dept.	DCO; Planning Department	✓	✓	funds for DRR activities and projects various materials and equipment for training sessions trainers and planning experts
	Approval of recommended mechanism	DCO, District Nazim	DDMA; DCO	✓		
	Training on DRR Integration Planning	DCO	Planning Department; DCO		✓	
	Integration Planning Workshops	EDOs of concerned departments	DDMA members, TMAs, relevant agencies		✓	


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DDMA Organizational Structure & Members

4.1 Organizational Structure and Members

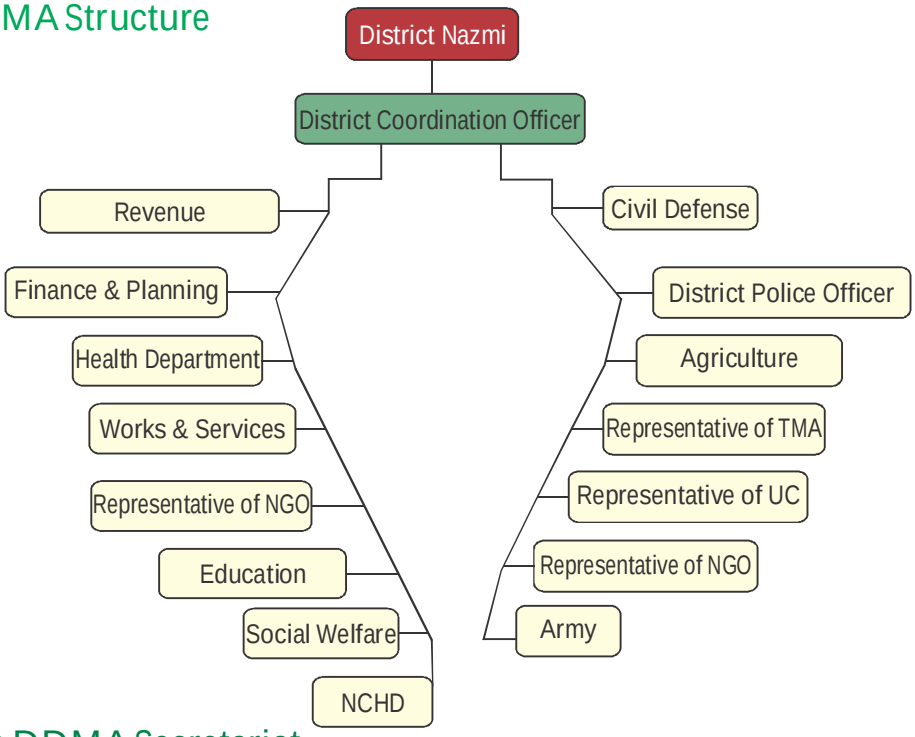
The DDMA is the focal organization and authority in the conduct and implementation of activities and actions on disaster management in Sialkot District. In the event of a disaster that shall affect any part of the District, the DDMA will be complemented by the District Administration in carrying out emergency response and relief activities in the affected areas.

During the pre-disaster stage, the DDMA is expected to undertake selected activities to make it ready for the onset of any disaster.

The District Disaster Management Authority will comprise the Nazim, District Coordination Officer (DCO), District Police Officer and the EDO Health. Where appropriate, the District Nazim can appoint other officers as members of the DDMA. They may include EDOs from the education, social welfare, community development, meteorology department, revenue department, environment and agriculture departments, Chamber of Commerce, WAPDA, Army, Red Crescent, NGOs, media, private sector, civil Defence services, or any other local stakeholders.

After consultations and meetings conducted by the district with various stakeholders, the structure of the DDMA in Sialkot will be:

4.2 DDMA Structure



4.3 The DDMA Secretariat

- A Secretariat shall be established to support the DDMA in its day-to-day activities. In district Sialkot, the Civil Defense Office under the DCO will be delegated to perform the tasks of secretariat for the DDMA.
- The Secretariat shall be composed of the District Coordination Officer, who shall

serve as the Chairperson, a District Disaster Officer as Executive Officer and a minimum of three staff who will be in-charge of three tasks / functions namely: Technical Support (training and education), Operations Group and Finance and Administrative Support.

- The number of staff, procedures and terms of reference of the Secretariat will be further developed by the DDMA.
- Development of Warning System for the communities in identified flood prone areas.
- Organization of communities and training in emergency response for hazards.
- Come up with a District map identifying actual and potential hazard prone areas in coordination with the Tehsil Administration and civil defense department, appropriate line departments and NGOs.
- Design Action Plan for emergency response that will include population, details of threatened areas, evacuation routes, campsites for temporary use, and selected areas for permanent shifting of families, livelihood assistance, and the like.
- With the police and transport offices, document and monitor transport situation to include vehicular accidents, number of dead and injured, location of accident, cause of accident, etc. and develop a trend analysis for use in development of a transport hazard reduction plan.
- Other mitigation activities are listed in the IMMEDIATE category of activities identified for implementation by the District Disaster Management Authority.

4.4 Function of DDMA

After the approval of plan, the officers and members of the DDMA shall do the following without any delay:

- Set up the office, secure equipment and design and install office systems (e.g. Disaster Management Information System) to make it functional.
- Conduct the fist inter-agency coordination meeting for familiarization with the DDMA set up and its operating system.
- Understanding of the policy requirements and operational aspects of the Disaster Management from the State, District, Tehsil, Union Council and Village levels.
- Initiate establishment of Warning Systems for the major disasters of earthquake, floods and landslides with the concerned government department and with the State Disaster Management Authority by institutionalizing cooperation with agencies and institutions involved in studies and monitoring of earthquake and other hazards. For recurring and already identified hazards, devise warning signs and signals that will immediately alert people about the risks that are involved in being in the area.
- Call the first Multi-Sectoral Meeting with NGOs, introduce the DDMA and discuss coordination points and SOPs. Regular meetings to be organized with representation of all departments & organizations.
- Assist in setting up a Municipal Corporation Control Room to function during emergencies and focus on the town center in coordination with the DEOC
- Conduct Training Needs Assessment and conduct the needed training for selected Tehsil and Union level officials and NGOs operating in the areas in Disaster Management.
- Conduct Community Based Disaster Management Training Seminars to selected persons in the most hazard-prone villages.
- The DDMA may delegate the monitoring responsibilities to any of the department.

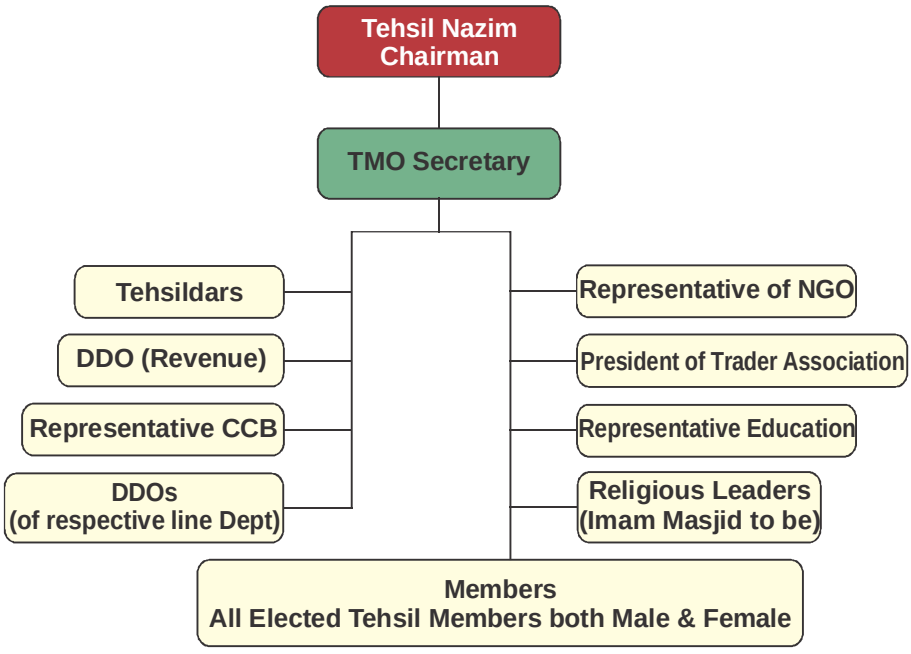
The checks and balances will be ensured.

- The DDMA will be having liaison with other districts adjacent to district Sialkot and will coordinate the activities with them if their support is required.
- The DDMA will ensure proper implementation of the plan.
- The DDMA will also be responsible to ensure just distribution of goods and relief materials; it will also ensure proper utilization of funds for the disaster victims.
- The DDMA will establish mechanism of considering the emergency exits while planning the building and proper issuance of the NOCs from the designated department and authorities. Also, the CNG stations sites and Gas cylinder plants rules and regulations need to be reviewed.
- The DDMA should make sure that Fire fighting staff in the factories and industries should be employed.
- The DDMA will make available latest equipments to deal any emergency and will delegate the responsibilities to relevant and right persons.
- The DDMA will be responsible to announce pre-cautions and occurrence of disaster officially on media.

4.5 Tehsil Disaster Management Committee

TMAs have & can play basic and vital role in organizing emergency response and relief such as damage and loss assessment and recovery needs assessment. There shall be Tehsil Disaster Management Committee (TDMC) to coordinate and implement disaster risk management activities at tehsil level. The Tehsil Nazim shall be the chairperson of the TDMC and the Tehsil Municipal Officer shall be the secretary. Members will include all elected Tehsil members, DDO Revenue, president of trade association, tehsildars, DDOS of respective line departments, religious leaders who are to be nominated and representative of CCBs and NGOs.

Specific roles and responsibilities of the TDMC and members will be further outlined by the District Authority.



The National Disaster Management Framework (NDMF) clearly elaborates Tehsil / Town administrations as frontline of disaster management where disaster activities are actually implemented. As per the NDMF the TMAs are responsible for:

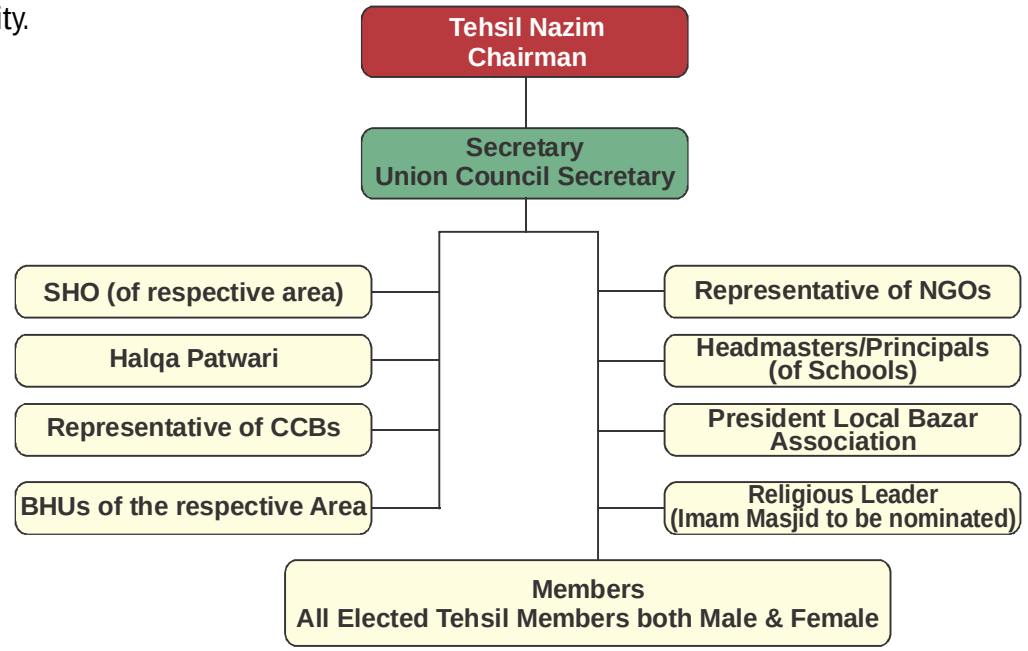
- Preparation of plans and procedures for disaster management programs in their respective locations.
- Taking operational control in the event of a disaster /emergency so as to ensure that support is provided to the victims.
- Mobilization of needed financial, technical and logistic resources for disaster management.
- Identification and mapping of all hazards in their respective location and conduct risk and vulnerability analysis.
- Establishment of civic groups for disaster reduction and relief operation.

Under LGO 2001, the TMAs is to facilitate, provide, manage, operate, maintain and improve the municipal infrastructure and services including: water supply and control and development of water sources, other than systems maintained by union and village council, sewerage, vector control, sewage treatment and disposal, storm water drainage and fire fighting.

4.6 Union Council Disaster Management Committee

Union Councils (UCs) are the lowest and most basic tier in the government structure and easily accessible by the people and can communicate governments plan at the most grassroots level. Under the LGO 2001, UC is to assist the relevant authorities during disasters and natural calamities and assist in relief activities. At union council level, a Union Council Disaster Management Committee (UDMC) will be established to coordinate and implement disaster risk management activities at UC level. The Union Council Nazim shall be the chairperson of the UDMC and the UC Secretary shall be the UDMC secretary. Members will include all elected UC members, SHO of respective area, Halqa Patwari, MOs and CMOs of RHCs and BHUs, headmaster/principal of schools, president of local market association, religious leaders who are to be nominated and representative of CCBs and NGOs.

Specific roles and responsibilities of the UDMC and members will be further defined by the District Authority.



4.7 Primary Responsibilities of the District Departments

a. Health Department

- Plan and organize emergency stations for first aid and medical care to those who suffer injuries as a consequence of disaster.
- Assist in the evacuation and hospitalization of the disaster victims.
- Institute preventive and curative measures to prevent occurrence and spread of disease.
- Establish system of high readiness.
- Establish an emergency cell (medical) to ensure centralized planning, coordination and direction in disaster situation as well as an efficiency planning and administration.
- Organize and equip medical teams to be sent to the disaster hit areas.
- Ensure communication link between hospital and DDMA.
- Coordinate with district authorities in all matters of evacuation of the victims.

b. Social Welfare and Community development

- Organize coordination of all aid giving agencies in provision of relief goods to victims.
- Assist the designated department in rescue, evacuation and relief operations.
- Manage the relief camps under the DDMA.
- Devise the criteria of victims for rehabilitation program.
- Collect public and private donations for relief of victims under the authorization of DDMA.

c. Education Department

- Make available school building near or within the areas likely to be affected by disaster to serve as emergency operation center.
- Assist in survey of damage assessment.
- Organize relief teams to support the DDMA relief distraction teams.

d. Communication and Works Department

- Supervise, direct and control flood protection of roads, bridges and buildings etc.
- Coordinate survey, investigation of the extent of damage of roads, bridges and buildings etc.
- Organize emergency repairs for restoration of public means of communication.
- Survey and inspect vulnerable sites.
- Plan and possession adequate bridging equipment near vulnerable locations.

e. Police

- Ensure law and order during emergency.
- Provide assistance in warning, rescue, relief and evacuation operations.
- Take security measures at evacuation points, in evacuated areas, in relief centers.
- Effective use of 15 information service.

f. Civil Defense

- Provision of search and rescue and evacuation services.
- Provide personnel for disaster training in rescue and relief works.
- Train the personnel in the operation of motor boats, first aid and life saving operations

g. Irrigation Department

- Supervise, direct and control flood prevention measures and bunds protection activities, such as strengthening, maintenance, repair and construction of additional embankments.
- Coordinate survey, investigations of extent of damage to bunds, embankments, canals and irrigation tube wells.
- Assist and coordinate emergency repair and subsequently restore damaged works under the control of irrigation department.
- Supervise and coordinate actions to save departmental stock, equipments.
- Complete repairs of the flood protection works in pre flood season.
- Review the plan for regulation of water supply.

h. Army

- Assist the District Administration in relief, rescue and evacuation.
- Nomination of liaison officer to the DDMA.
- Organize delivery of food to affected persons including airdrops where essential.
- Provide engineering assistance in emergency repair work on damaged protective structure and vital installations.
- Train civil / military power boat operators in case of flood disaster.
- Organize evacuation of households.

i. Pakistan Metrological Department

- Collect metrological and climatologically data.
- Timely information dissemination to DDMA and other concerned departments
- Prepare and issue daily weather and forecast report.

j. Food Department

- Ensure adequate availability of food stocks.
- Organize food supply center at locations required by the District Government.
- Shift food stocks from vulnerable zones to safer areas.

k. Finance Department

- Provide timely funds for disaster response / operations.

l. Information Department

- Disseminate information through mass media after verification to assist people.
- Proper information sharing with rural population on meeting disaster situations.

- Establish information cell in District emergency operation Center.
- Issue to the press and local TV and Radio Channel, official handouts for clarification or contradiction of any disaster news / information appearing in the media.
- Assist DDMA in regular briefings to the press / media during emergency.

m. Oil Companies

- Make available fuels, oils and lubricants at normal rates during emergency

n. Radio Buraq FM Channel 104 (District Sialkot)

- Close coordination with District Emergency Operation Center and Information Department.
- Disseminate the information about the early warning and hazard prone areas.
- Arrangement of the awareness raising program during the disaster situations.
- Special news bulletin in collaboration with the DDMA.

4.8 Tehsil and Union Council level, Activities

During disaster emergencies, the Tehsil and Union Council Administration will be involved in the delivery of the following activities within its jurisdiction:

- Send Initial Damage and Need Assessment Report to District EOC.
- Search and rescue operations in coordination with the Civil Defense and Police.
- Corpse disposal.
- Assistance to other agencies for mobility/transport of staff including rescue parties, Relief Personnel and Relief Materials.
- Communicate to the DEOC additional resources required by various control rooms.
- Establish communication links with DEOC, Union Council Disaster Management Committees (DMCs), NGO coordinating committee and Private donors.
- Issue passes and identity cards to relief personnel including the persons from NGOs operating in the affected area.
- Coordinate NGO activities through necessary support to ensure community participation by establishing coordination mechanisms among NGOs.
- Mobilizing and coordinating work of volunteers ensuring community participation.

4.9 Non-Governmental Organizations (NGOs) and Voluntary Agencies

The Non-Governmental Organizations and voluntary agencies play an important role in disaster management and provide a strong band of committed volunteers with experience in managing the disasters. Their strength lies in the choice of their manpower, the informality in operations and flexibility in procedures. These organizations enjoy a fair degree of autonomy and hence can respond to changing needs immediately.

However, in order to maintain uniformity in operations and effective co-ordination, it is desirable that they follow the standards of services (*as given in the Guidelines*), information exchange and reporting so as to enable the DEOC to have a total picture of resource availability, disbursements and requirements. NGOs therefore have been assigned specific tasks by the District Administration to undertake relief work within the overall institutional framework. As and where possible, NGOs may

also be able to improve the quality of delivery of services. In addition, CBO Committees have been operating at the community level, especially in times of emergencies like house collapses, fires, and floods. Such committees have been identified at the ward level.

Specific activities in which NGOs/Private Sector can be involved during disaster management operations are:

- Search and rescue operations
- Information dissemination
- First aid
- Disposal of dead
- Damage assessment
- Management of information centers at temporary shelters
- Mobilization and distribution of relief supplies including finances
- Manpower for community mobilization, crowd control, rumor control, traffic management
- Specialized services (psychiatric and mental health assistance)
- Management of transit camps
- Rehabilitation activities

The following agencies will be associated with relief and rehabilitation activities. Most of these agencies have the capacity to mobilize required resources and have assisted the administration in the past in managing relief and rehabilitation activities. These agencies include:

- UN Agencies
- WHO
- NCHD, Sialkot
- District Red Crescent Society
- BEDDARIE NGO Samberial
- Koshish Welfare Society, Pasrur
- SKILL NGO Sialkot
- Roshni NGO, Sialkot
- Madwah, Sialkot
- Caritas Pakistan Sialkot Region
- CCBs and CBOs at Union Councils and Village level
- Others

4.10 Community Based Activities

In partnership with NGOs already involved in risk reduction activities at the community level, the Union Councils and Village leaders should develop the Union's and Villages Disaster Management Plans based on the DEOC's Plans regarding actions during emergencies and disasters. Experiences in district shows that the relief operations to bring relief to particular communities immediately by the concerned authorities. Therefore the information mechanism systems should be devised as of ensuring the involvement of the local communities' role so that appropriate actions can be taken in time to reduce the risks and impacts of the disaster to the targeted areas

Pre, During and Post Disaster Involvement of District Departments

1. Police

Pre	During	Post
• Assign representatives for DDMA, • Participate in DDMA meetings • Information sharing regarding capacities and needs of police department regarding Disaster management • Capacity building of police department regarding Disaster management • Information dissemination through 15 helpline service to local residents • Capacity building regarding disaster • Prepare team for emergency intervention • Rescue 1122 available.	• Co-ordinate with District DEOC • Shifting the rescued/affected people to hospitals • Providing easy access to rescue and relief personnel/vehicles • Corpse disposal • Maintain law and order • Prohibits overloading goods in trucks. • Provide warning / instruction to travelers • Divert traffic on alternate routes as and when necessary. • Ensure security to workers of NGOs and INGOS who perform duties for emergency response. • Rescue 1122 available. • Provide food services.	• Cooperate with DDMA • Provide security in the safe area • Ensure security to workers of NGOs and INGOS who perform duties for rehabilitation of the victims. • Capacity building of police department regarding Disaster management • Prepare overall report of the department regarding intervention and disseminate to DDMA and other GOs / NGOs/INGOs • Development of contingency plan in the light of lesson learned

2. Revenue Department

Pre	During	Post
• Assign representatives for DDMA, and participate in meetings • Information sharing regarding capacities and needs of Revenue department regarding Disaster management • Capacity building of Revenue department regarding Disaster management • Assessment of high prone areas and estimation of possible damage and needs for recovery in case of emergency • Arrangements of financial resources (bloc grants) • Facilitation in getting tax exemptions to institutions/ NGOs /INGOs focus on disaster management	• Coordination with the DEOC • Establish relief distribution centers • Accept relief donations and relief support • Timely release of funds • Request assistance from the DEOC, as needed • Submit financial reports to the DEOC of the operations for onward circulation to all stakeholders	• Submit progress report to all relevant stakeholders • Assessment of damage of industry/business, crops and live stock and settlement of applicable taxes accordingly in coordination with industry, agriculture and irrigation departments. • Facilitation to institutions / NGOs/ INGOs which focus on rehabilitation activities. • Capacity building of Revenue department regarding Disaster management

3. Social Welfare and Community Development

Pre	During	Post
• Capacity building of Social Welfare department regarding Disaster management • Coordination of all NGOs and civil society organization working for disaster preparedness • Empower the extremely vulnerable people emphasizing women and children through public awareness involving respective departments for various fields such as Education, health etc. • Capacity building of CCBs, CBOs and other community groups • Establish a pre-disaster data base system. • Enlisting and linkages building with institutions / NGOs/INGOs focusing disaster management in coordination with Revenue department • Facilitation in procedural functioning of institutions /NGOs/INGOs focus on disaster management	• Provide information on the situation of the disaster to the DEOC • Coordination of all NGOs / INGOs and civil society organization working during the emergency response • Monitor progress of relief operations in the affected areas • In coordination with Health and Revenue departments , ensure delivery of relief to most vulnerable segments of society such as children, orphans, widows, destitute • Send advisories to the DEOC on the progress of the disaster situation • Assist and facilitate Damage and Needs Assessment teams from NGOs • Share its human resources with DDMA.	• Monitor and follow up the status of the extremely vulnerable people. • Summarize all losses (life, properties) of the extremely vulnerable people • Allocate budget for extremely vulnerable • Assist and facilitate Damage and Needs Assessment teams from NGOs • Facilitation to institutions / NGOs/ INGOs which focus on rehabilitation activities • Conduct impact assessment studies and analysis of strengths and weaknesses of stakeholders and disseminate learning to DDMA and other concerned institutions • Capacity building of Social Welfare department regarding Disaster management

4. Health

Pre	During	Post
• Assign representatives for DDMA, and participate in meetings • Information sharing regarding capacities and needs of health department regarding Disaster management • Capacity building of health department regarding Disaster management • Monitor the general health situation, e.g. monitor outbreak of diseases • Provide specific information required regarding precautions for epidemics • Establish a health mobile team in district & tehsil headquarter hospital • Set-up an information centre to organize sharing of information for	• Mobile medical teams available. • Providing emergency treatment for the seriously injured • Ensure emergency Supplies of medicines and first-aid • Supervision of food, water supplies, sanitation and disposal of waste • Assess and Co-ordinate provision of ambulances and hospitals where they could be sent, (public and private); • Provide special information required regarding precautions for epidemics • Set-up an information centre to organize sharing of information for public info purposes • Communicate to DEOC • Communicate to DEOC any additional resources required	• Conduct impact assessment on Health • Intervene immediately when there is a disease outbreak • Prepare plan for the following year and reports and submit to DDMA. • Medical camps and vaccination • Health Education in collaboration with social welfare and education departments. • Ongoing Surveillance • Facilitation to institutions / NGOs/ INGOs which focus on rehabilitation of health facilities • Rehabilitation of health infrastructure affected during disaster • Preparation of impact assessment surveys covering strengths and weaknesses of interventions and

public information purposes • Prepare first aid kits, medicines, water test kits, chloramines and anti snake venom serum. • Conducted training for medical staff and health personnel /community groups regarding preventive health care especially in disaster prone areas • Collaboration with relevant organizations / partner NGOs for participation and support through financial and technical resources • Up-gradation and smooth functioning of hospitals, BHUs, equipped with required staff and equipment • Data base and linkages with ambulance services/blood banks • Provision of the safe drinking water. • Health Education (a never ending task) • Early detection of cases. • Ongoing Surveillance • Facilitate education department and institutions regarding preparation of health related curriculum • Facilitation to water management department in treatment and disposal of industrial and urban waste • Ensure proper disposal of hospital waste	• Prepare first aid kits, medicines, water test kits, chloramines and anti snake venom serum. • Provision of the safe drinking water. • Medical camps and vaccination • Facilitation & collaboration with all NGOs / INGOs and civil society organization working during the emergency response in health sector	impact on affected victims and dissemination learning to DDMA and other concerned institutions • Capacity building of health department regarding Disaster management • Facilitate education department and institutions regarding preparation of health related curriculum • In collaboration with water management department conduct impact assessment and monitoring to inspect treatment and disposal of industrial, urban waste and hospital waste

5. Civil Defense

Pre	During	Post
• Assign representatives for DDMA, and participate in meetings • Information sharing regarding capacities and needs of Civil Defense department regarding Disaster management • Capacity building of Civil Defense department regarding Disaster management • Information sharing regarding technical and personnel expertise with DDMA • Conduct trainings for Volunteers' regarding first aid and other relevant expertise in collaboration	• Fire fighting • Rescue and evacuation • In coordination with community development and education department assign volunteers for emergency response. • Communicate to DEOC about details of all activities • Communicate to DEOC any additional resources required for performing the above tasks • Facilitate as per demand in disaster response.	• Identify gaps, make plan for future to overcome weakness of department. • Capacity building of Civil Defense department, Volunteers regarding Disaster management • Prepare overall report of the department regarding interventions and disseminate to DDMA and other GOs / NGOs/INGOs

with health and community development department • Create awareness regarding rescue, evacuation and first aid • Affectively establish, train and systemize volunteers initiatives in collaboration with education department / institutions		

6. Army

Pre	During	Post
• Coordinate with the DDMA in the pre disaster planning • Prepare necessary equipments, labor, transportation mean and other materials for emergency intervention • Protect roads from getting flooded (i.e. sand bagging and enforcement of embankments • Providing training to soldiers and determined the role of the soldiers who are stationed in flood prone areas. • Assist in evacuation of people to safe places before the disaster	• Provide rescue services. • Maintain liaison with the DEOC for vital inputs during response • Collate information and warn appropriate Army units • Establish communications of disaster and supplement the civil communication set up if required • Coordinate all military activity required by the civil administration. • Provision of medical care with the help of the medical teams, including treatment at the nearest armed forces hospital. • Transportation of Relief Material • Provision of logistic back-up (aircrafts, helicopters, boats, etc). • Establishment of Relief Camps • Assist in evacuation of people to safe places during the disaster • Installation of temporary bridges, Bunds etc.	• Construction and Repair of Roads and Bridges • Cooperate and coordinate with District authorities. • Facilitate other departments in capacity building in sectors such as road construction, telecommunication, medical facilities and other infrastructural development • Prepare overall report of the department regarding intervention and disseminate to DDMA and other GOs / NGOs/INGOs

7. Education and Literacy

Pre	During	Post
• Assign representatives for DDMA, TDMA and participate in meetings • Information sharing regarding capacities and needs of Education department regarding Disaster management • Teachers and students are informed about the disaster prone areas of the district • Teachers and students are informed of their responsibilities to take care of materials and documents to safe places during disaster.	• Mobilize the human resources for intervention during disaster. • Inform the schools situated in high risk areas on flood information (flood level) • Arrangements for evacuees to set up relief & temporary shelter camps in educational institutes • Facilitate health department in medical camps, blood donations and provision of medical aid • In coordination with civil defense & community development department assign volunteers for emergency response.	• Assessment of damages occurred to educational institutes • Provide assistance to teachers & students and other staff who are victimized by disasters (lack of food, shelter, etc.) • Collect information on adverse impacts of flood disaster on health of teachers and students (psychosocial care) • Need assessment of damaged educational institutes • Rehabilitation and reconstruction of affected educational facilities • Facilitation to institutions /

• In facilitation and collaboration with Health and environment department preparation of health & environment related curriculum • In collaboration with Civil defense systemize volunteers		NGOs/ INGOs which focus on rehabilitation of educational facilities • Capacity building of Education department regarding Disaster management • Prepare overall report of the department regarding intervention and disseminate to DDMA and other GOs / NGOs/INGOs

8. Agriculture

Pre	During	Post
• Capacity building of Agriculture department regarding Disaster • Provide recommendation on changing/rescheduling of cropping patterns • Create Community Seed Bank at Union Council level • Provide live stock vaccination • Assessment of high prone areas and estimation of possible damage and needs for recovery regarding live stock, crops, irrigation facilities in case of emergency • Mass awareness regarding epidemics and diseases to live stock and crops • Regular surveillance of rivers, canals, barrages and head works, other water courses which are most likely to be in flood. • Close coordination with Meteorology department & media, especially during monsoon	• Close & regular coordination with nominated staff of DEOC • Immediate transfer of current situation to DDMA and media to be spread for mass awareness • Facilitate other departments to set up relief camps, temporary offices in canal rest houses and other buildings as per need. • Vaccination of live stock	• Facilitation to institutions / NGOs/ INGOs which focus on rehabilitation activities. • Capacity building of Agriculture department regarding Disaster • Prepare report on damages and needs submit to DDMA • Upgrade Community Seed Bank (CSB) • Mass awareness regarding epidemics and diseases to live stock and crops • Repair and rehabilitation of canals, barrages and head works, other water courses which damaged during flood. • Close coordination with Meteorology department & media, especially during monsoon • Timely compensation to affected farmers • Vaccination of live stock • Prepare overall report of the department regarding intervention and disseminate to DDMA and other GOs / NGOs/INGOs

9. Irrigation Department

Pre	During	Post
• Monitor water level • Collect information on water level prepare equipment (pumping machines) to irrigate crops field where water is scare • Dig canals to irrigate from reservoirs to dry areas • Request the local authorities to share information on damaged irrigation	• Respond to specific water level and report to other line departments • Provide pumping machines to pump water out from public places. • Cooperate with other line departments, NGOs. Check irrigation systems when water recedes.	• Conducted assessment of damage and needs and report to DDMA • Damage assessment of infrastructure and irrigation systems. • Restore and repair damaged irrigation systems. • Construct newly approved irrigation systems and prepare plan for the future.

• Make a plan for disposal of solid waste of the industries • In facilitation of health department ensure treatment and disposal of urban, industrial and hospital waste		• In collaboration with Health& environment department conduct impact assessment and monitoring to inspect treatment and disposal of industrial, urban waste and hospital waste • Prepare overall report of the department regarding intervention and disseminate to DDMA and other GOs / NGOs/INGOs

10. Department of Finance and Planning

Pre	During	Post
• Regular coordination with DDMA • Get statistical data regarding possible damage and recovery needs from other departments such as Health, education, social welfare, agriculture. • Plan and identify potential resources • Facilitate other departments in planning	• Prepare materials and equipment for emergency response. • Responsible team distributes fuel to the affected areas	• Get statistical data regarding actual damage and recovery needs from other departments such as Health, education, social welfare, agriculture. • Plan and identify potential resources • Facilitate other departments in planning and execution of rehabilitation in cost effective manner. • Coordinate with all line Departments.

11. Environment Department

Pre	During	Post
• In coordination with health department conduct assessment of environment hazard and areas, population, infrastructure prone to environment hazards • Facilitate and coordinate water management and health department regarding treatment and disposal of industrial, urban and hospital waste • Mass awareness programs regarding healthy environment • Linkages with GOs/NGOs/INGOs which focus on environment issues • Inspection and checking of practices of environment related legislation by industries and departments and enforce penalties in case of violation	• Timely acquisition of information regarding abnormal weather conditions from meteorology department and media and passing on this information to concerned departments • Monitor closely effects of disaster on environment	• In collaboration with Health& water management department conduct impact assessment and monitoring to inspect treatment and disposal of industrial, urban waste and hospital waste • Conduct impact assessment of disaster's effects on population and environment to assess future ecological threats and challenges • Facilitate NGOs /INGOs regarding initiating eco friendly initiatives • Suggest poverty reduction strategies through sustainable environment initiatives

12. Meteorology Department

Pre	During	Post
• Update and upgrade forecast equipment • Timely and authentic forecast of rains, windstorms etc. • Timely transfer of information regarding abnormal weather conditions to media and other concerned departments • Availability of Geologist for earthquake information.	• Timely and authentic forecast of rains, windstorms etc. • Timely transfer of information regarding abnormal weather conditions to media and other concerned departments such as environment, agriculture & irrigation, civil defense, police and army	• In coordination with environment department conduct study of factors which cause abnormal weather changes • Evaluate gaps in information sharing

13. Media

Pre	During	Post
• Trainings for disaster reporting • Publish, broadcast /telecast plans of DDMA regarding disaster management and also voice public opinion • Close coordination with meteorology, irrigation, civil defense departments for announcing warnings and updates • Awareness raising in collaboration with departments such as health, education, environment	• Close coordination with meteorology, irrigation, civil defense departments for announcing warnings and updates • Awareness raising in collaboration with departments such as health, education, environment and information. • Publish, broadcast /telecast programs of safety measures during disaster.	• Awareness raising in collaboration with departments such as health, education, environment • Publish, broadcast /telecast programs highlighting strengths, weaknesses and scams in emergency response.

14. NGOs / INGOs

Pre	During	Post
• Facilitate DDMA member departments for capacity building regarding Disaster management • Capacity building of community groups regarding disaster preparedness and management • Linkages with concerned departments and institutions for providing technical and financial resources regarding diverse sectors related to disaster • Resource mobilization at local and international level	• Collaborate and facilitate in relief operations • Incorporate local and international expertise in emergency response • Establishment of temporary shelters & camps • Facilitation in overall disaster response in collaboration with concerned departments (e.g. for medical aid with health department and so on) • Updates and alerts to local & international partners • Utilization of existing resources and further mobilization at local and international level • Provide food services.	• Collaborate and facilitate in rehabilitation activities • Incorporate local and international expertise in rehabilitation activities • Facilitation in overall rehabilitation in collaboration with concerned departments (e.g. for medical aid with health department and so on) • Impact assessment studies and sharing findings with DDMA and local and international partners. • Preparation of overall reports and share with DDMA and other partners. • Conduct audit • Linkages with partners for sustainable resources mobilization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Standard Operating Procedures

The plan intends to provide direction and guidelines to all district stakeholders. The plan is primarily for use by all departments in the District Government, especially by those with roles and responsibilities outlined herein and also by government staff at the district, tehsil, union council and village levels. This plan facilitates the provincial and national government, UN agencies, donors, non-government organizations and philanthropic individuals and companies understand how they can support in disaster preparedness, response and mitigation in District Sialkot. The coordination mechanism during the disaster event in district will be established by the head of DDMA.

6.1 DDMA

DDMA is responsible for coordinating all components of the Disaster Risk Management Systems for the District. The components consist of activities related to mitigation, preparedness, response, recovery and rehabilitation. There can be some of following policy rules for all the departments constitute DDMA:

- Clarity of vision
- Commitment
- Close Coordination
- Concrete Collaboration
- Timely action
- Timely reporting
- Total Transparency
- Regular Monitoring
- Objectives, activities and outcome based pre, during and post evaluation
- Sharing and learning
- Sustainability

6.2 District Emergency Operations Center (DEOC)

In the event a disaster / emergency occurs, the District Emergency Operations Center (DEOC) takes the operational lead for all government district departments. The DDMA Head manages the DEOC and is responsible for ensuring that the following activities are always undertaken:

- Advise on the disaster situation.
- Coordinate with the concerned departments and Army.
- Set up Relief Centers (following the SOP for Relief by Flood Controller).
- Supervision and Monitoring of disaster management and relief activities.
- Coordinate the activities of DDMA members departments.
- Send out Damage and Needs Assessment Teams.
- Enlist services of laboratories and expert institutions for specialized services through the Health Department as and when required.
- Issue advisories on the Disaster Situation immediately and in appropriate time phases thereafter to the DDMA and the general public.
- Operate a Public Information Display Area for immediate access to information by the public and media regarding the disaster and the current situation.

- Requisition of accommodation, structure, vehicles and equipments for relief.
- Setting up of transit camps and arranging for food distribution.
- Arrangements for dry rations and family kits for cooking.
- Organize and coordinate clearance of debris.
- Temporary Repairs to damaged infrastructure.
  - Water
  - Telecommunication
  - Public buildings
  - Electricity

- Set-up an information centre to organize sharing of information with the media and the public.
- Generate and provide all information contained in the Risk and Vulnerability Assessment document to all the other control rooms and in special circumstances communicate the disaster prone sites to all control rooms.
- Monitor disaster warning or disaster occurrence and communicate the same to the Tehsils, Union Councils , and the Villages for better preparedness and effective response in coordination with and on the advise of the following agencies :
  - DDMA
  - Meteorology Department (Heavy Rains / wind or storms)
  - Irrigation Department (Floods)
    Civil Defense, Police (Road Accidents, Riots, Bomb threats/blast, Fires, House Crashes)
  - Health Department (Epidemics and Food Poisoning)

- Coordinate with other control rooms.
- Manage external relief coming into the district

The DEOC will be responsible for carrying out emergency preparedness and emergency management functions at a strategic level in an emergency situation, and ensuring the continuity of operations.

District Emergency Operation Centre (EOC) represents the physical location at which the coordination of information and resources to support disaster incident management activities normally takes place. The DEOC will be in close coordination during any emergency situation with civil defense, public health, search and rescue, first aid and medical personnel (representatives of health care facilities, pre-hospital emergency medical services, patient transportation systems, laboratories, military, NGOs and communications etc.).

Following core functions should include by the EOC;

- Coordination;
- Communications;
- Resource dispatch and tracking;
- Information collection, analysis, and dissemination.
- EOCs may also support multi-agency coordination and joint information activities.

- Communications and coordination must be established between the ground and the DDMA
- Field organizations must also establish communications with the activated local EOC.
- Additionally, EOCs at all levels of government and across functional agencies must be capable of communicating appropriately with others and all concerned stakeholders during incidents, including those maintained by private organizations.
- Communications between EOCs must be reliable.

6.3 Mechanism of Warnings

Department such as meteorology, agriculture & irrigation, health and environment would establish and upgrade early warning system and pass on warnings of a disasters occurrence directly to media and to the head of DDMA who will direct the most needed department (as per nature of disaster) to take immediate steps. Side by side he will call emergency meeting of all the members of DDMA. Following are some of the actions to be taken:

- As per nature of disaster nomination of lead agency.
- Analysis of the disaster and the level of response to be taken
- Accumulation and disposal of required resources

6.4 Warning & Plan Information Distribution

DDMA will ensure the implementation of this plan and all public warnings will be distributed through the secretariat upon recommendation of the Head of the authority. Appropriate media channels will be used to distribute the warning to the general public and concerned authorities for appropriate standby preparedness and response measures.

6.5 Public Information

The distribution to the public of contacts or telephone numbers for disaster information will be the responsibility of and the discretion of the DDMA. Public information is that information which is passed on to the public prior to, during, and after a disaster, such as warnings and directions for evacuations and service access to affected populations. The District Disaster Management Authority has the responsibility for the dissemination to the public of disaster risk management information. The focal person who will be designated by the authority to arrange the media briefings and interviews with key personnel and media channels for proper dissemination of the information concerning disaster situation in order to reduce the risks.

6.6 Reporting

All responsible departments and organizations are to submit regular updated situation reports to the DEOC situated in the DDMA. The communication officer will collate the reports received and circulate regular update and situation reports to all concerned stakeholders.

6.7 Requests for Assistance

DDMA will develop the contingency plan to meet any disaster situation. As of any disaster event the requests for any assistance from outside the district will be made by the District Nazim or District Coordination Officer to the Provincial Disaster Management Authority. The Tehsil Administration and Union Council bodies will make request to the District Authorities for the possible involvement of any concerned department to meet the disaster situation.

However, the DEOC will arrange the coordination mechanism by inviting all concerned NGOs and institutions to put their efforts by working together with DDMA for reducing the impacts of the disaster.

6.8 Plan Dissemination through Community Education

In addition to dissemination of literature related to the District Disaster the DDMA will disseminate the District Disaster Management Plan (DDMP) at the following levels;

- District government departments, and to the state level officials.
- To the Tehsil, Union Council and Village leadership.
- Through mass media to the general public in the district.
- Through existing CBOs and collaborating NGOs.

6.9 Community Involvement and Participation

The Sialkot District EOC and NGOs at the disaster area should ensure maximum community participation in all stages of operation in order to maintain community morale and confidence maximize the use of local resources and promote a faster recovery. Disaster management situations offer a wide range of choice and demands that requires immediate decision making. The participation of communities and their representatives would reduce the pressures on the field agencies with regard to the choice and uncertainties of community's response to the decisions.

The representatives of CCBs at local level may be involved in different activities of emergency response of relief and rehabilitation activities as this local unit does exist in all Union Councils as per the LGO 2001.

6.10 Organizing the Drills

In pre disaster situation DDMA will plan and carry out with other stakeholders' exercises or drills aiming at the following:

- Assess the procedures in this document.
- Assess the potentials and areas of improvement
- Agencies and departments should also conduct drills based on the hazard scenarios and areas of competence.
- The DDMA will ensure that disaster response drills are conducted by the other Department son a regular basis, especially in the disaster prone areas to maintain the readiness of communities and departments, as regards operational procedures, personnel and equipment and orderly response.

There should be at least two drills in a year. Lessons learnt from the drills and those from the previous and ongoing disaster related incidents should be incorporated in this DRM Plan as appropriate.

(a) The member departments of DDMA will mobilize resources to arrange a bloc grant for some of the following activities:
(b) Meet the expenses of DDMA secretariat
(c) Meet the expenses of drills
(d) Immediate response to emergency to be supplemented by larger budget on full fledge response

Conclusion

DDRMP has been designed in consultation with the all stakeholders of the district describing Hazard Vulnerability, strategies for disaster response, preparedness, mitigation and recovery initiatives to reduce the risks of the impact of the disaster in the district. Each department and sectoral line ministries should take the responsibility of developing contingency and Recovery Plans based on their areas of competence and mandate in collaboration with other stakeholders. During the multi sector consultation on disaster risk management plan, all district departments actively participated along with civil society organization representation and gave valuable comments. Most of the comments remained around the hazardous situation of the district like flood, environmental hazards as well as road accidents etc. It had been widely discussed that CNG stations site, rules and regulation for the Gas cylinder plants, roads situations, planning and building construction, factories and industries standards and procedures should be critically observed by all the stakeholders for reducing the risks of disasters.

This plan is guide tool which will be reviewed every year by all stakeholders' suggestion to make it more districts specified for minimizing the risks of the natural and man made disaster situation.


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ANNEXURE


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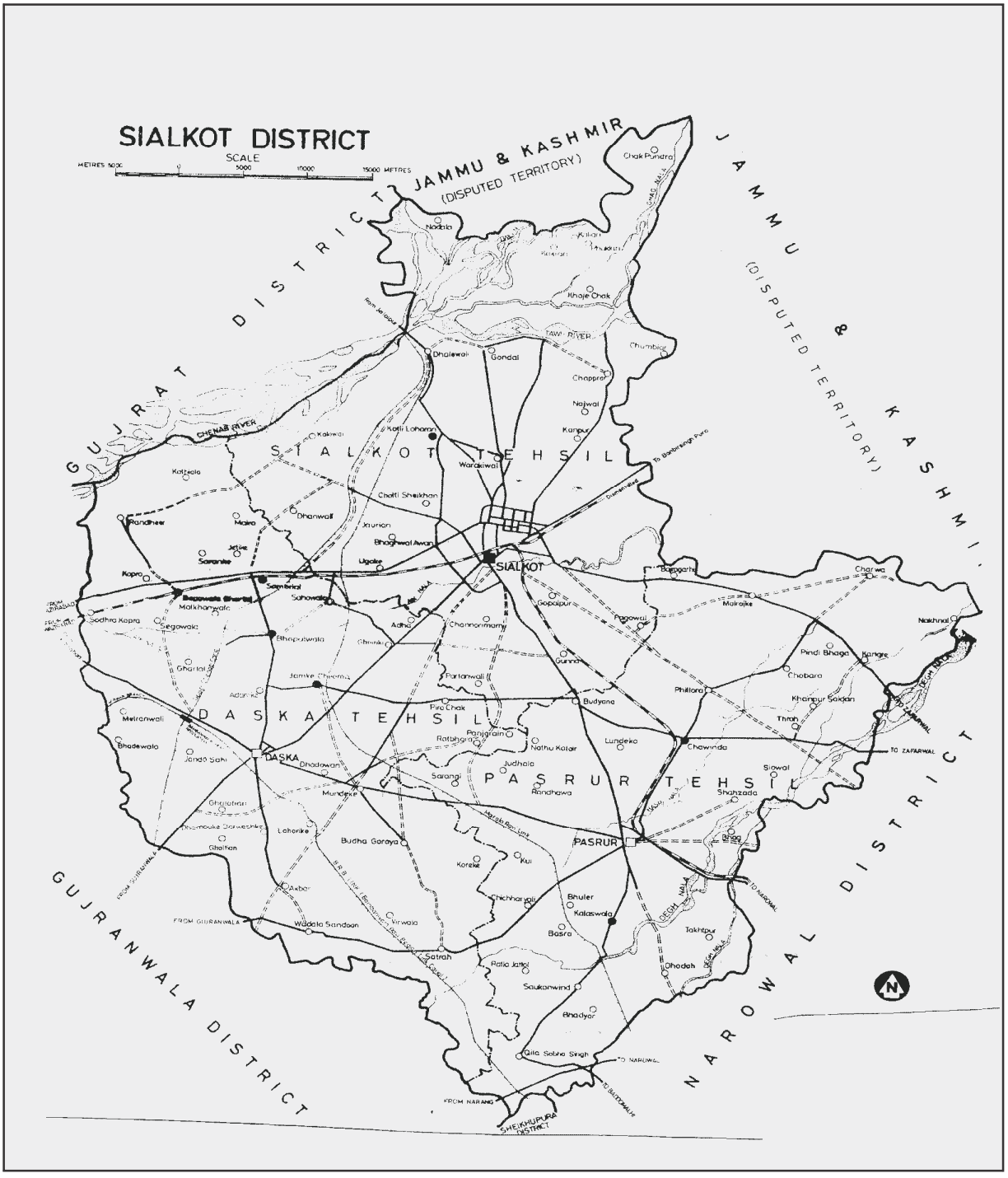
Map of the District Sialkot



Rivers & Nullahs in the District

2.1 Rivers & Nullahs in the District

i. Chenab River

The Chenab originates from the Hamalayas. It receives its supply of water from the snow covered central range of Himalayas. It receives water also from numerous smaller streams from the lower hills. It breaks-out from the rocky gorge in the hills. 6 miles to the north of Bajwat, flows down-ward from Marala Headworks and then enter into Gujranwala District. The force of the river throughout its curse is considerable. In its left bank upper Marginal Bound and lower marginal bound have been constructed near Head Marala saving vast area of Sialkot Tehsil from flood devastation.

ii. River Tawi.

The tow Tawis, namely Jammu Tawi and Munaawar Tawi are small rivers, which originate from Jammu & Kashmir State Territory and enter District Sialkot at its northern tip. These two merge with river Chenab near Marala Headworks. Jummu Tawi is of particulat mention, because it cuts off Bajwat area completely from the rest of the Tehsil during the flood season. During 1988, 1992 and 1997, spill-over of Jammu Tawi and its creeks eroded vast area of Bajwat posing direct threat to village Salehput, Ikramabad, Jhumian dallalan, Khonjpur, Bare-Dari etc. however, one of the creeks has been blocked to save thses villages. This situation will be kept under vigilance during the current flood season.

iii. Deg Nullah

The Deg Nullah is formed by the union of petty stream north of Jasrota in occupied Jammu & Kashmir territory and enters Tehsil Narowal near village Lehri. In flood season one of its off-shoots enters Qila Sobha Singh town and passing along the village Rattyian and Bago Churi falls into M.R. links near village Thalli Malian. The main Deg Nullah however flows into Pasrur tehsil and during high floods, which have gone up to 80,000 Cs. In the past, spills out from near Khalipur on the east and near Kishanpur on the west. After crossing Pasrur-Zafarwal Bridge, the nullah again spills over near Duggi Hundlan and Bhikhi on the east and through Nikki Deg no 1 & 2 on the western side. The water spills out from Durgi Hundlan, Crosses the Sialkot-Narowal Railway line, as well as the metalled road and enters Pasrur City. The remaining flood crosses Pasrur-Chawinda road and flows through Hassri Nullah towards a large number of villages in tehsil, siphons and inlets, feeds different nullahs in Sheikhupura and Gujranwala Districts and ultimately falls into river Ravi near Sharaqpur in District Sheikhupura. In all Deg Nullah affects 4940 acres of land spread over 41 villages of Tehsil Pasrur during floods.

iv. Aik Nullah

This Nullah originates in the Jammu hills and enters this District at village Umranwali about 6 miles to the east of Sialkot cantonment. Its general direction is south-west and it strikes the south of Sialkot city and posed great threat to the city. Though three bonds have been constructed by Irrigation Department to tame it. It still flows out of

its banks near Hajipura and on the left side of Aik Bridge towards Sialkot-Eminabad road. It also affects Industrial Area of Sialkot city. After that, the flood water enters the adjoining village namely Ganjianwali, Dhattal, Muzaffarpur, Horryr, Dubarji Mallian, Buttar, Miani, Adalatgrah, Shetabgrah and Bhabrian of this tehsil and destroys valuable cultivated areas of these villages. The area of Al-Hilal Colony and villages Doburgi Mallian, Butter Miani, Mughalanwali of Sub division Sialkot are also affected by the floodwater of this Nullah. Its water also affects Tehsil Daska and coupled with rainwater heads-up against BRBD Canal inundating vast area.

v. The Palkhu Nulla

This Nullah emerges from Jammu territory and enters into Sialkot district near village Kundanpur of Sialkot Tehsil. It flows along Sialkot cantonment area, on the northern side and the flood water of this Nullah affects the Cantt. Area and some Villages of Sub-Division Sialkot, namely Machhi Khokhar, Hassanwali, Kitli Tailian and Chak Adal.

vi. Bhed Nulla

It also flows along Sialkot Cantt Area but on the southern side the flood water affects some portion of Sialkot City and some villages of Tehsil Sialkot.

vii. Other Drains

There are several other smaller drains in the district. The important ate Sabazkot, Gadgore, Badyana and Begowala.

2.2 Bunds & Embankment

The following Bunds/ Embankments have been constructed along rivers and nullans to protect the villages and areas form flood hazards:-

i. Tehsil Sialkot

Upper Marginal Band at River Tawi (Length-13.71 Miles).

This Band was constructed on left bank of River Jammu Tawi to protect villages situated on lift side of Sialkot city. It extends from Head Marala to village Banout. Before the construction of this bund the area upto Sialkot was flooded from the spill-over of Tawi River. It protects 40 villages namely Banout, Surgpur, Kahandoor, Nadala, Hail Jattan, Jandiala, Ahmalput, Saidpur, Chak Umar, Mahal Haider, Chuian Dajuidor, Ferozepur, Chiti Khazapur, Khoja Chak, Pomal, Badala, Chak Ussri, Jhumian Dallalan, Chak Umaran, Ghazapur, Chani Wether, Bela BE Chiragh, Girmir, Sadiqpur, Monourpur, Girgwal, Pindi, Lodhi, Miani Waryam, Goddal, Chhani Ghondal, Sapwal, Nahiwal, Sigripur, Puransial, Sedhar and Lalair.

a Colony protection Band at River Chenab (3.40 miles)

This bund was constructed to protect canal colony Marala form river spill. It also protects upper Chenab canal M.R. link system, road and railway communication from Sialkot to Wazirabad.

b Lower Marginal Band at River Chenab (length 7.31 miles)

Villages protected by this band are Nurpur, Bahadarpur, ram rung, Pindikhakharan, Chak Kala, Bhatti Kotli Pathan, Raywali, Kulluwal and

gagger. Local government department constructed this bund after floods of 1973 under world food program to save villages falling on the left side of Chenab River down Head Marala in district Sialkot. It was transferred to irrigation department in 1981. Its tail reach is under direct hit of river. Chenab River washed away its 1250-feet as tail-reach in floods, because of which it was not considered useful for reconstruction.

c Mally-chak protection at Nullah Aik (Length 6.30 miles)
It protects villages namely Augowali, Kalalwali,Lagerriali, Chak Malla Nia, Dalowali and same areas of the city from the spill over of Aik Nullah.

d Sialkot city protection bund (Length 1.47 miles).
It starts from Rangpura and ends near bridge on Pasrur road. It protects only city areas of Sialkot.

e Hajipura bund at Nullah Aik (Length 1 .72miles).
This bund has been constructed on the bank of Aik Nullah to protect the following localities of Sialkot city:-

i. Hajipura
ii. Fatehgrah.
iii. Shetabgrah.
iv. Small industrial estate.

The bund has been actually constructed in a length from R.D 3900 to R.D 12500. This bund joins Sialkot-Pasrur Road and sialkot-Daska Road. After 3900 feet length, bund could not be constructed due to houses constructed by local inhabitants on the edge of the Nullah and there is no space available for the construction of even a wall.

f Bhed Nullah Bund (length 3 miles)
Villages protected are: Ghazipur, Sialkot Cantonment, Pakkagaraha, Malket Kalan, Mauradpur, Tibbi, Ghansapur and Kapoorwali.

Tehsil Pasrur

i. Marginal Bund along Deg Nullah

a) Left Marginal Bund (length 4.14 miles)
It protects villages Kotli Satarpur, Thatha Bawa (both) bund, Shah Hussain, Shoda and Jaddah.

b) Right Marginal (length-3.62 miles)
It protects seven villages namely Khewa Bawa, Bharat, Habitpur, Chak Malpur, Noorpur and Daulatpur.

ii. Noorpur Siphon Saukanwaind Bund on Deg Nullah
Its length is 16788 feet. It protects 6 villages namely Naukrian, Saukinwind, Laharanwali, Ratta Jothol, Qilla Sooba Sing (Kila Kalarwala) and Hussa Jajja.

iii. Shahzad Bund on Deg Nullah (length 3.0 miles)
It protects villages Shahzada, Bheer, Pir Muhammad, Bhojoke, Amin Shah, Dugri, Charwind and Chak Raja.

District Important Contact Numbers

Executive District Officers

S. No.	Designation	Contact Number
1	DCO	9250451 Fax 9250453
5	Executive District Officer	9250306
6	EDO education	9250194-97
7	EDO Revenue	9250464
8	EDO Agriculture	9250314-9250311
9	EDO Health	9250066
10	EDO F&P	9250123
11	EDO Literacy	925095-96
12	EDO Law	9250460
13	EDO Community Development	4294034
14	EDO IT	9250306

District Officers and other Important Contacts

S. No.	Designation	Contact Number
1	District Officer Health	9250064
2	DO Revenue	9250466
3	DO community development	563567/294034
4	DO Social Welfare	9250491
5	DO Planning	9250126
6	DO Road	9250309
7	DO Building	9250308
8	DO Water Management	4290056
9	DO Sports	9250490
10	DEO Collages	4591101
11	DEO SE	2950172
12	DEO EEM	9250193
13	DEO EEW	9250171
14	Superintendent Jail	9250481-9250483
15	Council Officer	9250127-9250159
16	Superintendent DCO	267590
17	ADLG	9250154
18	Tehsil Municipal Administration	9250148
19	District Information Officer	553505
20	TMO Daska	6613536
21	TMO Sialkot	9250148
22	TMO Samberial	9250062
23	TMO Pusrur	04342-441362-442399
24	Pakistan Baitul-Mal	553654
25	Allama Iqbal Memorial Hospital Sialkot	9250062
26	NADRA	9250301, 302

27	NADRA	257707 Mob:0300-6155354
28	Sardar Beghum Hospital	9250128-29
29	District Zakat Officer	9250301
30	Excise & Techs session Officer	9250156
31	Election Commissioner Sialkot	553063
32	In-charge Engineer Soi Gas	9250436-38
33	District Passport Office	550096
34	Sub Registrar Sialkot	9250469
35	Sub Registrar Sumbrial	268910
36	Sub Registrar Daska	6611289
37	Sub Registrar Pusrur	04342-442101
38	District Account Officer	9250157
39	Industrial Trade Sialkot	4261881
40	District Officer Labor	4274351
41	District Bar Association	4262002

District and Tehsil Nazims

S. No.	Designation	Contact Number
1	District Nazim	052-9250461 Fax 9250463
2	District Naib Nazim	052-92501127
3	Tehsil Nazim Sialkot	052-5250147
4	Tehsil Naib Nazim Sialkot	052-5250147
5	Tehsil Nazim Sumbrial	052-6521718
6	Tehsil Naib Nazim Sumbrial	0300-9612961
7	Tehsil Nazim Daska	6618579, 052-6619113, 0300-8741448
8	Tehsil Naib Nazim Daska	0300-6442167
9	Tehsil Nazim Pusrur	0300-8712012
10	Tehsil Naib Nazim Pusrur	0300-6108773, 052-64411362

Structure of Police Department

S. No.	Name of Post	Telephone Numbers
1	District Police Officer	9250321-2
2	Additional S.P	9250324
3	S.P. Investigation	9250348
4	DSP Legal	9250326
5	DSP (HQ)	9250326
6	DSP (Traffic)	9250449
7	SDPO, Sadar Circle	3251111
8	ASP/ SDPO, DAska Circle	6611666
9	DSP/ SDPOD, Pasrur Circle	6442626
10	DSP (Sadar) Investigation	3553586-3255863
11	DSP Investigation, Daska	6616110

12	DSP Investigation, Pusrur	6440844
13	DSP (Patrolling)	9250474

Police Stations

S. No.	Name of Police Station	Phone Numbers
14.	P.S, Kotwali	9250341-2
15.	PS, Civil Lines	9250331-2
16.	PS, Cantt	9250343-4
17.	PS, Rangpura	4583001-4598961
18.	PS, Neikapura	4592760-4598960
19.	PS, Hajipura	3553613-3552216
20.	PP, Lari Adda	4267590
21.	PP, Regiment Bazar	4266179
22.	PP, Sughet Garh	4206111
23.	PP, Model Town	3255764
24.	PS, Sadar Sialkot	3542969
25.	PS, Uggokey	3561985
26.	PS, Muradpur	3562450
27.	PS, Kotli Loharan	3530314
28.	PS, Kotli Said Amir	3518833
29.	PS, Headmarala	3502010
30.	PS, City Daska	6613317
31	PS, Sadar Daska	6617366
32.	PS, Banbanwala	6613083
33.	PS, Satrah	6280500
34.	PS, Moutra	6227010
35.	PS, Sambrial	6520331
36.	PS, Begowala	6520629
37.	PS, City Pasrur	6442475
38.	PS, Sadar Pasrur	6442323/ 6442320
39.	PS, Qila Kalarwala	6632279
40.	PS, Badiana	6528032
41.	PS, Philoura	6210616
42.	PS, Sabaz Pir	6536302

Note: The Wireless facility is available at all police Station "Sources; District Police Officer Sialkot"

Hazards Vulnerability in Union Council

S. #	Tehsil	Union Council	Population	Hazards Vulnerability		
1	Sialkot	Phulkian	27869	Flood	Epidemics	
2		Kuchi Mand	29223	War	Epidemics	
3		Gondal	31540	Flood	Epidemics	
4		Head Marala	28761	Flood	Epidemics	
5		Pindi Khokheran	33017	Environment		
6		Kherota Syedian	31448	Environment		
7		Shehni	31142	War	Environment	
8		Chaprar	29383	Flood	War	
9		Plora kalan	27869	Environment		
10		Kaman wala	30489			
11		Bharth	32713	environment		
12		Dalowali	30933	War	environment	
13		Rasoolpura	2897			
14		Langrdiwati	21460	Flood	Environment	Epidemics
15		Sydan wali	26717	Flood	Environment	
16		Bhagowal	25181			
17		Talwara Mughlan	23093	Flood	Environment	
18		Pindi Aryian	22511	Environment		
19		Doburgi Aryian	25734	Environment		
20		Prag pur	27671	environment	drought	
21		Vario	28701			
22		Hundal	28559	Environment	Epidemics	
23		Charind	32241	Environment	Epidemics	
24		Miani	29279	Environment	Epidemics	
25		Adalat Gerh	29179	Environment		
26		Moman Kalan	21905			
27		Ugoki	33852	Environment		
28		Jorian Kalan	32704	Environment		
29		Bhagwal Awan	27241	Environment		
30		Mongerh	28672			
31		Blanwala	33845	Flood	Epidemics	
32		Gohidpur	32696	Environment	epidemics	
33		Bounkan	31122			
34		Muzafar pur	30793	Environment	Epidemics	
35		Kotli Behram	33247	Environment	epidemics	
36		Miana pura	24365	Environment		
37		Model Town	29816			
38		Water works	28462	Floods		
39		Mohammad Pura	28328			
40		Shah syedan	24816			
41		Karim pura	25320			
42		Ahmad Pura	28210	Environment	Epidemics	
43		Pura Heeran	28874	Environment		

44	**Sialkot**	Neka pura	24506	Flood	Environment	Epidemics
45		Habib pura	24154	Flood	Environment	Epidemics
46		Imam Sahib	23988	Environment		
47		Shahab pura	33406	Environment		
48		Haji pura	26916	Environment		
49		Fateh Gerh	30017	Environment		
50		Kotli Loharan	28276	Environment		

S. #	Tehsil	Union Council	Population	Hazards Vulnerability		
1	Daska	Gojra				
2		Kandan Sian				
3		Mitranwali	25514			
4		Goendky	24367			
5		Raja Ghuman	26160			
6		Glotian Khurd	26249			
7		Glotian kalan	26748			
8		Adamky Chema	22173			
9		Akbar	25580			
10		Salhokey	25074			
11		Bhartanwala	22189			
12		Satrah	26718	Road Accidents		
13		Bhagat Pur	24752	Road Accidents		
14		Siranwali	24752			
15		Wadla Sindhwan	27212	Road Accidents		
16		Budha Goraya	30160	Road Accidents		
17		Aalo Mohar				
18		Goenky	29407	Road Accidents		
19		Shuiky				
20		Peerochak	27793	Road Accidents		
21		Bogery	24901			
22		Malomahay	22484			
23		Kawan Lit	28190	Road Accidents		
24		Model Town Daska	25236	Road Accidents	Environment	
25		Haqpura Daska	26918	Environment		
26		Mainbazar Daska	28242	Environment		
27		Younisabad Daska	29793	Environment		
28		Daska Kalan	30476	Environment		
29		Jamky Cheema	28007			

S. #	Tehsil	Union Council	Population	Hazards Vulnerability		
1	Pusrur	Bajra Garhi	30725	War	Drought	
2		Marajky	25806	War	Drought	
3		Pindi Bagho	24542	Drought		
4		Chobara	22488	Drought		
5		Chawah	23472	War	Drought	

6	Pusrur	Prail	22811	War	Drought	
7		Kingra	30972	Drought		
8		Dahlum Kahlwan	23726	Flood	Drought	
9		Chahoor	25936	Flood	Drought	
10		Gudgor	26390	Drought		
11		Khananwali	29700	Drought		
12		Jasoran	29119	Drought		
13		Badiana	26830	Drought		
14		Kapoorpur	27037	Drought		
15		Balagan	24737	Drought		
16		Malipur	24654			
17		Adamky Nagra	30096			
18		Ban Bajwa	26832			
19		Musa pur	25674	Flood	Drought	
20		Talondi Anayat khan	26909			
21		Sokanwand	29540			
22		Pejokey	28471			
23		Qila Kalcrawala	32787			
24		Takhat pur	25362	Flood		
25		Pusrur 1	30214	Flood	Environment	
26		Pusrur 2	28735	Environment		
27		Chawinda	26211	Environment		
28		Kalaswala	31698			

S. #	Tehsil	Union Council	Population	Hazards Vulnerability		
1	Sumberial	Kher Walian				
2		Qila Sumbrial		Environment		
3		Beghuwala	21725	Environment		
4		Baduky Chema	23516			
5		Dar-ul-Islam Sumbrial		Environment		
6		Mandi Sumbrial		Environment		
7		Bhopawala		Road accidents		
8		Rorus	25365			
9		Sahowala	22422	Environment	Epidemics	
10		Kalluwal	27677	Environment	epidemics	
11		Jatheky	25536			
12		Habib Pura	23073			
13		Randheer	23441			
14		Kopra	23351	Road accidents		
15		Malikhanwala	20104	Environment	epidemics	
16		Halgan				
17		Dairowala				
1		Kher Walian				
2		Qila Sumbrial		Environment		
3		Beghuwala	21725	Environment		
4		Baduky Chema	23516			

5	Sumberial	Dar-ul-Islam Sumbrial		Environment		
6		Mandi Sumbrial		Environment		
7		Bhopawala		Road accidents		
8		Rorus	25365			
9		Sahowala	22422	Environment	Epidemics	
10		Kalluwal	27677	Environment	epidemics	
11		Jatheky	25536			

Health & Education Data in District Sialkot

➢ Health Facilities

S #	Description	Nos.
1	DHQ Hospitals	02
2	THQ Hospitals	02
3	T.B. Hospitals/Clinics	02
4	Rural Health Centres	08
5	Basic Health Units	88
6	Government Rural Dispensaries	02
7	MCH Centres (Govt. + ZC/MC)	14
8	Sub Health Centres	15
9	Zila Council Dispensaries(RDs)	23

➢ Health Department

S. #	Position	Sanctioned Post	Recruited #	Vacant #
1	Deputy District Officer Health	3	3	Nil
2	District Superintendent Vaccination	1	Nil	1
3	Assistant District Superintendent Vaccination	3	3	Nil
4	District Coordinator NP	1	1	Nil
5	Assistant District Coordinator NP	1	1	Nil
6	BHU Medical Officer	87	70	17
7	BHU Medical asstt	12	11	1
8	BHU Deputy Medical Officer	NA	NA	NA
9	Medical Tech	NA	NA	NA
10	LHVs	102	84	18
11	Health Tech.	82	65	17
12	Female Health Tech.	12	9	3
13	Dispensers	123	110	13
14	Midwifes	127	112	15
15	Daies	3	3	Nil
16	Chowkidars	114	106	8
17	Peons	130	122	8
18	Sanit. Workerers	94	91	3
19	Sanit. Inspectors	81	62	19
20	Vaccinators	119	119	Nil
21	CDC Supervisors	87	68	19
22	Sanit. Patrol	61	55	6
23	LHSs	85	74	11
24	LHWs	2131	1852	279
	Total	**3459**	**3021**	**419**

➢ Detailed education data of the district

Sr. #	Facilities	Numbers
1	Total Teacher (Male 3189, Female 4640)	7,829
2	Total Primary School	2,452
3	Total Student	251,774
4	Student Per Teacher	32
5	Student per school	103
6	School per UC	21
7	Teacher per school	3
8	Teacher per UC	68
9	Total Markaz	15
10	Total AEO	40

List of NGOs in Sialkot

Sr. #	Name of NGO / CBO	Address	Contact #		Name of Director/ Incharge
			Telephone	Mobile	
1	Young Blood Foundation	Kutcheri Chowk, Daska	052-6614650	0300-6430130	Tanveer Billa
2	Tayyab Blood Bank	Civil Hospital Chowk, Daska	--	0302-6380995	Riaz Butt
3	Baidari	Village Roras, Tehsil Sambrial	--	0346-6649585	Zubair
4	Aas Foundation	Pak Mir Street, Khadim Ali Road, Sialkot	052-92557	--	Ghazala Khan
5	Al-Khidmat Committee	Khadim Ali Road, Sialkot	052-4553000 052-4563333	--	Dr. Muhammad Akram Arain, Ch. Muhammad Sharif
6	All Sialkot Student Van Assiciation	H/No. 8/321, Pura Heran Sialkot	052-4582315	--	Hafeez Javed Rafique Bhutta
7	Allama Iqbal Deaf & Dumb SW Assciation	Neka Pura, Sialkot	052-4587953	--	Sh. Luqman Ahmed Zafar Sarwar
8	Allama iqbal Memorial Social Welfare Society	Imam Sahib Sialkot	052-3239689	--	Amir Ali
9	Allama Iqbal School for Special Education	Masjid Road, Sialkot Cantt	052-3272851 052-3272853	--	Ghazanfar Ali
10	Allama Iqbal Welfare Foundation	Daska Road, Ghuinke Sialkot	052-4557001 052-4557002	--	Waheed Ahmed Malik Shabbir Muhammad Akram Ch.
11	Al-Saddique Welfare Council	New Mianapura Roras Road, Sialkot	052-4556543	--	M. Sabeera Bano
12	Angels Social Welfare Organization	19/381 Greenwood Street, sialkot	052-4597252	--	Waqar Rauf Quershi
13	Anjuman-e-Bahbood-e-Marizaan for Eye	Abbot Road, Sialkot		--	Dr. Muhammad Akram Arain
14	Koshish	Khananwali, Tehsil Pasrur	052-6900940	--	Arshad
16	Saibaan	Pasrur	052-6441490	--	Mian Mushtaq
17	Khatam-e- Nabuwat	Kalaswala, Tehsil Pasrur	052-6508132	--	Muhammad Mushtaq
18	Madwah	Sialkot			Tariq
19	Caritas Sialkot Region	Sialkot			Shamoun Kholhar
20	National Commission for Human Development NCHD	District Sialkot			Manager Capacity Building

Environmental Hazards & Impacts in the District

History of industralization of Sialkot is very old. Now a days, Sialkot is famous allover the world because of its Sports Goods and Surgical instruments Industry. Over the years the industry grew to include a variety of wood and leather-based sports equipment, and diversified into related industries includes Leather Tanneries, Leather Garments, Musical Instruments, Sportswear included Martial arts wear , Gloves, Badges, Cutlery, Hunting Knives, Air Guns and Shotguns. Industrial development has led to the volunerablity of enviromental hazrds in district Sialkot. In Sialkot there is not proper system of management of all kinds of industrial, urban and hospital waste. The environmental hazards due to industrial waste and pollution put countless obstacles in the sustainable production capacity of the agriculture sector and wind and water erosion, water logging and salinity all accelerate the degradation process

Environmental Hazards and Impacts in the District

Modern era of advancement, at one hand, has discovered new perspectives regarding totally new concept of life but at the other hand, the rapid industrialization and rising population has caused serious threat for the earth and environment. Though considered an agricultural country but Pakistan is rapidly growing as industrial state as well. But the lack of planning, the industries are causing sever threats to its environment.

Following is a glimpse of factors leading to environment hazards in the country and the district as well.

- Sialkot district is one the most densely populated districts of Pakistan. Population Growth poses serious environmental problems, which are of great ecological concern in terms of its sustainable economic future.
- The use of raw materials is also inefficient and many reusable resources are discarded as waste. Only 3% of the industrial plants meet international waste treatment standards.
- Water is basic to life. Not only is there a scarcity of drinking water but also pollution of water bodies by effluents from industries and the sewerage system have compounded the problem.
- A large number of industries discharge deadly and toxic waste into storm-drains, open nullahs.
- Solid waste also finds its way into the water system. The chemical analysis reveals that there are traces of heavy metals such as chromium and nickel in the vegetable samples.
- Indiscriminate use of pesticides and fertilizers contributes to water pollution. Extensive use of agricultural chemicals has already started affecting aquifers.
- The pesticides are carcinogenic and mutagenic causing sterility, low fertility, skin cancer, immune and hormonal system disorder.
- In Pakistan, pesticide residues have been found in water, soil and even food commodities.
- Solid Waste & hospital waste. Almost 76 tones of solid waste is created daily in our country. At least 40 % of the solid waste can be managed & recycled to generate income but it is not done.

- In Pakistan 25 tones of hospital waste is generated per day but there is no proper arrangement of its disposal. Therefore this waste is more dangerous. In Sialkot there is not proper system of management of all kinds of waste and The Sialkot Environment Department issued the final show cause notices to Sialkot district's as many as 24 private hospitals for not having the proper hospital wastage disposal systems. According to the official sources, majority of the government and private hospitals and clinics do not have the proper systems for the disposal of wastage. They said that this nasty situation was also causing environmental pollution in Sialkot, Daska, Sambrial, Uggoki, Pasrur and their surrounding areas. (daily The Post September 16,2006)

Impacts on health

The poor cannot deal with the impacts of a degraded environment. Their habitats are environmentally vulnerable and they do not have access to many facilities. As a result they are prone to diseases because they reside in low-income houses usually in industrial areas and have little choice in the quality of their nutritional intake. This increases their vulnerability to diseases, which they do not have the capacity to treat. They have minimum access to health services and spend long hours in polluted work places (factories) or work as unskilled labor.

Water contamination causes serious problems and water supply standards set by WHO are rarely met (SDPI 1995). 50% of the population has access to piped water and the rural water supply coverage in 1997-98 was 90% according to an appraisal done by the World Bank (Human Development Index, 2003

Tanneries

Tanneries in "Sialkot Cluster" are located in both cluster formation and individual and tanning units. Major sub-clusters are located along "Wazirabad-Samberyal road", "Malkay Kalan, Head Marala road", "Pul Aik, Hajipura Lahore-Daska road" and "Chiti Sheikhan". Whereas individual tanning units have been established along "Defense road", "Pasrur road", "Nakapura", "Sadpure Gondal road" and "Pakikotli, Lahore-Daska road". With 117 operational tanning units, Sialkot is the second largest tanning cluster of Punjab after Kasur-Lahore. Out of total 117 tannery units, 60 (51 %) fall under the category of medium units, whereas 53 units (45 %) are small tanneries. They create some of the following hazards:

Water Consumption

It is estimated that average water consumption in processing per kilogram of hide/skin is substantially high in the tanneries of Sialkot district.

Wastewater

Cumulatively, about 7,547 m3/day of wastewater is being generated from tannery sub-clusters of Sialkot. Medium tanneries have large share with 3,828 m3/day followed by large and small tanning units with 2,185 m3/day and 1,534 m3/day respectively. All the quantity of wastewater is ultimately discharged into adjacent natural water bodies and cultivated lands. This discharge, of highly toxic tannery wastewater, high in BOD, COD, TDS, sulfide, chloride and chromium, has rendered the Nallah water unfit for irrigation purposes and live stock consumption.

Solid Waste Generation

All the small, medium and large tanneries in Sialkot Cluster produce about 165 tons of solid waste every day. Medium tanneries with over 99 tons per day (about 60 %) contribute highest to this waste load, while large and small tanneries have a smaller share of 10 tons (6 %) and 56 tons (34 %) per day respectively. Due to the unavailability of landfill sites and proper collection and disposal arrangements, solid waste mostly consisting of wet blue trimmings and discarded split pieces remains unattended and finds its ultimate disposal along roadside and open plots.

Gaseous Emissions

Tanneries are generally not considered a major source of air pollution. However, microclimatic air pollution takes place in virtually all leather tanning processes. This includes hydrogen sulfide and ammonia gas emissions. Other major air born pollution includes the buffing dust and spray fumes. Tanneries are also notorious for obnoxious odor emanating right from the 'Raw hide storage' area to 'Beam house' and 'Tan house' processes - through to the finishing stage. Noise is another source of environmental pollution from a tannery and persists in virtually all sections of the tannery.

Recommendations

a. Water conservation

- Installation of water flow meters on drums and turbine in order to maintain a water balance;
- Replacement of "continuous washes" with "batch washes" thereby saving on energy and chemicals besides averting pollution charges;
- Optimization of number of "batch washes" with correct water intake would considerably decrease the hydraulic loading without any change in the process recipe;
- Establishment of process control laboratory;
- Provision of washbasins with low flow taps and close by bathrooms would stop the use of high-pressure valves for minor requirements including hand and face washing, cloth washing and even bathing.

b. Chrome recovery and recycling

Effluent from each tanning bath can be reused up to five times by adding one the one-third the normal amount of chromium sulfate before each tanning bath.

c. Lime floats recycling

Direct recycling of the liming float is possible after removal of suspended particles and restoration of chemical content of the float. Also low sulfide liming liquors can easily be introduced to reduce the sulfide loading in the effluent.

d. Solid Waste Management

A number of initiatives exist that could be used to manage tannery solid waste. Such measures include, besides others, optimized "green trimming", thereby reducing the amount of wet blue trimming, which is difficult to market as compared with the former; collection and separate disposal of "fleshing" which could be used for fat recovery and glue making; "lime fleshing" instead of "wet blue splitting", and proper

collection and disposal of "shaving" and "buffing" residues. Taking these measures would not only reduce the solid waste but they also tend to improve the quality of this waste thereby making it more acceptable.

e. Reduction In Gaseous Emissions

Installation of dust collection system could arrest buffing dust. Similarly, noise attenuation could be achieved by proper repair and maintenance of the moving parts of the tanning machinery. In addition, the tannery workers could be provided with OHS equipment for protection against air and noise emissions.

f. Improvement In Material Storage And Handling

Raw hides must be stored in cool and well-ventilated separate room and stacked properly on wooden pallets in order to avoid fouling and degradation of hide. Storage of chemicals can be improved by making them spacious and ventilated. Labeling and clear delineation of hazardous chemicals should be done in accordance with material and data safety sheet (MSDS).

g. Improvement In Physical Conditions

Tanneries floors should be properly sloped with ceramic tiled surface. Regular maintenance of the tannery floors should also be done in order to maintain quality. Windows and ventilators should be adequately provided and properly located. Exhaust fans and lighting could be provided in order to improve the ventilation and the lighting system in the areas where required.

h. Air Pollution

1. Always keep your Vehicle in good condition.
2. Prefer 2 stroke engine vehicles.
3. Do not establish industrial units within the residential areas.
4. Apply clean technology in industrial units and apply 3R formula i.e. Reduce, Reuse, Recycle for the proper disposal of solid waste.
5. Plant as many trees as possible

i. Industrial Waste Water Pollution

1. Installation of Treatment Plants to make the municipal liquid waste as well as industrial waste water as per National Environmental Quality Standards (NEQS)
2. Application of "Clean Technology" at the industrial units

j. Solid Waste Pollution

Proper disposal and treatment of the waste may reduce the negative effects / impacts of solid waste pollution. There are three important methods for the treatment and disposal of solid waste.

1. Incineration
2. Pulverization
3. Composting

k. Risk Management Strategies for Chemical and industrial accidents

Technological hazards can be reduced by improving safety standards in plant and equipment design, by anticipating possible hazards in plant design, by developing safe equipment design and operating procedures, by safe and regulated disposal of hazardous materials, and through proper preparedness planning. In addiction risk reduction strategies include using fire-resistant materials, building fire barriers or installing devices to extract smoke, improving detectors and warning systems, engaging in preparedness planning by improving fire fighting and population dispersal capabilities, and emergency relief and evacuation planning for plant employees and nearby settlements. In addiction, on-site and off-site safety plans should be initiated and drills should be conducted in conjunction with local fire departments and other civil authorities.

Neighboring Districts and Their Role During Emergency in District Sialkot

District Narowal

Narowal District is one of the districts in the province of Punjab, Pakistan. Narowal city is the capital of the district. Narowal District is divided into two tehsils, Narowal and Shakargarh. Before the independence of Pakistan in 1947, Shakargarh town was the headquarters of Shakargarh Tehsil, which was a subdivision of theGurdaspur District of British India. Under the Radcliffe Award, the tehsil of Shakargarh was transferred to Pakistan and attached to Sialkot District. In July 1, 1991 Narowal and Shakargarh were removed from Sialkot District to form Narowal District.

Hazards

- *Floods*
- *Pak-India Conflict due to boder (Migration)*
- *Drouht*
- *Road Accidents*
- *Fire*

District Gujranwala

Gujranwala District is a district in the province of Punjab, Pakistan. It had a population of 3,400,940 of which 50.17% were urban in 1998. It is thus the third-most advanced district in Punjab, the population now stands at 4,308,905.

Hazards

- *Floods*
- *Environemntal Hazards*
- *Epedemics*
- *Road Accidents*
- *Fire*

District Gujrat

Gujrat is a district of Punjab Province in Pakistan. It is an ancient district located in between two famous rivers, the Jhelum and Chenab. Because of its proximity with the rivers the land is good for cultivation with rice and sugar cane as main crops. It is bounded on the northeast by Mirpur, on the northwest by the River Jhelum which separates it from Jhelum District, on the east and southeast by the Chenab River, separating it from the districts of Gujranwala and Sialkot, and on the West by Mandi Bahauddin. District Gujrat is spread over an area of 3,192 square kilometres, and is divided into three tehsils, Gujrat, Kharian, and Sarai Alamgir. There are many historic villages and towns in the district such as Chakdina, Kunjah, Dinga.

Hazards

- *Floods*
- *Envriomental Hazards*
- *Road Accidents*

- *Epedemics*
- *Fire*

Expected help from adjoining districts during emergency response

- The adjoining districts will be assisting the District Sialkot during an emergency situation in following was.
- Search and Rescue through the dedicated volunteers team of Civil Defense Department.
- Professional staff members of Heal Department will provide the services for establishment medical and health camps for required vaccinations and first aid services.
- Social Welfare and Education Department will provide help for the relief services.
- Rescue 1122 along with Police department will help for the search, rescue and evacuation as well as maintain the law and order situation during the emergency.

ANNEX 9

Existing Resources with the District Roads and Building Department

Sr #	Name of vehicle	Mae/Model	Capacity
1	Jeep STV-7377 (District Officer (Roads), Sialkot	Suzuki-2006	1000 CC
2	Jeep STV-1997 (Deputy District Officer (Roads) , Sialkot	Suzuki-2006	1000 CC
3	Jeep STC-6850 (Deputy District Officer (Roads), Pasrur	Suzuki-1986	1000 CC
4	Jeep STC-7101 (Deputy District Officer (Roads), Pasrur	Suzuki-1986	1000 CC
5	Pickup STC-8893 (-do-		
6	Tractor MF-260 with Trolly		
7	Tractor MF-260 with Trolly		
8	Tractor MF-385 with Trolly		
9	Diesel road Roller (3-Nos)		

District Officer (Roads), Highway Division, Sialkot.

Sr #	Name of Vehicle	Mae/Model	Capacity
1	Suzuki Jeep Potohar 1000.CC Engine No. J-110423. Jeep No.STU-712(D.O Buildings)	2006	1000-CC
2	Suzuki Jeep 1000.CC Engine No. 807847 Jeep No. 9559(D.D.O buildings Sub Division Sialkot)	1987	1000-CC
3	Suzuki Jeep 1000.CC Jeep No.STB-7515 (D.D.O Buildings Sub Division Sialkot). out of order	1984	1000-CC
4	Suzuki Jeep 1000.CC(D.D.O Buildings Sub Division Pasrur. Jeep No. SLE 6857 out of order	1987	1000-CC
5	Land Cruiser Diesel Jeep Engine No.11411-56040 Deputy District Officer Building Sub Division Daska Jeep No-STB-555	-	1000-CC
6	Nissan Jeep 1000-CC Engine No.71450 old Jeep Deputy District Officer Building Sub Division Daska out of order	1981	1000-CC
7	4-Cylinder Jeep Engine No.193667 Deputy District Officer building Sub Division Daska Jeep No. STA-7037 out of order	1980	1000-CC

District Officer (Blddos) Buildings Division Sialkot

➢ Machinery and Equipment for managing disaster situation

S #	Description	Nos.
1	Tractor	40
2	Trolley	35
3	Front end loader / Blade	2
4	Mechanical Sweeper	3
5	Suzuki Jeep	6
6	Suzuki, Mazda Pick up	2
7	Pajero	1
8	Street Light Van	1
9	Suzuki Cars	2
10	Road Roller	2

11	Road Marking Machine	2
12	Dewatering Pumps	16

List provided by Tehsil Sialkot

➢ Tools available

S #	Item / Description	Quantity
1	Life Jackets	10
2	Long shoes	5 pair
3	Helmets	10
4	Shovels	4
5	Torch	7
6	Empty Bags	60
7	Bamboos	10

List provided by Tehsil Sialkot

➢ Ambulances and Vehicles with Department

S #	Description	Nos.
1	Vehicles and Ambulances	32
2	National Program Vehicles	53
3	Motor Cycles	18

➢ Private ambulances in District Sialkot

S #	Name of Hospital	Number of Ambulances
1	Edhi Center	4
2	Private Hospital Ambulances	25
3	NGOs Ambulances	5

Civil Defense Department and Resources

Civil Defense Department and Resources

The role of Civil Defense Department cannot be over emphasized in the eventuality / occurrence of crises. The Civil Defense Department, Sialkot is an organized department working always hand in hand with District administration on the district. The organized human resource of Civil Defense Department in the shape of volunteers can render much needed support to civil administration in case of natural disaster. The logistical and human resources of Civil Defense are as under.

i. Flood Fighting Equipment

The fold fighting equipment available in the office of Civil Defense can play an important role once the crisis is occurred. The following equipment is available to meet out the eventuality:

S #	Materials	Quantity
1	Almonium Boat	01
2	Fiberglass Boat	02
3	OBM Engine (40 HP)	03
4	OBM Engine (30 HP)	02
5	Life Ring	04
6	Life Jackets	32
7	Oars	08
8	Gas Mask	05
9	Breathing Apparatus	01
10	Fire Blanket	01
11	Siren	03
12	Stretcher	04
13	Shovel	270
14	Handy – Talkies	05
15	Mobile Sets	03

ii. Bomb Disposal Equipment

S #	Materials	Quantity
1	1Bomb Disposal Suit	01
2	Bomb Pin	01
3	Water cannon Gun	01
4	Prodder	02
5	Extension Rod	01
6	Metal Detector (small)	06
7	Metal Detector (large)	01
8	Security Gate	01

iii. Human Resource

S #	Materials	Quantity
1	Chief Warden	01
2	Additional Chief Warden	03
3	Dy. Chief Warden	10
4	Divisional Warden	01
5	Dy. Div. Warden	03
6	Group Warden	05
7	Dy. Group Warden	10
8	Post Warden	20
9	Volunteers	500

Godowns and Storage Places in District

a) Godowns / Storage place of District Sialkot and their Location

Sr#	No of Godowns	Storages place	Location of Godowns
1	8	PRC, Sialkot	Near Rex Cenima, Sialkot
2	10	//	Stadium Road, Sialkot
3	8	PRC, Daska	Near Chongi No.8 Daska
4	6	PRC, Sambrial	Near Ghala Mandi, Sambrial
5	6	PRC, Sambrial	Gujranwala Road, Siranwali
6	6	PRC, Pasrur	3 Godowns at Ghala Mandi & 3 at Railway Phatak, Pasrur

b) Godowns/Storage place of Private Organizationa and their Location

Sr#	No of Godowns	Storages place	Location of Godowns
1	2	Karmanwala Rice Mills	Dharganwali, Sialkot
2	1	Data Rice Mills	Chaprar Road, Sialkot
3	1	Langreal Rice Mills	Chaprar Road, Sialkot
4	2	PRC, Daska	At Village Pahari Pur, Daska
5	1	//	At Village Kotli Khano
6	1	Butt Rice mills	Bhatah Wahh
7	4	PRC, Sambrial	Ghala mandi, Sambrial
8	2	//	Lopowali Road
9	1	Muslim Rice Mills	Sambrial
10	4	PRC, Sirawali	At Village Bhikhi Sandwan
11	1	Moshin Rice Mills	Siranwali
12	1	HAIDAR Rice Mills	//
13	1	National Rice Mills	//
14	3	Pasrur	At Village Purab Kalair
15	1	//	Village Kala Chak
16	1	//	Pasrur Mahal Cenima
17	2	KBF	Adda Assowal
18	1	Tatla Rice Mills	KBF Chand
19	1	Gujjar Rice Mills	//
20	1	//	Aminanabad Road Bhiowali
21	5	Chawinda	Near Village Butor Dogran
22	7	//	Phalora Road Chawinda
23	1	Gillani Rice Mills	Chawinda

District Food Controller District Sialkot

List of Participants Multi Sector Consultation on District Disaster Risk Management Plan of District Sialkot

S#	Name	Dept / Organization	Position
1	Shalim Kamran	NDMA	Planning and Preparedness Coordinator
2	Shakir Hussain	SKILL	Executive Director
3	Shahid	Social Welfare	DDO
4	Javaid Gill	Community Development	EDO CD
5	Dr. Capt. M Iqbal	Health	Medical Superintendent
6	Mian Shahid Maqsood	TMA Pasrur	Tehsil Officer
7	Muhammad Younis Bhatti	TMA Pasrur	Tehsil Officer
8	Muhammad Irshad Nagi	Environment	DDO
9	Dr. Capt (R) Muhammad Aslam	Health	MS Government AIM Hospital
10	Muhammad Shoaib Butt	KOSHISH Welfare Society	Office Manager
11	Dr. Gul Nawaz Raja	Health	MS THQ Pasrur
12	DR. Arshad Dar	Health	EDO
13	Muhammad Akram	Punjab Emergency Services Rescue 1122	Emergency Officer
14	Shamoun Khokher	Caritas Sialkot Region	Regional Coordinator
15	Shahzad	Traffic Police	Inspector Police
16	M Zaman Shah	Instructor Civil Defense	Instructor
17	Roman Akhtar	Caritas Sialkot Region	Animator
18	Saeed Siaf Hussain	District Food Controller	Assistant Food Controller
19	Muhammad Asif Ali	Social Welfare	Gender Specialist
20	Muhammad Nawaz Khan	Social Welfare	DO
21	Naheed Tufail	Social Welfare	Supervisor
22	Mussrat Sultana	Social Welfare	Supervisor
23	Sabiha Sultana	Social Welfare	Supervisor
24	Qamar Ul Nisa	Social Welfare	Supervisor
25	Abida Kausar	Social Welfare	Supervisor
26	Amjad Gulzar	UNDP	Planning Expert
27	Irfan MAqbool	NDMA	Training Coordinator
28	Muhammad Adil Iqbal	Civil Defense	DO
29	Syeda Farah Azmi	Roshani Welfare Organization	President
30	Manzoor Ahmad Goriya	DCO Office	DDO Registrar
31	Adnan Rafiq	TMA Samberial	TO
32	Awais Ahmed Tarer	DCO Office	DDO Coordination
33	Capt Muhammad Atta	DCO Office	DCO
34	Amir Mohyuddin	NDMA	Deputy Director
35	Amir Ijaz Akbar	Revenue	DO Revenue

Schedule of Multi sector Consultation

#	Activity	Time	Responsibility
1.	Welcome	9:00 am	Adil DOCD
2.	Introduction	9:10 am	Amjad Gulzar
3.	Planning Process	9:20 am	Amjad Gulzar
4.	Plan Structure / Overview	9:25 am	Amjad Gulzar
5.	Group Formation/ToRs	9:30 am	Shalim
6.	Group work	9:40 am	Shalim, Irfan & Amjad
Working Tea			
7.	Presentations of Groups	10:40 am	Groups
7.1.	Groups # 01	10:45 am	Group # 01
7.2.	Groups # 02	10:55 am	Group # 02
7.3.	Groups # 03	11:10 am	Group # 03
7.4.	Groups # 04	11:25 am	Group # 04
8.	Two Year Plan Presentation	11:30 am	Irfan / Shalim
9.	Concluding Session	11:45 am	
9.1.	Brief Remarks: Deputy Director NDMA	12:10 am	Irfan Maqbool
9.2	Brief Remarks: Capt M Atta, DCO Sialkot	12:30 pm	Irfan Maqbool
10.	Vote of Thanks	01:00 pm	Irfan Maqbool
Lunch			

District Level Damage, Needs & Assessment Form Format

Date of Report_____ **District**_____

Part 1 Situation

1.1 Type of disaster

1.2 Date disaster started

1.3 Status of disaster

( ) ongoing_____ ( ) ended: date_____

1.4 Total number of population affected_____

1.5 Percentage of population affected versus total population in the district_____%

1.6 Type of area affected

1.7 Worst affected community (specify by name) _____

_____

_____

_____

Part 2 Effects on Population Who Suffer and in Need of Assistance

Serial No.	Name of UCs	Total affected people		No. of deaths	Cause of deaths	Number missing	Injured/Sick	Type of sickness	No. of houses damaged			
		Family	Persons						totally	w/major	w/minor	total #
2.1												
2.2												
2.3												
Etc.												
Total												

Part 2.1 Effects on Population Who Suffer and in Need of Assistance

Serial No.	Name of UCs	Water sources contaminated	No. of safe areas	Families inside safe areas who need					Families outside safe areas who need			
				Shelter	Food	HH Kits	Watsan	Medicine	Food	HH Kits	Watsan	Medicine
2.1												
2.2												
2.3												
Etc.												
Total												

Part 3 Effects to Household Property, Agriculture and Livelihood

Serial No.	Name of UCs	Areas of crops damaged			Major livestock killed			Other types of livelihood & family properties damaged, specify				
		Totally	Partially	total	Cow/buffalo	Goat	total	boats				Total
3.1												
3.2												
3.3												
Etc.												
Total												

Part 4 Effects to Facilities and Infrastructure

#	Name of UCs	Hospital/health centre damaged			Schools damaged			National Road in Km	Secondary Road in Km	No. of Bridges	Culverts	Irrigation scheme
		Totally	Partially	Total	Totally	Partially	Total					
4.1												
4.2												
4.3												
Etc.												
Total												

Part 5 Summary of Assistance Received by Provincial/Federal Government and any other Source

Type of Assistance	Source	Status of Use and Implementation of Assistance Required	Problems Encountered
5.1			
5.2			
5.3			
5.4			
5.5			
5.6			

Part 6 Possibility of Secondary Hazards during Disaster Situation

1._____

2._____

3._____

Prepared and submitted by:

Submitted to:

District Authority (DDMA)
Date

Provincial Authority (PDMA)
Date

Explanatory Notes:

1. The detailed District Damage Report is based on the UC reports received within 4-5 days of the disaster occurrence, for onward submission to Province/Federal Departments.

Union Council Level Damage, Needs & Capacity Assessment Form Format

Date of Report _____ UC Name _____

Tehsil Name _____ District _____

Part 1 Situation

1.1 Type of disaster

1.2 Date disaster started

1.3 Status of disaster

( ) ongoing _____ ( ) ended: date _____

1.4 Total number of villages affected _____

1.5 Percentage of population affected versus total population in the district _____%

1.6 Type of area affected

1.7 Worst affected villages (specify by name) _____

_____

_____

_____

Part 2 Effects on Population Who Suffer and in Need of Assistance

Serial No.	Name of UCs	Total affected people		No. of deaths	Cause of deaths	Number missing	Injured/Sick	Type of sickness	No. of houses damaged			
		Family	Persons						totally	w/major	w/minor	total #
2.1												
2.2												
2.3												
Etc.												
Total												

Part 2.1 Effects on Population Who Suffer and in Need of Assistance

Serial No.	Name of UCs	Water sources contaminated	No. of safe areas	Families inside safe areas who need					Families outside safe areas who need			
				Shelter	Food	HH Kits	Watsan	Medicine	Food	HH Kits	Watsan	Medicine
2.1												
2.2												
2.3												
Etc.												
Total												

Part 3 Effects to Household Property, Agriculture and Livelihood

Serial No.	Name of UCs	Areas of crops damaged			Major livestock killed			Other types of livelihood & family properties damaged, specify				
		Totally	Partially	total	Cow/buffalo	Goat	total	boats				Total
3.1												
3.2												
3.3												
Etc.												
Total												

Part 4 Effects to Facilities and Infrastructure

#	Name of UCs	Hospital/health centre damaged			Schools damaged			National Road in Km	Secondary Road in Km	No. of Bridges	Culverts	Irrigation scheme
		Totally	Partially	Total	Totally	Partially	Total					
4.1												
4.2												
4.3												
Etc.												
Total												

Part 5 Summary of Assistance Received by Provincial/Federal Government and any other Source

Type of Assistance	Source	Status of Use and Implementation of Assistance Required	Problems Encountered
5.1			
5.2			
5.3			
5.4			
5.5			
5.6			

Part 6 Possibility of Secondary Hazards during Disaster Situation

1._____

2._____

3._____

Prepared by:

Received by:

UC Authority
Date

District Authority
Date

Explanatory Notes:

1. The purpose of the UC Level Damage Report is to report in detail the extent of damages for each vulnerable element: particularly population, household property, agriculture, community and public facilities, the priority needs of population, the type and quantity of assistance provided at the district level and the additional need for outside assistance.

Village Level Damage, Needs & Capacity Assessment Form Format

I. Name of Village Organization: _____

II. Description of the Disaster Event:

Disaster: _____

Date of Occurrence: _____

Duration (Description): _____

III. Affected Area: _____

(Address: Village/City/District/Region/Province)

Total Population:

Total No. of Families in village:

Total No. of Families Affected:

IV. Damage to Structures:

No. of Families Who Own Their Houses: _____

No. of Families Who Lease: _____

No. of partially destroyed: _____

No. of completely destroyed: _____

V. Damage to Livelihood

1. _____
2. _____
3. _____

VI. Present Location of the Survivors

Did the affected families evacuate or do they remain in their respective homes?

_____

(If the answer to the above is yes, answer section A or B below.)

a. Evacuation Centres (Specify name, location, distance from the place of origin)

_____

1. When did the families move to the evacuation centre? _____
2. How many are staying in the centre? _____
3. Is there enough ventilation? _____
4. How are waste and excreta disposed of ? _____
5. Are there enough latrines? _____
6. Are there sources of potable drinking water? _____

b. In the absence of an evacuation centre, please specify present location of the survivors and give brief description of the physical condition of the place

_____

VII. Emergency Assistance Received from Other Organizations

Name of Organization	Assistance Extended	Date	Quantity/Estimated Amount

IX. Identification of Needs of Target Beneficiaries

1. _____
2. _____
3. _____

Other Items Needed:

1. Kitchen Utensils: what, how many and why? _____
2. Sleeping materials: What, how many and why? _____
3. No. of families in need of materials for temporary shelter
   (Plastic Sheets)_____

XI. Additional Information on the Area

Report Prepared by:

Submitted to:

_____

Village Committee
Administration
Date

_____

UC
Date


ن
حکومت پنجاب

References & Sources

Consultations and meetings

- District Nazim & District Coordination Office
- District Revenue department
- District Agriculture department
- District Finance and Planning Department
- District Social Welfare and community development
- District School and Literacy Department
- Environment Department
- Tehsil Municipal Administration secretariat
- National Commission for Human Development, District Sialkot
- Medical Superintended, District Head Quarter Hospital Distt. Sialkot
- Civil Defense Office. Distt. Sialkot
- Secretary Board of Revenue
- Irrigation Department Sialkot
- District Flood Controller

References and Reports

- National Disaster Risk Management Framework Pakistan
- District Disaster Risk Management Planning Guidelines (NDMA)
- National disaster management Ordinance NDMO
- District Flood Plan 2004
- District Flood Plan 2006 by District Flood Controller
- Living with Disasters (Disaster Profiling of districts of Pakistan) *by Noreen Haider*
- District Health Profile by EDO Health
- District Profile by District Coordination Office
- District Census Report of Sialkot, 1998.

Websites

Pakistan Government	http://www.pakistan.gov.pk
Pakistan Meterological Department	http://www.pakmet.com.pk/
National Disaster Management Authority	http://www.ndma.gov.pk/
National Reconstruction Bureau	http://www.nrb.gov.pk/
Government of Punjab	http://www.punjab.gov.pk
UNDP Pakistan	http://www.undp.org.pk
ADB Pakistan	http://www.adb.org
Asian Disaster Preparedness Center	http://www.adpc.net
Centre for Research on the Epidemiology of Disasters	http://www.cred.be/
Population Census Organization; Federal Bureau of Statistics, Pakistan.	http://www.statpak.gov.pk