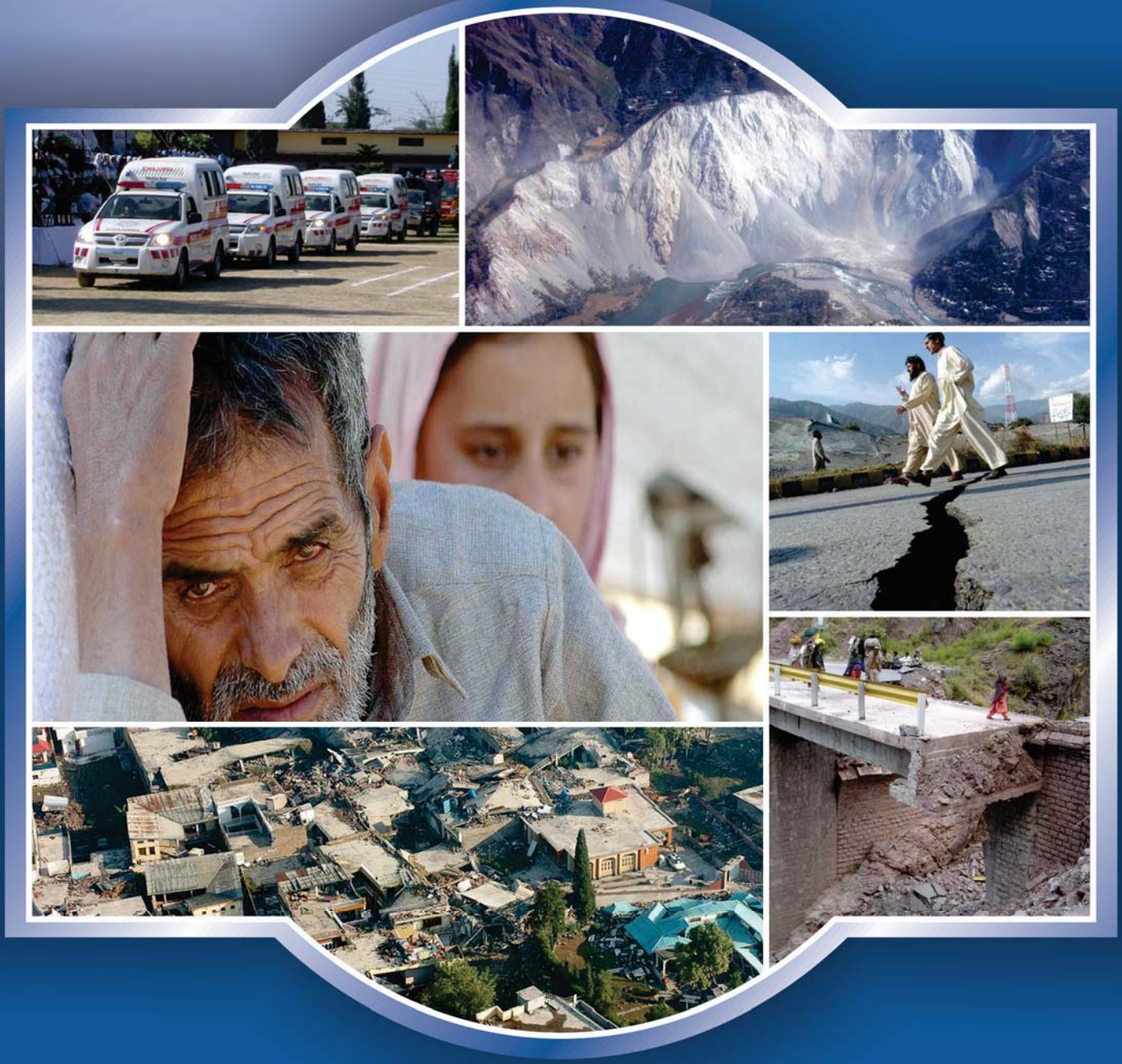
State Disaster Risk Management Plan

2017



State Disaster Management Authority

Government of Azad Jammu & Kashmir

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Acronyms

AD	Assistant Director
CBDRM	Community Based Disaster Risk Management
C&WD	Communication & Works Department
DG	Director General
DRM	Disaster Risk Management
DRR	Disaster Risk Reduction
DDMA	District Disaster Management Authority
GoAJK	Government of Azad Jammu and Kashmir
ICAO	International Civil Aviation Organization
IDPs	Internally Displaced Persons
INGO	International NGO
LUP	Land Use Planning
LoC	Line of Control
MOU	Memorandum of Understanding
MOFA	Ministry of Foreign Affairs
NDMA	National Disaster Management Authority
NDMC	National Disaster Management Commission
NFI	Non-Food Items
NIDM	National Institute of Disaster Management
NGO	Non-Governmental Organization
NHA	National Highway Authority
NLC	National Logistic Cell
NOC	No Objection Certificate
PSDP	Public Sector Development Program
PP&H	Physical Planning and Housing
SDMA	State Disaster Management Authority
SDMC	State Disaster Management Commission
UNICEF	United Nations International Children's Emergency Fund
WASH	Water, Sanitation and Hygiene
WFP	World Food Programme
WHO	World Health Organization

Foreword

The nature has been very generous in bestowing the State of Azad Jammu and Kashmir with astounding beauty. It has glaciers, lush green mountains, gushing streams and has abundant natural resources. However, due to its geography and geology, AJK is facing frequent seismic activity and intensification of climate change makes it vulnerable to floods. Being prone to natural disasters, AJK is a region that frequently suffers earthquakes, floods, landslides and other natural disaster.

In the wake of the earthquake of 2005, Government of AJK has established State and District Level Disaster Management institutions to adequately respond to any event of natural calamity and devise measures for disaster risk reduction. Since its creation, SDMA and its subsidiaries has improved the response against floods, landslides and other accidents. The SDMA is performing its functions in available resources, however there is dire need to improve its capacity and capability.

Keeping in view the requirements of SDMA, the World Bank funded "Disaster & Climate Resilience Improvement Project (DCRIP)" hired the services of M/s Solution for Development Support (SDS) for preparation of **"Disaster Risk Management Plans for State & 10 Districts".** It is a matter of great satisfaction that the consultants have submitted their report which will definitely provide an excellent planning framework for the Authority.

I would also like to acknowledge the support of the World Bank provided to the GoAJK through "Disaster and Climate Resilience Improvement Project (DCRIP)", P&DD for enhancing the capacity of public sector institutions to cope with the disasters in AJK. The active support of the World Bank made formulation of Disaster Management Plans possible. The formulation of these plans will help disaster management authorities considerably enhance their technical capabilities in forecasting, effectively managing and closely monitoring hazards like floods, landslides and earthquakes. The document, I hope will contribute towards clearing concepts, building networks, harmonizing initiatives and energizing stakeholders in State. I hope that the guidelines set forth through these DRM Plans will be observed by all concerned.

On behalf of Planning & Development Department (P&DD) GoAJK, I can confidently say that, these Plans will enable us to align us with National Framework for Disaster Risk Reduction. I heartily congratulate SDMA & DCRIP and wish that these Plans and its implementation meet great success and pray that Almighty protect us from all such disasters in future, Ameen!

Muhammad Ahsen
Secretary (Development)
Azad Govt. of State of Jammu & Kashmir

Prime Minister's Message

The State of Azad Jammu and Kashmir has been blessed with a unique geographic location along with an extremely conducive environment and an abundant wealth of natural resources. It provides huge quantities of water through Neelum and Jhelum Rivers as well as a number of other waterways and streams. The abundant rainfall contributes additional water which is used by the people of the State as well as Pakistan.

Due to its mountainous terrain and presence of active fault lines, the people of the State suffer from a range of natural disasters whose impacts are exacerbated by the limited investments in disaster mitigation as well as paucity of resources for adequate response and recovery. The earthquake of 2005 which devastated the population of the State and wrought havoc on the already stretched infrastructure will remain alive in our memories for a long time to come.

Realizing the need for proactive disaster preparedness measures, the State Government has created the State Disaster Management Authority (SDMA) to coordinate relief, recovery, reconstruction efforts in addition to preparing the populace for future disasters through structural and non-structural measures. It is a mammoth task requiring effective coordination among all the relevant stakeholders at the State level.

I am glad to learn that a comprehensive Disaster Risk Management Plan at State level has been formulated. On this occasion, I would like to emphasize that role of our all institutions, individuals, international humanitarian agencies and local organizations to come to save humanity in institutionalizing the preventive theories and knowledge. I commend the efforts of every single individual put in for this noble cause. I assure that Government of Azad Jammu & Kashmir is instantly available for any cooperation needed for the implementation of this Plan.

I believe that preparation of the State Disaster Management Plan is a step in the right direction and I commend the Authority for preparing this comprehensive document which would provide a way forward to build resilience in the State.

I would like to acknowledge the support provided to the State Government by the World Bank through Disaster and Climate Resilience Improvement Project which made formulation of this Plan possible.

In the end, I would like to reaffirm the full support of the Azad Government of the State of Azad Jammu and Kashmir towards the cause of building resilience to the impacts of natural disasters.

Raja Muhammad Farooq Haider Khan
Prime Minister
Azad Govt. of State of Jammu & Kashmir

Chief Secretary's Message

The State of Azad Jammu and Kashmir is vulnerable to a diverse range of natural disasters due to its terrain and environmental conditions. It is one of the few regions in the world that is affected by the impacts of Earthquakes, Floods, Landslides, Drought and other natural disasters. The climate change has further increased the frequency of climate related and hydro-meteorological events as evidenced by the floods in 2010, 2012 and 2014. Flash flooding in the State has now become a regular phenomenon and requires the State Government to respond in a timely manner to save precious lives and property.

These natural disasters are a call for action for the Government to improve its preparedness and response capacity in order to ensure timely and equitable support to the affectees on one hand while on the other hand take proactive measures to minimize their impact.

The State Government has been taking measures to improve the capacity of the State Disaster Management Authority (SDMA) to enable it to take lead in all matters where Disaster Risk Management is concerned. It is not an easy task due to the limited resources available but maximum efforts are being made.

Preparation of the State DRM Plan is just a single step on this long and arduous journey. Nevertheless, it is one of the most important step as it will chalk out the plan of action for the years to come ultimately resulting in a capable and competent SDMA fully equipped to meet the challenges posed by the natural disasters in the State.

I would like to congratulate the Director General SDMA and his team on their hard work for creation of this Plan, which I am sure would provide an example for others to follow. However, I would like to urge the Authority to immediately take up implementation of the recommendations of the Plan in cooperation with the other relevant departments.

I would also like to thank the World Bank for providing generous support in responding to the challenges posed by the 2014 floods by launching a multi-sectoral resilience project which includes support for the Authority and other departments. I hope that plans would enable the Authority to achieve the objective of increasing the resilience of the State against all kind of natural and man-made disasters.

Dr. Ijaz Munir
Chief Secretary
Azad Govt. of State of Jammu & Kashmir

Message by Secretary, Relief, Disaster Management & Civil Defence

The State Disaster Management Authority is the premier government entity in the Azad Jammu and Kashmir for leading coordination of all disaster risk management related activities in the State. Ever since its creation, it has been striving to improve the government's response to the natural disasters and to help the people of the State in better preparedness. With generous support from the government and assistance from the donor agencies, its capacities have increased manifold which has led to a better prepared AJK.

Today when I look upon and compare the State of preparedness before and after the catastrophic Earthquake of 2005. I feel encouraged as State departments are better as prepared to respond to any disaster. Number of legal instruments have been enacted to institutional and operationalize disaster management system.

Handsome contribution has been made to Disaster Management Fund both by State and Federal governments. Humanitarian Response Facilities have been established in all the ten districts. Modern equipment has been the most glaring shortfall in handling of situations, giant leaps has also been taken in this regard. Federal Government and the World Bank has contributed 500 million and 200 million for the purpose of procurement of modern equipment.

Preparation of the State Disaster Management Plan is the culmination of tireless efforts of the team which started from its inception and has not been deterred by the numerous challenges posed by the frequent disaster episode in the State.

I would like to acknowledge and appreciate the kind support provided by the World Bank through the Disaster and Climate Resilience Improvement project which is supporting the SDMA in a number of activities including capacity building and analytical studies which would form the foundation of future investment to further enhances its capabilities. I sincerely hope that other donors would also follow the footsteps of the World Bank to supplement the resources and technical expertise available. I would specifically like to mention the technical support by the Task Team of the Project who worked closely with the SDMA team to make the timely completion of this important Plan possible.

With the completion of the State DRM Plan, I, along with my team would embark on ensuring its implementation and working closely with the relevant Line Departments and District Administrations to ensure that the coordination mechanisms and operating procedures are implemented and would be tested real-time in disaster episodes. We would further strive to ensure that this plan remains a usable and live document and improved on regular basis to incorporate the lessons learnt and best practice.

Zaheer Ud Din
Secretary/Director General,
Relief, Disaster Management & Civil Defence, AJK

Vision, Mission and Objectives

Vision

Enhance disaster resilience in the State of Azad Jammu & Kashmir

Mission

To reduce vulnerability of human life, property and the environment to natural as well as man-made disasters through awareness, mitigation, preparedness and coordination.

Objectives

- To contribute achievement of sustainable development through minimized human suffering, loss and damage to the economic infrastructure by promoting and strengthening State level capacities for disaster management.
- To localize disaster risk management to the maximum extent possible so as to minimize the impact on life, livelihood and environment
- To enhance institutional capacities at State level including those related to technology, training and human and material resources

Definitions

Agricultural Drought: Refers to reduction in moisture availability below the optimum level required by a crop during different stages of its growth cycle and resulting in reduced yields.

Climate Change: Refers to a change of climate which is attributed directly or indirectly to human activity that alters the composition of the global atmosphere and which is in addition to natural climate variability observed over comparable time periods.

Complex Humanitarian Emergency: This is a crisis in a country, region or society where there is total or considerable breakdown of authority resulting from internal and/or external conflict(s).

Consequences: The actual damage to elements in case of a source of hazard translating into a disaster is termed as consequences. For instance, if a river overflows and floods the areas on its banks, but this does not pose a risk of disruption to elements there, it is of little consequence.

Disaster: It is an event that is associated with the impact of a human-induced or natural hazard which causes a serious disruption in the functioning of a community or society, causing widespread human, material or environmental losses which exceed the ability of the affected community or society to cope with the hazard using its own resources.

Disaster Contingency Plan: A means to address a disaster or impending disaster within a fairly finite time such as from early warning to response and recovery, including mechanisms for generation of disaster-specific operational plans.

Disaster Management: Refers to a continuous and integrated multi-sectoral and multidisciplinary process of planning and implementation of measures aimed at (a) preventing or reducing the risk of disasters, (b) mitigating the severity or consequences of disasters, (c) emergency preparedness, (d) a rapid and effective response to disasters and (e) post-disaster recovery and rehabilitation.

Disaster Preparedness: Refers to 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 evacuation of people and economic assets from a threatened location.

Disaster Prevention: Refers to measures or actions taken to avoid, eliminate or prevent harmful natural or human adverse phenomena or hazards from causing or resulting in a disaster. This includes the process of informing the general population, increasing levels of consciousness about risks and how people can act to prevent their exposure to risk of hazards.

Disaster Risk Management: This is the systematic process of using administrative directives, organizations and operational skills and capacities to implement strategies, policies and improved coping capacities in order to lessen the adverse impact of hazards and the possibility of disaster.

Disaster Risk Reduction: The implementation of conceptual framework of elements considered with the possibilities 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.

Drought: This is defined as a period of abnormally dry weather that persists long enough to produce a serious hydrologic imbalance (for example crop damage, water supply shortage, etc.). The severity of the drought depends upon the degree of moisture deficiency, the duration and the size of the affected area.

Early Warning: Refers to the provision of timely and effective information, through relevant institutions, that follows individuals exposed to any hazard, to take action to avoid or reduce their risk and prepare for effective response.

El Nino Effect: A phenomenon of changes in surface temperatures and currents of the Pacific, Atlantic and Indian Oceans, causing much of the yearly variations in rainfall. These changes have proved difficult to predict or understand their causes.

Elements: The human, material, economic and environmental assets likely to be affected in a disaster are termed as elements at risk. For instance, the human settlements, the infrastructure, the land and economic assets downstream of a weakened dam are elements at the risk of flooding.

Emergency: An event, actual or imminent which endangers or threatens to endanger life, property or the environment and which requires a significant and coordinated response.

Epidemic: Refers to an unusually large or unexpected increase in the number of cases of the disease for a given time, place or period.

Environmental Degradation: The reduction of the capacity of the environment to meet socioeconomic objectives and needs. Examples are land degradation; deforestation; desertification; loss of Bio-Diversity; water and air pollution; climate change; sea level rise; ozone layer depletion; illegal mining and quarrying; indiscriminate throwing of garbage; and drilling boreholes close to sewer systems.

Famine: A crisis induced by the breakdown of the accustomed availability of and accessibility to basic food stuffs on a scale sufficient to threaten the lives of a significant number of people.

Floods: A flood is a high flow of water, which overtops either the natural or artificial banks of a river. Floods induce disasters when human settlements have an overflow of water beyond the normal confines and humans are unable to cope with the calamity or when they result in the destruction of crops, social and economic infrastructures.

Gender: Gender refers to the social and economic differences between men and women that are learned, changeable over time and have wide variation within and between cultures. This is opposed to sex that refers to the biological differences between men and women. Gender is used to analyze roles, responsibilities, constraints and opportunities of men and women in development.

Hazard: Refers to a potentially damaging physical event such as an earthquake, a hurricane, flood, drought, fire, epidemic, phenomenon or human activity, which may cause injury or the loss of life, damage to property, social and economic disruption or environmental degradation and includes latent conditions that may represent future threats and can have different origins, natural and human-induced.

Human-Induced Hazard: Those elements of the physical environment harmful to human beings and caused by humans also seen as 'Acts of Humans.'

Hydrological Drought: This is a period when the flows in rivers, lakes and ground water aquifers are below normal levels. Hydro-Meteorological Hazard: Natural phenomenon of atmospheric, hydrological or oceanographic nature which may cause the loss of life or injury, property damage, and social and economic or environmental degradation such as floods, debris and mud-floods and tropical cyclones.

Impact and Needs Assessment: Involves assessing the nature and magnitude of a disaster once it occurs, its impact on affected populations, and the type and extent of emergency assistance that is required.

Life Skills-Based Education (LSBE): Refers to describe life-skills education that addresses a specific content or subject with the aim of creating abilities for adaptive and positive behavior in a person(s).

Mitigation: Structural and non-structural measures undertaken to limit or make less severe the adverse impact of natural hazards, environmental degradation and technological hazards.

Natural-Induced Hazard: Those elements of the physical environment harmful to humans and caused by forces exogenous or external to them, also seen as 'Acts of God'.

Pandemic: Deadly or virulent disease affecting or threatening serious injury, ill-health, discomfort or death to a large number or proportion of the human, plant or animal life.

Probability: The likelihood of a source of risk translating into an actual damage to the elements at risk is termed as probability. For instance, millions of people live downstream of dams in the world, but the probability of a disruption of lives and livelihoods is high only for the dams that have become weak due to structural damage or silting up.

Reconstruction and Recovery: To rebuild essential infrastructure, productive capacities, institutions and services destroyed or rendered non-operational by a disaster. Recovery is to help bring about sustainable development by facilitating the necessary adjustments to the changes caused by the disaster and improving on the status quo, where possible.

Rehabilitation: Refers to measures to help restore the livelihoods, assets and production levels of emergency affected communities.

Relief: Refers to emergency provision of assistance to save people's lives in the immediate wake of a disaster, including search and rescue, evacuation, distribution of food and water, temporary provision of sanitation, health care and shelter, and the restoration of immediate personal security.

Resilience: Refers to the ability of a system, community or society exposed to hazards to resist, absorb, accommodate to and recover from the effect of a hazard in a timely and efficient manner, including through the preservation and restoration of its essential basic structures and functions.

Response: The provisions of emergency services and public assistance during or immediately after a disaster in order to save lives, reduce health impacts, ensure public safety and meet the basic subsistence needs of the people affected.

Risk: Refers to the probability of harmful consequences such as deaths or injuries, or expected losses of property or livelihoods, disruption of economic activity or environmental damage, resulting from interaction between natural or human induced hazards and vulnerable conditions.

Source: The natural or manmade conditions that may translate into a disaster. For instance, a weakened dam is a source of hazard for people living downstream. Similarly, geological fault-lines, active volcanoes, industrial installations storing or producing poisonous substances, and hydrological disturbances are sources of risk for geographical locations in proximity to them etc.

Sustainable Development: Development that meets the needs of the present without compromising the ability of future generations to meet their own needs. Sustainable development is based on socio- cultural development, political stability and decorum, economic growth and ecosystem protection, which all relate to disaster-resilience increase.

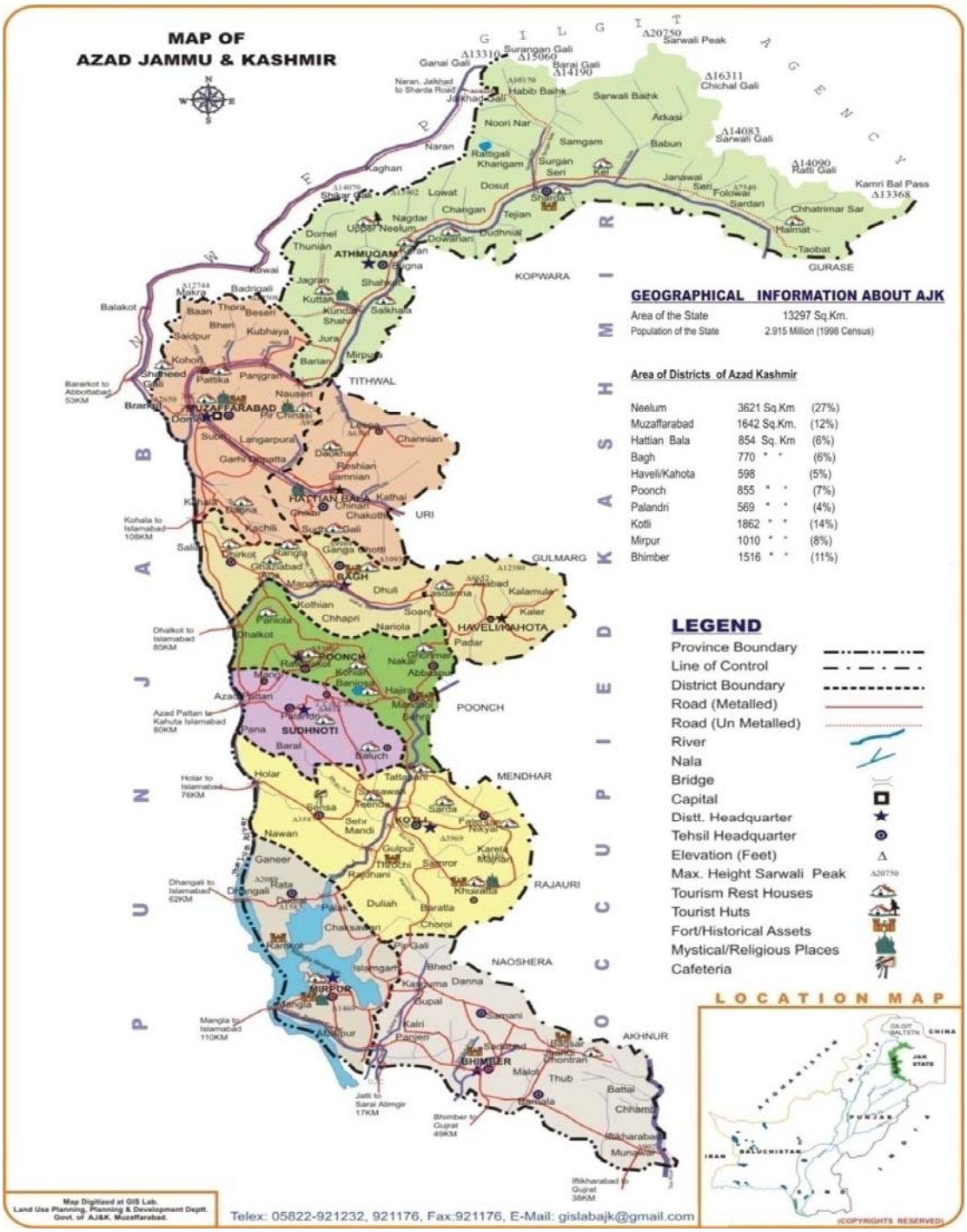
Vulnerability: Refers to a set of conditions and processes resulting from physical, social, economic and environmental factors which increase the susceptibility of a community to the impact of hazards.

Chapter

1

Profile of AJ&K Region

Chapter 1: Profile of AJ&K Region



Map of AJK

1.1 Topography

The State of Azad Jammu and Kashmir lies between longitude 73° – 75° and latitude 33° – 36° and comprises an area of 5,134 square miles (13,297 square kilometers). AJ&K falls within the Himalayan organic belt. As such, its topography is mainly hilly and mountainous characterized by deep ravines, rugged, and undulating terrain. The northern districts (Neelum, Muzaffarabad, Jhelum Valley, Bagh, Haveli, Poonch, and Sudhnoti) are generally mountainous while southern districts (Kotli, Mirpur, and Bhimber) are relatively plain. The mountain ecosystems are relatively unstable and have low inherent productivity. Within this fragile environment, however, there is a great variety of ecological niches upon which people base their livelihood. Small land holdings and scarcity of cultivable land are the main factors limiting on-farm income. The area is full of natural beauty with thick forests, fast flowing rivers and winding streams. Main rivers are Jhelum, Neelum and Poonch.

1.2 Climate

The region is marked with varied elevation as south being lowest at 360 meters above sea level and north having the highest altitude of 6325 meters. AJ&K experiences varied seasons for which the snow line fluctuates between 1200 meters in winter to 3300 meters in summer.

Depending on the altitude, AJ&K has a wide range of climatic conditions. The South has dry sub-tropical climate while the North most moist temperate. There is significant variation in the rainfall pattern across different regions both in terms of amount and distribution. Average annual rainfall ranges from 1000 mm to 2000 mm. In the northern districts 30% to 60% precipitation is in the shape of snow. In winter, snow line is around 1200 meters while in summer it is 3300 meters. Average maximum temperature ranges from 20°C to 32°C while the average minimum temperature range is 04 to 07°C. Details of yearly rainfall data are at annex.

1.3 Soil

Based on the location, the soil in AJ&K can be broadly grouped into 03 categories:

a. Soil of mountain plateau is generally leached and relatively infertile.
b. Soil of mountain slopes is gravelly loam, shallow and deficient in organic matter.
c. Soil of inter-mountainous valleys is alluvial with a high agricultural potential.

1.4 Regional Variations

The terrain, resources and socio-economic conditions vary across different regions of the State. Muzaffarabad Division, the largest division is less accessible and the poorest, especially the northern part of District Neelum. As one moves south from Muzaffarabad towards Bagh, then Poonch, Sudhnoti and Kotli, the valley widens up and agricultural production increases. The area is more accessible, especially from Pakistan. Kotli is partially hilly whereas Bhimber and Mirpur are plains and similar to agricultural regions of northern Punjab. Settlement size is larger here and rich in agricultural production. The line of control (LOC) area with Indian

occupied Kashmir (IOK) remains a restricted zone; otherwise life carries on as usual. The entire stretch of the Line of Control between the Indian held Kashmir and the areas of the Azad Kashmir is approximately 740 Km.

1.5 Languages

Although Urdu is the official language of Azad Jammu & Kashmir. Other languages are Pahari, Gojri, and Kashmiri. The dominant language spoken in the State is Pahari with different accent that closely resembles to Pothowari and Hindko.

1.6 Per Capita Income and Employment

The majority of the rural population depends on forestry, livestock, agriculture and non-formal employment to eke out its subsistence. National average per capita income has been estimated to be US $1512 and according to Labor Force Survey (LFS) unemployment rate in AJ&K is 14.4%**. In line with the National trends, indicators of social sector particularly health and population have not shown much proficiency. Efforts have been made during the recent past to make up this deficiency so that the fruits of development can be brought to the doorstep of every common man.

*Economic survey of Pakistan 2014-15

**LFS, Pakistan 2014-15

1.7 Population

AJ&K is a fascinating land of people, languages & culture. Origin of inhabitants is claimed to be from the descendants of Semitic, Mongoloid, Aryans, Afghans, Persians, Turks & Arabs races. The marvel of beauty has many shades of times and enjoys a special place in history.

According to the 1998 population census, the State of Azad Jammu & Kashmir had a population of 2.973 million, which has grown to 4.466 million in 2015. Almost 100% population is Muslim. The population has grown at 2.4% annually during last decade; however, the family size remains slightly over 7 members per family, living mostly in extended/joint family structures. The population is predominantly rural with only 12% people residing in cities.

The Rural to Urban ratio is 88:12. The population density is 336 persons per Sq. Km. The literacy rate has increased from 55% to 76% after 1998 census. Infant Mortality Rate is approximately 58 per 1000 live births, whereas the immunization rate for the children under 5 years of age is more than 94%.

Population Features 2015

Projected population of AJ&K. (2015)	4.466 million
Male population (2015)	2.247 million
Female population (2015)	2.217million
Gender Ratio (Number of males per 100 females)	101
Average Family Size	6.7 Members. (MICS2007-08)
Rural - Urban Ratio	88:12
Growth Rate	2.41 %
Population Density 1998 Census. Population Density2015 projected	258 Persons/Sq. Km. 336 Persons/Sq. Km.
Literacy Rate	76 %
Religion	Almost 100% Muslims

Projected on the basis of 1998 Census

Source: i. Population Census Organization, Islamabad.

ii. PSLM 2014-15 Survey

1.8 Health

Health coverage in Azad Jammu & Kashmir is still inadequate. There are approximately 3855 hospital beds available in the area averaging one bed per 1158 people. Although AJ&K has primary health care coverage of 58%, however gap between service providers and population they supposedly serve is growing. The total number of Doctors, including Administrative Doctors, Health Managers & Dentists is 1078 out of which there are 57 Health Managers, 76 Dental Surgeons and 826 Medical Officers/Specialists, giving an average 0.18 Per 1000 Population in respect of Medical Officers/Specialists, 0.017 per 1000 Population in respect of Dentists and 0.012 per 1000 population, in respect of Health Managers.

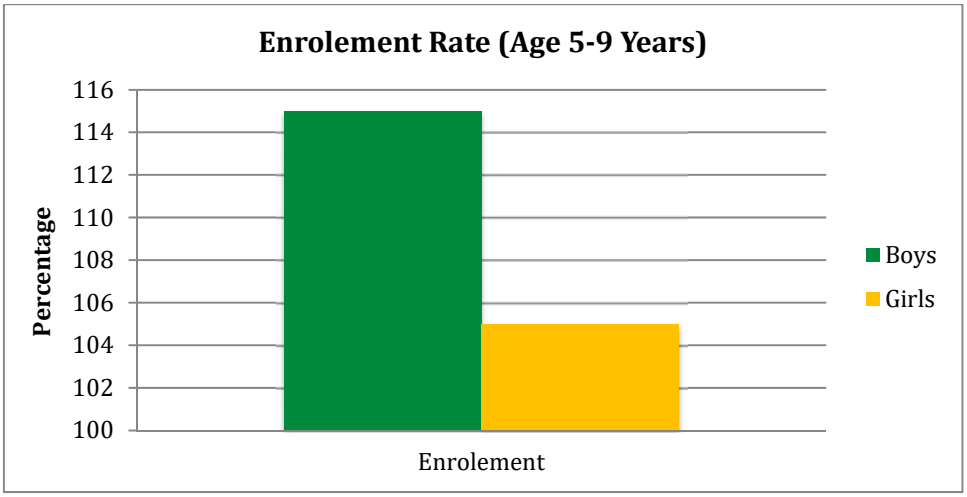
Source: Directorate of Health, Muzaffarabad

1.9 Education

Education has been a priority of the Govt. of the State of Azad Jammu & Kashmir as about 30% of its total recurring budget, besides, 7% of the total development budget is allocated to this sector. AJ&K's literacy rate is 77%* which is significantly higher than the national average of Pakistan. At present the gross enrollment rate at primary level is 115% for boys and 105% for girls (between the ages of 5-9). District wise literacy rate is given below.

Name of District	Literacy Rate %
AJ&K	77
Muzaffarabad/Jhelum Valley	72
Neelum	54
Bagh/Haveli	74
Poonch	81
Sudhnoti	79
Kotli	73
Mirpur	78
Bhimber	79

*Sources: *PSLM Survey 2014-15*



1.10 Governance

Azad Jammu & Kashmir has a parliamentary form of Government. The President of Azad Jammu and Kashmir is the Constitutional Head of the State, while the Prime Minister, supported by a Cabinet, is the Chief Executive. AJ&K has its own Legislative Assembly comprising of 41 direct and 8 indirect elected members, a member each from Technocrats, Mashaikhs, Overseas Kashmir is and 5 female members. The AJ&K has its institutions of the Supreme Court, High Court and Sharia Court.

1.11 Administrative Set-up

Azad Jammu & Kashmir is divided into three divisions (Muzaffarabad, Poonch & Mirpur) and ten administrative districts with Muzaffarabad as the capital of the State. The Muzaffarabad Division comprises of Muzaffarabad, Jhelum Valley and Neelum districts, Poonch Division comprises of Bagh, Haveli, Poonch & Sudhnoti districts whereas Mirpur Division consists of Mirpur, Kotli & Bhimber districts. These ten districts are further divided into 32 Subdivisions, 194 Union Councils and 1771 Revenue Villages. There are 5 Municipal Corporations, 13 Municipal Committees, 18 Town Committees and 31 Markaz Councils, which are administrated by the Local Government &Rural Development Department (LG&RDD).

Divisions, Districts & Sub-Divisions of AJ&K

Division	District	Sub-Division	No. of Villages	Total
Muzaffarabad	Muzaffarabad	Muzaffarabad	286	Districts = 03 Sub-Division = 07 Villages = 670
		Pattika(Naseerabad)	129	
	Neelum	Athmuqam	63	
		Sharda	25	
	Jhelum Valley	Jhelum Valley Bala	110	
		Leepa	33	
		Chikar	24	
Poonch	Bagh	Bagh	52	Districts = 04 Sub-Division = 14 Villages = 414
		Dhirkot	61	
		Harighel	27	
	Haveli	Haveli	44	
		Khurshidabad	16	
		Mumtazabad	31	
	Poonch	Rawalakot	53	
		Hajira	44	
		Thorar	07	
		Abbaspur	18	
	Sudhnoti	Pallandri	27	
		Tararkhal	11	
		Mang	06	

		Baloch	17	
Mirpur	Mirpur	Mirpur	176	Districts = 03 Sub-Division = 11 Villages = 687
		Dadyal	70	
	Kotli	Kotli	84	
		Khuiratta	26	
		Fatehpur	18	
		Sehnsa	71	
		Charhoi	19	
		Darlian Jattan	16	
	Bhimber	Bhimber	66	
		Samahni	47	
		Barnala	94	
03	10	32	1771	

Source: -Board of Revenue, Muzaffarabad.

1.12 Economic Features

Predominantly, AJ&K exhibits cultivation, livestock rearing and services as a vocational base however average family income generation from agriculture and livestock remains largely of subsistence value. On the other hand, a noticeable proportion of population has emigrated to Middle East, UK and Europe in search of better income prospects. Consequently, foreign capital remittances also hold a vital share in household income accumulation; the estimated per capital income stands at 847 US$. Unemployment rate is between 6.0 to 6.5% per annum. Though it is difficult to find credible source for poverty statistics, nevertheless anecdotal accounts suggest that poverty figures are in between 35%-45% of total population. The aftermath of 2005 earthquake has further increased poverty and has defragmented the fragile socio-economic fabric of AJ&K, especially of those living in remote rural areas and in mountainous regions.

1.13 Agriculture

Area under cultivation is around 1,940,82 hectares, which is almost 13% of the total Geographical area out of which 92% of the cultivable area is rain-fed. About 87% households have very small land holdings between one to two acres. Major crops are Maize, Wheat & Rice whereas minor crops are Grams, Pulses (Red Kidney Beans), Vegetables and Oil-seeds. Major fruits produced in AJ&K are Apple, Pears, Apricot and Walnuts. Agriculture and livestock income ranges between 30-40% of household earnings.

The remaining share comes from other sources including employment, businesses and remittances received by the families of AJ&K living abroad. Reduced agriculture productivity has adversely affected the traditional lifestyle and per capita income of the rural households.

Agriculture in AJ&K

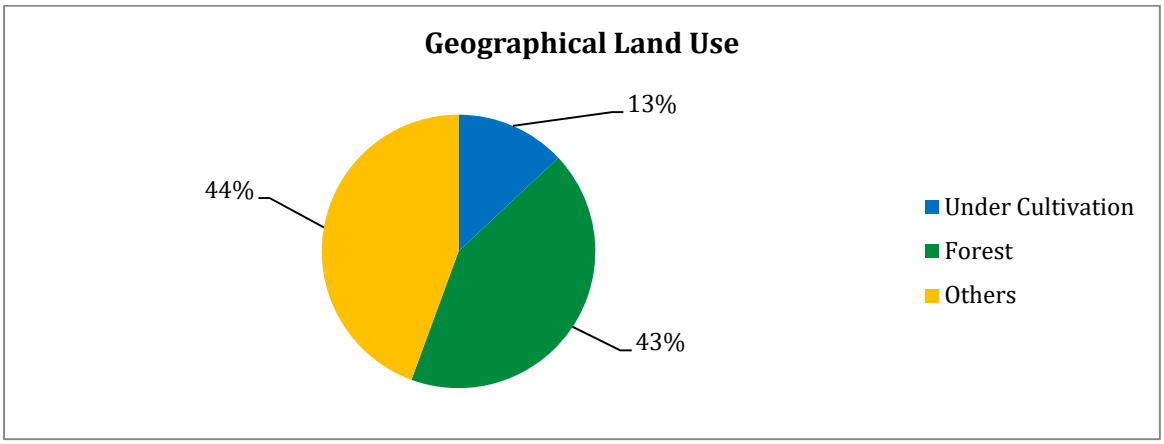
Land Holdings Area in Hectares & Acres		
	Hectares	**Acres**
Total Farm Area	637368	1574936
Farm Area per Family	1.749	4.323
Farm Area Per Capita	0.216	0.534
Area Under Cultivation	194082	479576
Cultivated Area Per Family	0.515	1.273
Cultivated Area Per Capita	0.064	0.157
Annual Cropped Area	238735	589913
Non–irrigated Area	181979	449671
Irrigated Area	12102	29905
Area Under Maize Cultivation	99408	245638
Area Under wheat Cultivation	80706	199425
Area Under Rice Cultivation	2824	6979
Area Under Jawar Cultivation	48	118
Area Under Vegetables Cultivation	3493	8631
Area Under Fruits Cultivation	13092	32350

Sources: Agriculture Department, Muzaffarabad.

Major Crops Production (Metric Tons)

Crop Name	**Quantity**
Maize	185195
Wheat	152451
Rice	7350
Millet	34298

Source: Agriculture Department Muzaffarabad.



1.14 Livestock Population & Domestic Poultry Birds by Administrative Units

On an average in AJ&K, livestock consists of 3 heads and 2 head per household for small ruminants and cattle/buffalo respectively. Overall gross annual income from livestock is Rs.1600 per household and contribution of milk is about 68%.

1.15 Forests

About 42.6% of the total Geographical area (0.567 million hectares), is substantially covered by the forests and due to its highlighted importance, as a major resource of revenue the Government Forest Department is overall responsible of protection and reforestation. Azad Kashmir Logging and Sawing Board (AKLAS) was setup to market the natural forest resources, by the virtue of value addition; various exhibition outlets have been setup for the same to gain desired market outreach.

The per capita standing volume is 299.5 Cubic foot and per capita forest area is 0.35 Acre. Annual wood demand is 1.65 million cubic meters and sustainable production is 1.94 million cubic meters. The local communities have traditional rights in terms of use of the forests and on an average three trees are burnt by one household every year for the fuel-wood requirements in the absence of alternate sources. Similarly, about 5 trees on average are required to construct a house for which the wood roofs have to be replaced after every 8-10 years.

Total Geographical Area:	**1.330 million Hectares**		**3.286million Acres**	
General Distribution of Land Utilization				
	Area (million)		% of	
Land Utilization	Hectares	Acres	FDA*	TGA**
A) Area Controlled by Deptt. Of Forest	0.567	1.400	100.0	42.60
1. Area Under Productive Forests	0.379	0.936	66.8	28.5
i. Area under Actual Forest				
Area Under Deodar	0.018	0.044	3.1	1.3
Area Under Kail	0.036	0.090	6.4	2.7
Area Under Fir	0.042	0.103	7.4	3.2
Area Under Pine	0.057	0.141	10.1	4.3
Area Under Broad Leaves Trees	0.001	0.002	0.1	0.1
Sub-Total (i)	0.154	0.38	27.1	11.6
ii. Area Under Thinly wooded Forests	0.225	0.556	39.7	16.9
2) Non Productive Area	0.188	0.464	33.2	14.1
B Area Under Cultivation	0.173	0.427	-	13.0
C Area Under Cultivable Waste	0.032	0.080	-	2.4
D Area Under Uncultivable Waste	0.558	1.379	-	42.0
Total Geographical Area (A+B+C+D)	1.330	3.286	-	100
Forest Production				
Total Annual Forest Production			6687000 Cft	
Annual Production /Acre			4.77Cft	
Per Capita Forest Area			0.35Acre	
Per Capita Standing Volume			299.5 Cft	
Per Capita Timber (Yield)			1.65 Cft	
* Forest Demarcated Area.** Total Geographical Area				

1.16 Mineral Resources

The Geological environment of AJ&K comprises generally 3 types of rocks i.e. Sedimentary, Igneous and Metamorphic. The Industrial minerals and base metals are found in all of 3 rocks spreading all over the AJ&K territory whereas gemstones are confined to metamorphic terrain and occur in the upper parts of Neelum valley. The most economically promising mineral resources of Azad Kashmir are gemstones and industrial minerals. In AJ&K mineral exploration activities started in 1973 by AKMIDC, a state owned corporation and emphasis was laid on assessment of potential economic deposits and an analysis of value of the different minerals discovered in the area so far amount to 137.915 million tons.

1.17 Industry

The unique topography, meteorology, hydrology and administrative setup offer adequate investment avenues. Various focus areas have been developed for these reason i.e. medium & large industry setups, Kashmiri handicrafts, mineral resources, hydropower generation and tourism respectively. A number of tax-free industrial zones have been setup in concurrent to above.

1.18 Tourism

Nestling in the lapse of the Himalayas, Azad Jammu and Kashmir has been generously blessed with scenic beauty. Its snow covered peaks, dense forests, winding rivers, turbulent streams; sweet-scented valleys, velvet green plateaus and climate varying form arctic to tropical, all together make it an excellent tourist resort. Valleys like Neelum, Jhelum, Leepa, Rawalakot, Banjosa, Samahini and Baghser unfold delightful scenic beauty and provide a feast of pleasure to discerning tourist's eyes. Azad Kashmir is also blessed with a varied mountainous landscape ranging from low hills to high mountains (2000 to 6000 meters). The area is most suitable for soft to medium adventure tourism. The area provides excellent opportunities for rock climbing, trekking, mountaineering and summer camping. Moreover, blessed with large number of rivers and streams, Azad Kashmir offers great potential for water sports, especially rafting, canoeing and Kayaking. Infrastructure, a pre-requisite for the development of tourism comprises wide-ranging and diverse activities requiring heavy investment.

1.19 Roads

Roads are the only mode of transportation in Azad Jammu and Kashmir. The present road length in AJ&K is given below: -

Road Length (Kms)

Roads	2015
Metalled	8909.09
Fair-weather	6958
Total	15867.09
Road Density (Km Per Sq.Km)	0.67

1.20 Airports

The Government of Azad Jammu and Kashmir in collaboration with the Civil Aviation Authority of Pakistan has constructed two small airports in Muzaffarabad and Rawalakot cities in order to provide easy and fast mode of travel (Flights presently suspended). An international airport at Mirpur is to be constructed in collaboration with Civil Aviation Authority, GOP to facilitate the need of 1.5 million People of AJ&K, living abroad.

1.21 Power

AJ&K has extensive power distribution network. At present, the installed Grid capacity is 677.3MVA and about 25,861 km transmission lines have been extended to 1670 villages out of a total of 1771 villages and about 4.267 million populations have been provided with electricity supply. The per capita electricity consumption is 353 KWH and within next two years 100% population of AJ&K is planned to be provided with power connections.

1.22 Hydro Power Generation

Azad Jammu & Kashmir by virtue of its topography, meteorology and hydrology is blessed with abundant hydropower potential. Up to December 2015, approximately 5,63,059 service connections have been provided to the consumers.

AJ&K has identified potential of hydro power generation of 8695.46 MW of electricity using its natural resources.

Status of Hydro Power Projects in AJ&K

STATUS	Nos.	Capacity(MW)
Commissioned	16	1135.870
a. PDO	13	50.870
b. WAPDA	1	1000.000
c. AJ&KPPC/PPIB	2	85.000

Ongoing	19	1372.55
PDO (ADP:10, PSDP:1)	16	154.55
WAPDA	1	969.000
AJ&KPPC/PPIB	2	249.000
New Projects (AJ&K PDO) FY 2015-16 (3 AJ&K ADP Cap: 2.5 MW)	3	2.5
Upcoming Projects in Public Sector (19 Feasibility Completed Cap: 62.88 MW+ 4PC-I Cap:78.25 MW)	23	141.13
Projects Under Process in Private Sector (08 PPIB Cap:3912 MW + 223 AJ&KPPC Cap: 272.41)	30	4184.41
Raw Sites pre-feasibility under process by WAPDA (Dudhnial: 960 MW, Neelum II, III & IV: 899 MW)	4	1859.000
TOTAL	95	8695.460

Source: Power Development Organization, Muzaffarabad

1.23 Piped Water Supply

Public Health & Engineering Department (PHED) and department of Local Government and Rural Development (LGRD) are responsible for water supply in AJ&K. The former is responsible for water supply in urban centres and later in rural areas. At present 68% of the urban population and 53 % of rural population has been provided with a piped water supply through house connections and public stand posts. Out of 1771 villages, 1032 have been provided with water supply facility.

1.24 Communications Infrastructure

Multiple means of communication including private mobile networks, wireless communication used by police and forest department and the landline and cellular network of Special Communication Organization (SCO) are available across the state. In Azad Jammu and Kashmir, there are six cellular mobile operators i.e. Mobilink, Telenor, Ufone, CMPak, Warid and Special Communication Organization (SCO). The operators have covered most part of the AJ&K by providing services using GSM, UMTS and LTE technology. Now as a result of this, mobile services with data facilities are available in far flung mountainous areas of the state. The process for Next Generation Mobile Services Award has already begun and soon people of AJ&K will enjoy the high speed wireless broadband services in their areas.

The SCO raised since 1976, is providing state-of-the-art, modern IT and Telecom facilities in Azad Jammu & Kashmir. Current services include landline Telephone (PSTN), Mobile (GSM), Wireless Local Loop (WLL), Internet Broadband (DSL) and Digital Cross Connect (DXX).

1.25 Issues and Challenges to Sustainable Development

AJ&K faces plethora of challenges, impeding progress towards achieving sustainable development. The key factors at play are the peculiar geophysical environment and climate of AJ&K, which makes it susceptible to multiple hazards like earthquakes, flash and river floods, avalanches, landslides and wild fires etc. The development planning in AJ&K so far, have paid little attention to the risks posed by natural hazards, thus have heightened the vulnerability of communities & critical infrastructure to such risks.

The challenges posed by natural forces are further aggravated by the geo-political situation of AJ&K, a region reckoned as potential flash point for nuclear war and is a continuous source of conflict and hostility between India and Pakistan. The lingering conflict does pose challenges to achieving sustainable development.

The other contributing factors impeding progress towards sustainable development are risk sensitive sources of livelihoods, dynamic pressures – urbanization, population explosion, de-forestation, absence or weak enforcement of land use planning and construction regimes/codes, shortage of trained manpower with inadequate resources in public sector, poverty, illiteracy and fatalistic outlook etc.

Achieving sustainable development would require well thought-out, coordinated efforts in integrating disaster risk management in development planning and management. This seems possible only through extensive research, enabling policy environment, political and institutional commitment, education and training, and adequate funding support with effective monitoring, controls and accountability at all levels.

Chapter 2

Hazards, Vulnerability and Risk Assessment

Chapter -2: Hazards, Vulnerability and Risk Assessment

The peculiar disaster risk context of AJ&K affirms the area as a hub of variety of disasters. This section of the plan presents an overview of disaster risk scenario of area, and their analysis with respect to historical patterns, institutional, socio-economic vulnerabilities and consequences. The risk assessment was driven through wide ranging consultation exercises whereas; scientific perspective was mostly gained through review of technical reports.

A mix methodological approach was adopted to assess the risks which include analysis of spatial and temporal disaster patterns, future trends and extensive discussions with range of stakeholders. Hazard, Vulnerability and Capacity Assessment (HVCA) tools were used during consultative meeting to secure inputs form all relevant stake holders including technical agencies, national building departments, UN agencies, civil society organizations, academia and research organizations etc.

The assessment and the analysis made will surely provide the basis for future planning and research. The purpose was to develop shared understanding of risk context in AJ&K and present brief and focused description of the risk environment for generating ideas around priority strategies and action plan.

2.1 Disaster Risk Analysis of Azad Jammu and Kashmir

Azad Jammu & Kashmir (AJK) has a very diverse and ironic hazard and risk profile with almost all natural and human-induced hazards embodied; the region has steep slopes, complex geological structures with active tectonic processes and continued seismic activities. Furthermore, the region has a climate system with great seasonality in rainfall. With her peculiar hazardous environment, the risks are accentuated for current state of physical, socio-economic and organizational vulnerabilities and exposure.

Disaster History				
Period	**Hazard**	**Damages**		
		Houses	**Lives**	**Socio-Economic Impact**
1988	Avalanche	500	20	Infrastructure, livestock etc.
1991	Avalanche	150	25	Infrastructure, livestock etc.
1992	Flood	21920	322	Infrastructure, livestock, crops, over 1.25 million of population adversely affected
2005	Avalanche	40	52	14 injured, Snow avalanche stuck in Neelum Valley and Leepa Valley
2005	EQ	314,474	46570	Multi sectoral long term high magnitude impact. Over 33,136 injured. 1.8 million people affected
2006 & 2010	Flood	11,240	96	79 injured, shops, houses, agriculture and roads, communication affected
2011	Land Slide	34	1	228 individuals affected, 26 million economic losses, cultivable land

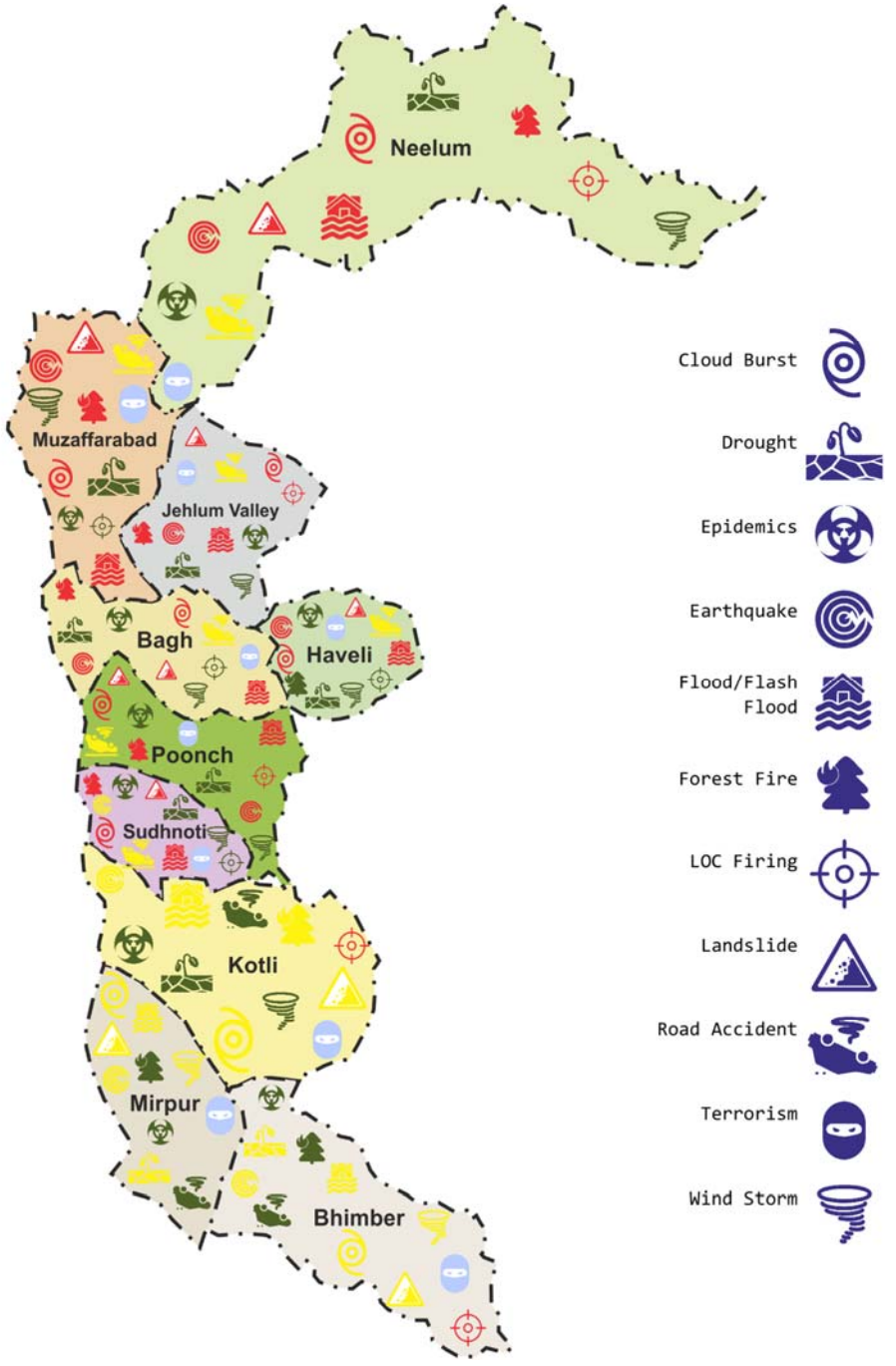
2012	Flash Flood	2092	41	24 injured, More than 15000 people affected, agricultural & Multi sectoral loses
2012	Avalanche	20	17	23 injured Snow avalanche stuck in Neelum Valley
2013	Heavy rains	786	33	15 injured,24 shops, 81 cattle, agricultural & Multi sectoral loses
2013	Indian Firing along the LOC	45	4	34 injured,16 cattle,04 vehicles
2014	Heavy rains	4108	56	87 Injured, 148 Shop, 1171 Cattle agricultural & Multi sectoral loses
2015	Heavy rains	408	26	5 Injured, 10 shops, cattle head 06 agricultural & Multi sectorial loses
2015	Earthquake	76	2	23 Injured, 01 Van , 02 Schools
2016	Heavy rains/land sliding	1317	26	20 Injured, 43 shops, 17 cattle heads & acres of land destroyed

The process of risk assessment and analysis followed by developing District Risk Assessment Matrix took into account the technical features of hazards like location, intensity, frequency and probability with those of corresponding vulnerabilities (social, economic, physical, environmental, organizational at varying levels). The matrix drawn after consultation gives an overview of risk assessment associated with different hazards which cuts across different regions/districts in AJ&K.

The basis of drawing this matrix primarily is driven through wide ranging consultation exercises whereas; scientific perspective is mostly gained through review of technical reports. Following table gives a brief overview of historical patterns of disasters with corresponding impact over the years in AJ&K.

S.#	District	Hazard														
		Earthquake	Landslide	Avalanche	Flash Floods	Seasonal Floods	Cloud Burst	Wind Strom	Lightening	Drought	Epidemics	Forest Fire	Firing along LOC	Road Accident	Terrorism	Drowning
1	Muzaffarabad															
2	Neelum															
3	Jhelum Valley															
4	Bagh															
5	Haveli															
6	Poonch															
7	Sudhnoti															
8	Kotli															
9	Mirpur															
10	Bhimber															

Extreme	
High	
Moderate	
Low	
Nil	



Very High	
High	
Moderate	
Slight	

Azad Jammu and Kashmir (AJ&K) is highly prone to both natural and man-made disasters. Floods, droughts, landslides and earthquakes are a recurring phenomenon.

2.2 Risks Associated with Natural Hazards

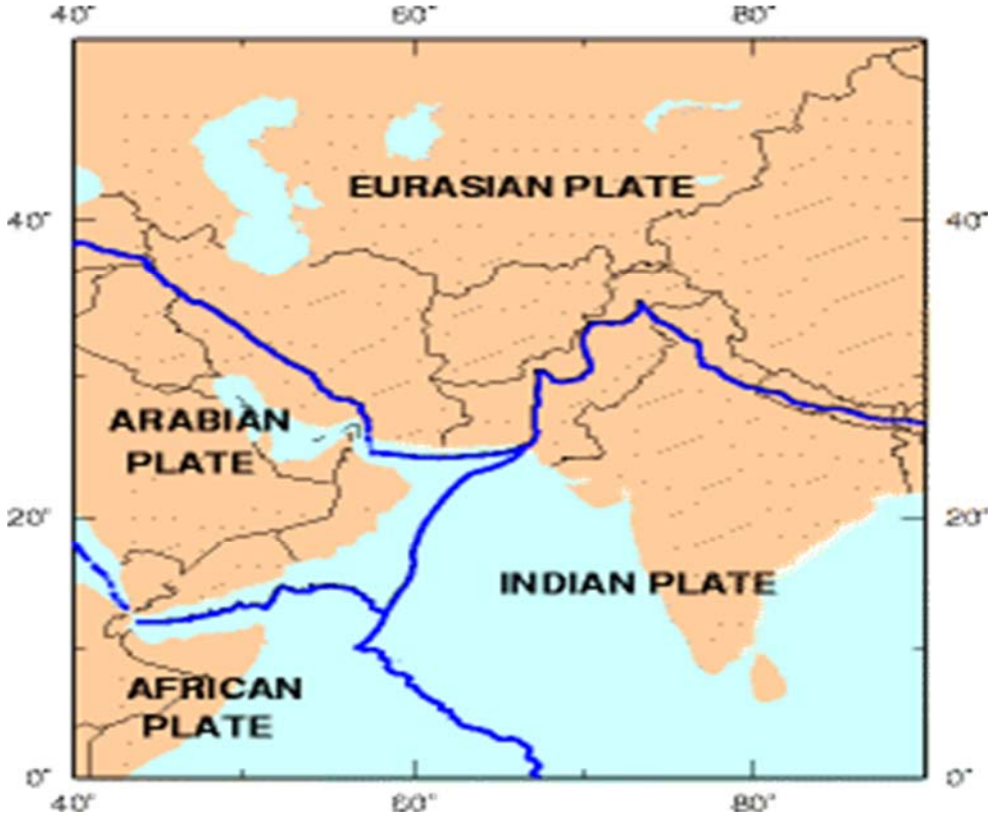
The risk environment for each hazard type has been explained in the following sections:

In-depth and repeated consultations with government officials, academia and NGOs helped prioritizing the hazard context of AJ&K, both in terms of natural and manmade. For easier comprehension hazards are grouped into categories based on causative factors like geological and hydro-morphological etc. The risk context for each hazard has been explained in relevant section.

Geological Hazards

2.2.1 Earthquakes

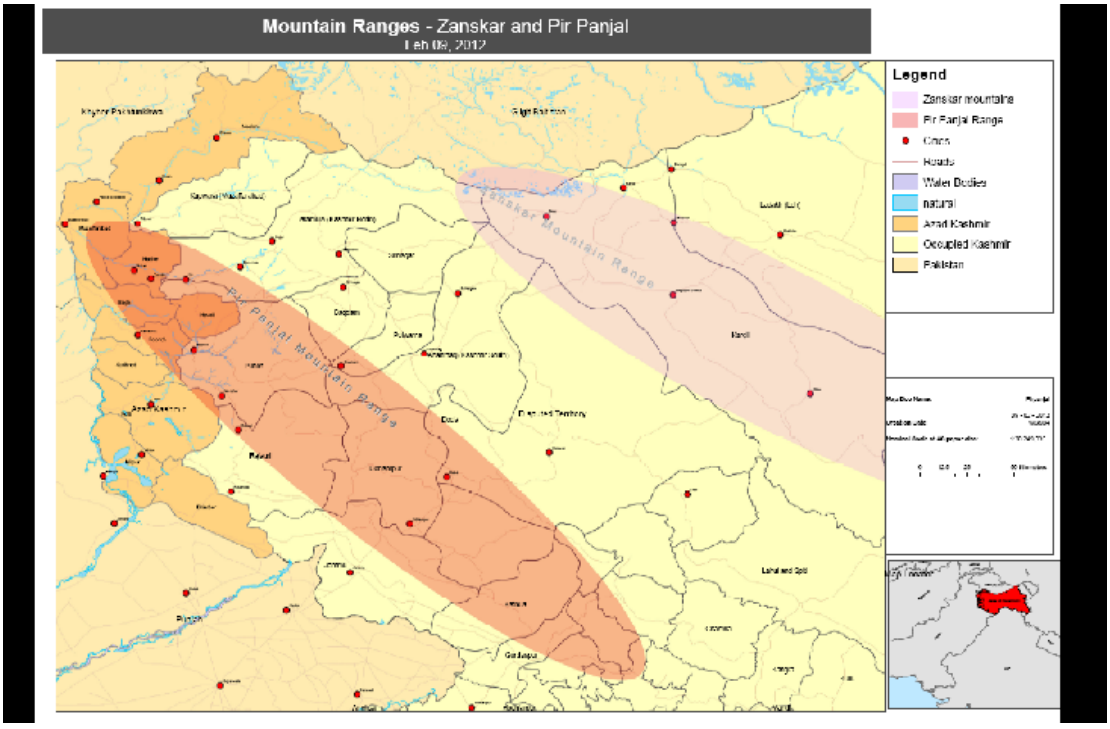
Kashmir lies in the area where the Eurasian and Indian tectonic plates are colliding. Out of this collision, the Himalayas began uplifting 50 million years ago, and continue to rise by about 5 mm/year. This geological activity is the cause of the earthquakes in the area. Below map depicting tectonic plates shows Indian subcontinent and Eurasian land plate divide throughout Pakistan and Kashmir where earthquake activity is common.



AJ&K has experienced 2005-Earthquake as a rare example of human suffering in terms of life, property and socio-economic losses. The earthquake of October 8, 2005 shook the calmness and tranquility of the State that brought anguish and woes to the lives of over 4 million souls. The earthquake caused massive loss of precious lives as well as livelihood to the victims, while

reducing all essential facilities and infrastructure to dust and debris. In northern part of AJK 7000 Sq. Km (out of 13297 Sq. Km) area was affected, inflicting massive damages to the large number of population (1.80 million) in Muzaffarabad and Pooch division. The earthquake on 26th October 2015 damaged two schools while 23 persons were injured.

Recent studies indicate that the energy stored along the Himalayan arc suggests a high probability of several massive earthquakes. Various national and international agencies highlighted that AJ&K is still under threat of a big earthquake. As Dr. Rodger Bilham, Colorado University USA suggests in a report (November, 2005) that the 2005 EQ has not released the total cumulative energy that has been developing since last big earthquake in this region in 1555 or before. Still 90% energy is yet to be released and may explode any time causing a huge devastation. Further after Japan Tsunami 2010, Dr. Bilham analyzed tectonic movements and indicated potential EQ / seismic hazard in PirPanjal mountainous range. He fears that a mega earthquake at 9 rector scale is likely to trigger landslides that could dam the Jhelum valley river, which drains from the Indian occupied Kashmir valley into Pakistan. That could put the valley under water within three months and would also threaten disastrous flooding in Pakistan if the waters were released too quickly. Bilham fears for the death toll of human being up to three hundred thousand.



(Map showing PirPanjal and Zanskar Mountain Ranges)

Dr. John Pal of Germany negated predictions of Rodger Bilham and in his studies John Pal indicated that due to active fault lines a major EQ is due in the Zanskar mountainous range within 200 to 300Km of radius.

To ascertain the veracity of Dr. Rodger Bilham report about major Kashmir EQ, SDMA consulted with Geological department of AJ&K University and Geological Survey of Pakistan. Experts of both the departments negated the predictions of Dr. Bilham and stated that EQ at 9 rector scale could never occur in this region, however, studies of Geological department of

AJ&K University suggested the Main Boundary Thrust (MBT) Jhelum Strike-slip fault and Kashmir Boundary Thrust (KBT) are now tectonically more active which may be harmful for the multistoried buildings and other construction works in this area.

The seismic gaps in this region are thought to store the tectonic strain and are candidates for future large earthquakes. The medium range earthquakes (few months to few years) with magnitude 7 and greater are expected along these gaps. The 1100 km long seismic gap between Assam to northern India, 300 km long seismic gap between Northern India to Bagh Azad Kashmir and 250 km long seismic gap between Muzaffarabad to Northern Afghanistan are indicators of the future medium range earthquakes with magnitude 7 and greater.

Japan International Cooperation Assistance (JICA) Experts under the Project "Formulation of National Disaster Management Plan in the Islamic Republic of Pakistan" has conducted hazard and risk assessment study and prepared hazard maps in 2010-2011. According to their risk assessment study, eight districts of AJ&K lie under very high risk and two of the districts lie under high risk of EQ Hazard. Below table and map show the severity of EQ Hazard in AJK region.

Sr.No.	District	EQ Risk Severity
1	Neelum	
2	Muzaffarabad	
3	Jhelum Valley	
4	Bagh	
5	Haveli	
6	Rawalakot	
7	Kotli	
8	Sudhnuti	
9	Bhimber	
10	Mirpur	

Legend	Very High Risk	High Risk

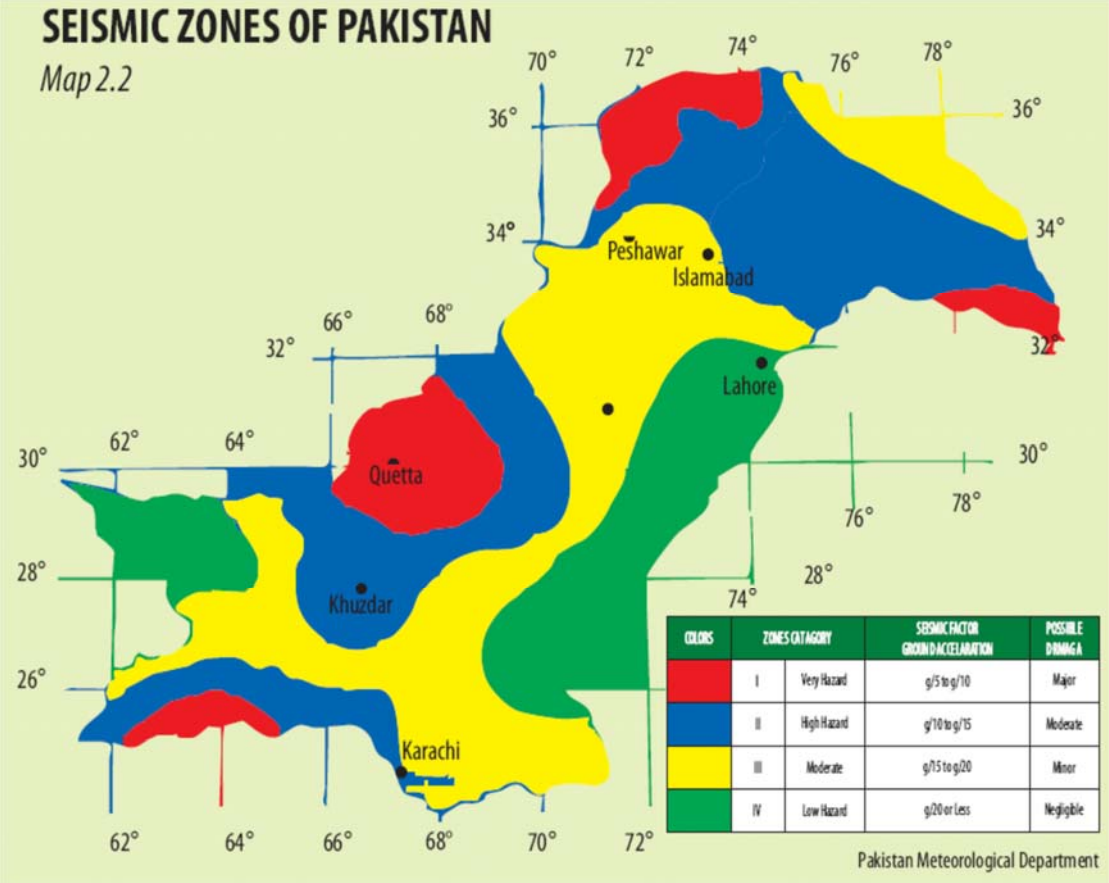
(Source: JICA Studies 2010-2011)

According to different findings /studies the whole of AJ&K falls in active seismic zone which, combined with physical and economic vulnerabilities, poses extreme risks especially to those living either on fault lines or adjoining areas. The Northern districts mainly Neelum, Muzaffarabad, Jhelum Valley, Bagh, Haveli, Poonch, Sudhnoti and Kotli are at greater risk compared to extreme southern districts i.e. Mirpur and Bhimber. The causes are obvious, as the region lies on two continental plates (Indo-Eurasian plates).

The latest seismic micro-zonation studies conducted by NESPAK and Geological Survey of Pakistan (GSP) suggest that Muzaffarabad, Poonch and Kotli districts face extreme risk of a

major earthquake while surrounding districts face slightly lesser degree of risks. Kotli district falls in an active seismic zone and has a minor fault line in the region of Tatta Pani.

Concurrently, in the latter part of March, 2006, circumference area comprising of district Mirpur, AJ&K and some areas of Jhelum, province of Punjab experienced an isolated episode of seismic activity, measuring 5.3 on rector scale.



Surrounding areas of UCs Pindi, Samwal and Sabarwal were affected. 500 families were reported to have been displaced in UC Samwal and Sabarwal, loss of life remained on the minimum and was largely due to the post-traumatic stress reactions from the great Pakistan earthquake i.e. Jumping of buildings, panic, stampede etc. Another massive earth quake not second to the EQ of 2005 in terms of magnitude i.e. 7.5 on rector scale in October 2015 that struck major cities of Pakistan, including the Azad Jammu & Kashmir, leaving 2 persons dead and more than 48 injured due to building collapses, landslides and other quake related incidents in AJ&K. While the magnitude of this earthquake was close to the devastating quake of 2005, the epicenter of the 2005 quake was shallow hence caused more destruction. The earthquake in 2005 was at a depth of 26 km, while this was at a depth of 196 km. Forty minutes after the first earthquake, an aftershock of 4.8 magnitude was reported in the same area.

However, these event failed to gain any due/ noticeable attention and remains off the hazard classification charts; consequently, post disaster technical hazard analysis studies were not or least conducted for the same.

Vulnerability & Risk Factors

Cognitively whole region is characterized by generalized pattern of common institutional, social and cultural vulnerabilities, which are applicable across different hazards and groups. The general vulnerabilities are as follow:

a) Insufficient or limited coordination between response institutions and line agencies.
b) Job fragmentation and lack of clarity as to mandate and responsibility for disaster risks related work between different line departments
c) Limited awareness, understanding and institutional capacity for risk responsive development planning
d) Absence of land use plans; inappropriate design and construction of public and private infrastructure as per building codes
e) Absence or weak implementation arrangement of policies, legal instruments and codes (such as building codes) for risk conscious development planning
f) Availability of limited safe land with increasing growth of settlements in non-safe areas
g) Illiteracy, poverty and limited access to social services for communities and financial constraints for public agencies to improve access to services
h) Absence of contingency or departmental emergency preparedness plans
i) Institutionally emergency response is dealt with post-emergency/disaster as and when scenario; lacking the essential element of pre-emergency/disaster preparedness
j) Absence of resource mobilization/allocation for emergency/risk preparation, mitigation and response activities; hence falling short of finding any significant placement in annual development plans (though traditionally contingent costs are incorporated into project plans but only in the light of rising inflation rates and to reduce the cost of time) – thus there is no financial buffers available to combat emergency situations.

Elements at Risks

The risk analysis suggests that following sectors & people are at most risk because of earthquake hazard:

a) Built infrastructure (mostly commercial and residential areas) especially those with modern architectural design and materials which mostly are non-compliant to earthquake resistant codes
b) Public infrastructure i.e. Roads, hospitals, bridges, water supply network which are located in known or potential landslides areas especially after 2005 earthquake
c) Partially damaged houses & public infrastructure (after earthquake in 2005) still in use for living, offices and public services
d) Communities living on edges and steep slopes especially in the northern districts
e) Communities settled in far flung areas and those on high altitude are at higher risk of not receiving immediate relief in case of earthquake
f) Energy and communication distribution links/network

Table of Major Earthquakes in Region

Date	Richter scale	Epicenter	Deaths
3rd September 1972	6.0	Kohistan	-
28th December 1974	6.0	Pattan	994
12th September 1981	6.0	Darel	-
1st February 1991	6.6	Dir	181
22nd May 1992	5.5	Khyber	115
26th October 1994	5.7	Chitral	-
21st November 2002	5.8	Gilgit	30
October 2003	6.2	Upper Hazara	17
14th February 2004	5.7	Mansehra	37
8th October 2005	7.6	Mansehra,	46570
26th October 2015	8.1	Feyzabad, Afghanistan	2

2.2.2 Landslides

Landslides can be considered a symptom of fragility, either natural or human-induced. A small seismic shock to a sensitive system can cause a landslide, whereas a system with higher buffering capacity may sustain little reaction to seismic shock (Hufschmidt et al. 2005)

In the case of Azad Jammu & Kashmir, a highly sensitive system received a great shock, resulting in massive landslide damage. AJ&K with exception of its southern districts is susceptible to landslides which often results in cutting off areas especially in extreme north for weeks and sometimes even for months. The landslides pose extreme risks in Haveli, Hattain Bala, Neelum, Muzaffarabad, Bagh, Shudhnoti and Poonch districts.

In northern part of AJK, landslides triggered at the several locations that kill the people and destroy their houses besides damaging livelihoods. Due to frequent rains and landslides, road network is usually hit hard. This results in blockade of many areas. Consequently, mobility of the inhabitants badly hampered, transportation stopped and essential commodities become unavailable. Although the risk gradually decreases as move towards south but even during 2015 a massive land slide was triggered in Kotli district.

Almost eleven years after the 2005 Earthquake that triggered multiple mass movements and landslides an enduring threat to the population of AJK in particular during heavy monsoon rains and climate change scenario. Thousands of landslides that were triggered due to 7.6 magnitude of the Earthquake in 2005 were not just due to the natural phenomena but largely induced by human activities including road building, grazing and deforestation. The landslides triggered by earthquake caused fatalities, destroyed houses and agriculture land, created artificial dams and blocked roads and communication. The worst affected area

remained northern part of Azad Jammu & Kashmir. On many slopes earth stratum became vulnerable to feature failure through loss of cohesion and numerous cracks that were induced by strong ground motion. Not only was this area subjected to high magnitude earthquake in the past but in future long term major slope failure is forecasted by the various scientists. The earthquake has destabilized numerous slopes by creating large number of tension cracks which may lead, together with the monsoonal climatic conditions to increase landslide activities. The earthquake generated unstable loose material and cracks on slopes. These material and most of the visible cracks were triggered into landslides after 2006 monsoon seasons and now posing great threat not only to the infrastructure but also to the human lives.

In the above mentioned backdrop, slide triggered at the Karli village is one of the worst case in point. A huge landslide generated at Karli village which lies in the District Jhelum Valley at an elevation of about 7980 feet. Stretch is steep topography having fragile geology prone to big slides and surface erosion. There are clear evidences in shape of old dormant slides showing the previous history of land sliding in this area. The landslide was actually triggered by devastating earthquake 2005 when almost 153 houses were completely destroyed. Several survey reports confirm that huge landslides from both hill tops in 2005 have caused huge blockade in regular Nullah which still shaped into big Lake later on named 'Zilzal Lake'. Karli area adjacent to Zilzal Lake was also heavily damaged and declared dangerous for population of the area. The slide was further aggravated by the subsequent rain and snowfall on the top of it. In April 2011 the area started depleting due to some internal geological activities. Thick slush started coming from deep inside of the core and began flowing downstream. The slush has damaged 49 houses while compelling 286 families comprising 1300 individual to evacuate the area.

Another massive earth flow type landslide and sinking of land mass resulted from varying triggering factors was experienced in Danna area, about 45 km southeast of capital city of Muzaffarabad, in August 2015. The geological, geomorphologic, and hydro geological environment of the area were found major contributing factors causing landslide activity and affected the local inhabitants and the environment of the area. On 22nd Feb 2016, in Baffa area, this earth flow type landslide was remobilized at the lower slope and huge cracks were developed in the area besides the tumbling of land. This sinking of land and resulted earth movement have uprooted many of forest trees, destroyed 35 houses, and rendered many others under potential risk.

The major causes of landslide susceptibility in the region are multiple: weak geological structures (limestone, silt and clays), morphological, tectonic uplift, physical (intense rainfall, earthquake), steep slopes and anthropogenic (excavation of slope toe for roads, loading of slope due to water infiltration, deforestation, etc.).

Anthropogenic factors are considered "preparatory factors", whereas rainfall or earthquakes are "triggering factors" (Crozier 1986). Rainfall can actually be considered both: it contributes to slope instability and it triggers landslides.

In the Kashmir EQ aftermath, the devastation caused by the massive and pervasive landslides can be attributed to many of the above mentioned factors: population pressure leading to deforestation and poor road building undercutting already fragile slopes, as the consequence of poor governance and development. Any effective strategy for mitigating this complex cause and effect between eco and social systems must be multi-disciplinary by nature. Disasters

create the need for immediate, short-term reaction but effective disaster management requires long-term, systematic solutions.

2.2.3 Glacial Movements/Avalanches

While analyzing the risks related to landslides, it was considered appropriate to include other related events such as avalanches, boulders, rockslides, mudslides in landslides which are quite common in AJ&K.

In the extreme northern parts of the State occurrence of snow avalanches is very often when the snow-pack starts to weaken and allows the buildup of snow to be released. Rainfall and sleet also tend to be responsible for avalanches in the summer and monsoon season. Neelum district and the Leepa valley of District Hattain, by virtue of their location and topography experience glacial movements and avalanches. These processes are often triggered by extreme weather variations in Neelum and Leepa valleys during summer and winter. In Feb. 2005 a glacier engulfed 18 houses in Neelum Valley while 46 people lost their lives. Just a day later 7 people were died in Leepa Valley after being struck by an avalanche pushing the death toll caused by avalanches to 52.

Nonetheless, the 2005 earthquake has further weakened glaciers and rocks formation underneath, thus exacerbating the threat of glacier movements and avalanches.

In Graze village of Neelum Valley, a snow avalanche on 25th Feb 2012 has buried 5 persons including three women while left 15 injured due to heavy snow fall. In another incident on 30 November,2012, 12 people including eight Pakistani soldiers have been killed after being hit by snow avalanche in Keil area of Neelum Valley.

Vulnerability & Risk Factors

Factors that contribute to slope failure are generally complex and difficult to assess with confidence but in general a steep sloop, high intensity of rain falls, undercutting of slopes by river erosion and human activities such as road construction, engineering interventions, deforestation, terracing and agricultural activities are probably the main reasons for these slope failures and has to be reached for triggering landslides.

The key vulnerabilities in terms of design, construction and access are outlined below:

a) Inaccessibility of region due to its rugged terrain, disruption of communication links i.e. roads, bridge, telephone and electricity etc.
b) Unplanned road construction, stone and mines excavation and other vibratory factors.
c) Poor construction on the marginalized cliff especially those living on steep and high slopes with absence of land use planning.
d) Limited alternative access and communication routes and equipment
e) Non-availability of technical/skilled professional, equipment and resources to respond such eventualities.
f) Limited resources for landslide clearance

g) Proximity to Line of Control, which has long been an active conflict zone thus limiting opportunities for developing alternative communication links
h) Inadequate strategic warehousing/stockpiling of foods and other supplies for potentially landslide affected areas
i) Absence of interagency emergency coordination mechanism and task forces
j) Although frequency of such events is of common occurrence, yet institutionally installment of preparatory measures is of latent one.

The risks associated with such hazards within the vulnerability context of these areas suggest that life, livelihoods and built infrastructure are all at risk owing the combined effects of hazard and vulnerability context of the region. The key risks associated with set of hazards are as following:

a) Life, livelihoods and property risks to communities settled at steep slopes (in potentially avalanche & landslide zones)
b) Communication network like roads, bridges linking the main road arteries to the remote destinations like Neelum, Hattain, Haveli, Bagh, etc.
c) In-accessibility to cut off communities resulting in delayed rescue, evacuation & delivery of relief supplies
d) Extreme shortage of food, medicines and fuel in case of in accessibility
e) Exuberant pricing of edibles due to limited availability in disaster situation
f) No or delayed information flow due to disrupted communication links e.g. telephone with no alternative communication links
g) Limited institutional capacity for landslide clearance and rebuilding emergency communication and civic amenities

2.2.4 Hydro-Meteorological Hazards

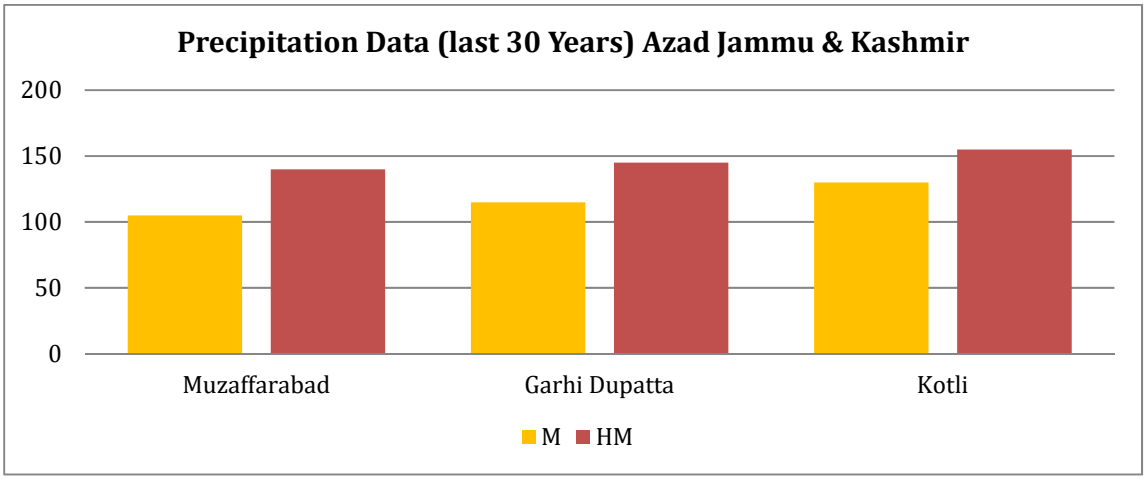
Flash, Seasonal floods, Cloudburst & Lightening Hazards

The State of Azad Jammu & Kashmir is severely exposed to the variety of hydro-meteorological disasters. Flash, Seasonal floods, Cloudburst & Lightening are rain induced hazards which have been grouped together as they are inter-linked at times in terms of occurrence and impact.

Floods are also becoming amongst the most common forms of natural hazards in the region as seen in last few years. 2010 flood and flash flooding of 2012, 2014, 2015 and pre monsoon rain induced devastation in 2016 caused enormous economic & live losses. Flash floods are the most damaging type of floods due to poor mitigation measures as they often take place in remote mountainous areas. Flash floods having short lag time but difficult to forecast compared to other types of floods. The population in the State has become more vulnerable due to increasing exposure to flash floods in mountainous regions related to climate change and extreme weather events. These floods caused extensive damage to human lives, property, agricultural land and livestock.

Muzaffarabad, Hattain, Neelum, Bagh, Poonch, Sudhnuti, Haveli, Kotli and Bhimber are highly susceptible to flash floods and catchments bursts. Excessive rains and steep slopes are amongst the major reasons for flash floods. This is further compounded by the texture of soil

and unguarded deforestation in run off/catchments. The other districts marked with relatively plain topography are less exposed to flash floods. The flash floods at times turn into hill torrents and wreak havoc with settlements and infrastructure that comes in their way. Often flash floods trigger secondary hazards like land/mudslides, soil erosion and sometimes avalanches.



Source: Pakistan Meteorological Department Reference: NDMA Monsoon Contingency Plan

AJ&K experiences seasonal floods mainly on account of monsoon season which brings more than half of annual rainfall in three months i.e. July, August and September. All districts except Neelum are moderately susceptible to seasonal or river floods, Neelum district does not fall into monsoon range. Like flash floods, the seasonal flooding again is on account of excessive rains during monsoon season and limited drainage of excess rain water.

Cloudbursts and lightening have become more frequent in last few years in AJ&K in almost all districts with exception of Neelum. The impact has often been localized resulting in limited losses. Though it cannot be proved scientifically however anecdotal accounts suggest extreme seasonal temperature variations, global warming and fast removal of forest cover, as main causes in activation of these hazards. It was observed during 2014 and 2015 monsoon that the cloudburst in some specific areas did not allow for disseminating early warning regarding flash flood to the habitants resulted in human and property losses.

Vulnerability & Risk Factors

The vulnerability context is similar to what is explained as generalized pattern of vulnerabilities in AJ&K. The communities and infrastructure risks associated with activation of such hazards in given vulnerability context are as follow:

a) Life, livelihoods and property risks to communities settled at steep slopes
b) (In potentially flash flood zones); also communities settled in and around river channels
c) Limited access for immediate rescue and relief due to wider dispersion of settled population
d) Loss of fertile soil cover, land degradation and land loss because of flooding

e) Accelerated sedimentation of water reservoirs resulting in reduced capacity
f) Stimulation of secondary hazards such as landslides, avalanches etc. further accentuating the impact

Climatic variations of the AJK were highlighted while pointing out all those critical and contributory factors which may enhance the existing potential threats of floods/flash floods which include:

a) Massive environmental degradation due to both natural disasters and anthropogenic activities.
b) Land encroachments over forests areas, rivers and mullah's banks in the urban and semi-urban areas.
c) Unplanned construction of rural roads in particular, without strictly adhering to the geomorphologic parameters i.e. wildly cutting of hills toes/slopes
d) Large scale deforestation and insufficient reforestation/Afforestation
e) Use of vulnerable and marginal lands for inhabitation purposes
f) Absence of comprehensive planning for implementation of climate adaption measures in order to avert unparalleled and prevailing environmental degradation phenomenon in AJ&K.
g) Massive Environmental Degradation
h) Increased Deforestation Phenomena
i) Encroachments
j) Blockade of Natural Water Outlets
k) Illegal use of Vulnerable/Marginal Land for Habitation
l) Unplanned Construction of Roads/cutting of hill slopes
m) Poor Watershed Management System
n) Ineffective enforcement of Forest & Environmental Laws
o) Inadequate Mitigation Plans
p) Reforestation & Afforestation Projects
q) Revamping of Forest Laws
r) Poor implementation of Land Use & Master Plans in Urban & Semi Urban areas
s) No Plan for Climate Change Adaptation Measures
t) Inadequate flood protection arrangements
u) The protection works arrangements to keep the human settlements, properties and crops etc. Situating along the threatening Nallahs, landslide areas and areas exposed to flash flood are quite inadequate in terms of extending safeguards to vulnerable populations against the flood hazards.
v) Inadequate flood early warning arrangements
w) The scientific early warning system and alert warning issuance and communication system is weak. No arrangements are in place to forewarn vulnerable communities of flash flooding and land sliding across the mountainous regions. Moreover, Community EW mechanisms has remained largely ineffective during the 2010 floods, 2012, 2013 and 2014 flash flood due to temporary suspension of cellular and landline telecommunication networks.

Floods in AJK

An important aspect witnessed was the lack of seriousness in observing the flood early warnings by general public. The people having tendency to stay back to their areas till flood waters completely bring down their properties and marooned them.

2.2.5 Wind Storms and Droughts

In AJ&K the frequency, intensity and impact of windstorms has significantly increased in recent times. Invariably, all districts of AJ&K are prone to wind storms, however; the events of recent past have affected mostly the communities and families living in makeshift shelters

especially in Muzaffarabad district (especially those of earthquake affected areas). Though no scientific explanation is available to substantiate the statement, most of the environmentalists' term deforestation, extreme weather and temperature variations as causative factors for wind storms.

More or less whole of AJ&K remained in the grip of prolonged drought between 2000 to 2004, which caused extensive damage to rain-fed crops. It affected the orchards and livestock also, which added to the economic woes of drought. The drought 2000-2004 is associated with regional climatic change processes whereby the whole region remained in the grip of Elnino effect (source reports of Pakistan Meteorological Department).

Vulnerability & Risk Factors

The peculiar vulnerabilities of people from wind storms and droughts are outlined below:

a) Residents of makeshift shelters with CGS sheets as rooftops
b) Communities and families living at mountain tops and slopes
c) Drought related vulnerabilities are loss of livelihoods, land and land
d) degradation
e) Small landholders/livestock base with no alternate means of subsistence
f) Under-developed crops/livestock insurance sector
g) Loss of potable water because of drying of springs

The risk environment in relation to the hazard and vulnerability context of AJ&K is as under:

a) Families in makeshift living especially those with CGS sheets as rooftops
b) Limited early warning options for wind storms
c) Loss of livelihood and depreciation of productive resources
d) Limited savings and credit option for small loans in AJ&K
e) Drought mitigation and response are long term undertakings, which do not correspond to the mandate and resources of public and civil society organizations
f) Most vulnerable i.e. poor and destitute are at greater risk of falling into poverty and debt traps
g) Increased malnutrition amongst vulnerable groups' e.g. Children and senior citizens

2.2.6 Drought

The southern districts of AJK are mainly arid and the agriculture activities depend on the annual rainfall. Drought is an insidious hazard of nature, although it has scores of definitions. Drought originates from a deficiency of precipitation over an extended period of time, usually a season or more. This deficiency results in water shortages for limited livelihood activities. The Districts of Mirpur, Bhimber and Kotli experienced drought in past, however, due to the extensive de-vegetation and low rainfall, drought can be expected in these districts again.

2.2.7 Epidemics

Epidemics, often of localized impact have been experienced in AJ&K. However, in post-earthquake 2005 scenario, incidences of localized epidemics have registered a steady increase mainly for reasons such as unsafe potable water, poor sanitation and changed housing/living pattern. The localized epidemic episodes have become accelerated in recent years mainly due to unavailability of safe drinking water and poor sanitation conditions. The wider spread of population together with weak institutional arrangement for immunization and field based surveillance of disease trends are key vulnerabilities.

The northern region comprising of Neelum, Muzaffarabad, Bagh and Rawalakot including Sudhnoti are prone to Acute Respiratory Infections (ARI) primarily for freezing temperatures for most of winter season. However, the southern regions experience repeated epidemics related to water borne diseases like diarrhea/dysentery, enteric fever, hepatitis A&E and worm infestation. There are occasional reports of scabies and rabies epidemics in certain areas.

Vulnerability & Risk Factors

The particular vulnerabilities with respect to epidemics in AJ&K are as under:

a) Unavailability of safe drinking water
b) Limited public awareness of personal and environmental hygiene
c) Poor sanitation and living conditions
d) Limited health service outlets and coverage for reasons like widely dispersed population.
e) Unavailability of medics at health outlets – quality of care and treatment provided by medics
f) Fatalistic attitude
g) Weak surveillance system with limited emergency health support
h) Inappropriate insulation/heating in post-earthquake recommended housing

With these particular vulnerabilities the risks linked to epidemics are enumerated below:

a) Communities in remote areas and along the LoC with limited access to health services and surveillance
b) Delayed emergency health support for weak surveillance and inaccessibility
c) Weak health communication network to access communities in need
d) Limited mobile health coverage because of terrain
e) In-adequate emergency supplies at remote outlets to meet any emergency health needs
f) Inadequate monitoring and weaker controls in health department to ensure staff presence at health outlets
g) Inadequate staff capacity and resources available at outreach health units to initiate response to outbreaks.

2.3 Risks Associated with Human Induced Hazards

The following section explains the context of manmade hazards, extent, causes, history and pattern, vulnerabilities and risk associated for communities living across AJ&K.

2.3.1 Cross Border Firing

AJ&K is an unresolved agenda on UN Security Council since independence of sub-continent. AJ&K holds strategic importance both to Pakistan and India for her resources, hence is a source of continued hostilities between two neighbors.

The entire stretch of the Line of Control between the Indian held Kashmir and the areas of the Azad Kashmir is approximately 740 Km. Two hundred and thirty-three villages of District Neelum, Muzaffarabad, Jhelum Valley, Bagh, Haveli, Rawalakot, Kotli and Bhimber are located on LoC. Approximately 0.403 million populations out of total estimated 4.361 million population of AJ&K is exposed to Indian Firing. Since 740-km curved line of control does not follow any well-defined geographical feature and often the population residing along the LoC area of AJK suffers the grave consequences of border skirmishes and Indian firing in terms of life losses, permanent injuries and disabilities, property and livelihood losses. Although with continuing peace process between India and Pakistan, the cross border firing has almost stopped however, as per reports of AJ&K Commissioner Relief and Rehabilitation Office, 1448 people lost lives and over 4000 people were wounded due to continued cross border firing/shelling during 90's. The economic damages were to the tune of billions (PKR) and roughly 100,000 people are still being looked after in IDP camps because of displacement. The recent Indian firing/shelling in 2015 on Line of Control have revealed the vulnerability of people living along the LoC.

District wise population on the border is as under: -

District	Population
Neelum	87759
Muzaffarabad	5300
Jhelum Valley	85677
Bagh	-
Haveli	14325
Rawalakot	85853
Kotli	81035
Bhimber	43217

Vulnerability & Risk Factors

The peculiar disaster risks posed to the communities are outlined below:

a) Life risks to families and communities settled on LoC
b) Loss of livelihoods and productive resources
c) Limited mobility, communication and evacuation opportunities
d) Limited stocks/supplies of edibles
e) Inadequate emergency health support along LoC
f) Limited or no warning time due to unprovoked firing & shelling
g) Unsafe housing/living
h) Deterioration of socio-economic fabric of the region

2.3.2 Road Accidents

Road accidents are regular events and interestingly came up as high priority hazard in Neelum, Jhelum Valley, Haveli, Poonch, Muzaffarabad and Bagh, as compared to other districts. The inter-district link roads are often scenes of traffic accidents resulting in loss of precious human life. The key factors contributing to traffic accidents are poor road conditions, incessant land/rock fall along key roads, poor traffic management, careless and speedy driving, absence of support infrastructure along main highways and roads i.e. mirrors, side walls, landslides and extreme weather and are some of the major reasons. The road accidents are mainly attributed to faulty road design and construction, extreme weather, active landslides and bad vehicular condition. It does also include unsafe driving practices.

2.3.3 Encroachments

Most of the losses (life and property) occurred as a result of unchecked massive encroachments and intrusion of population along river banks and different Nallahs, partly along the flood prone hill blocked and heavily encroached drainage systems of settlements also played a major role in inundation and consequent destruction. The district administrations and other Authorities are obligated to initiate coercive measures for clearing natural water flowing channels and outlets and to put a stop on illegal occupation of land exposed to natural floods and hazards. Following pictures barefaced the prevalent trend of encroachments over natural water flows.

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2.3.4 Forest Fire

Wild fires have been identified as predominantly urban hazard. However, forest fire has been rated as pressing hazard for regions with high forest coverage. The discussions revealed that often the urban/wild fire occur because of short circuiting, gas leakage and stockpiling of inflammable materials in residential areas. Forest fires though happen because of negligence

of bushman/nomads; communities settled in forests and at times are used as cover up for illegal wood cutting.

Wild fires are more of risk in urban areas especially in two municipalities i.e. Muzaffarabad and Mirpur; however sporadic cases of wild fires are regularly reported in other regions. Forest fires are more common in Neelum, Hattain and Muzaffarabad districts with occasional reports in other districts. Though the impact is often localized, however it came out as a relatively important hazard during consultations.

Vulnerability & Risk Factors

The peculiar vulnerabilities and risks associated with wild and forest fires are outlined below:

a) Unregulated stockpiling of hazardous/inflammable materials in residential areas
b) Insufficient monitoring & controls in residential/commercial/industrial electric connections/wiring resulting in short-circuits
c) Limited capacity of fire extinguishing/brigade services
d) Inappropriate design for commercial and industrial buildings with no evacuation routing
e) Inaccessibility of cluttered urban housing (especially in old city areas) by fire brigade
f) Inadequate health facilities for fire victims
g) Litter & temperature extremes during summers for forest fires
h) Lack of public awareness and training as how to deal with fire
i) Un-controlled forest/pasture regenerative practices by communities having grazing rights for forests
j) Weak communication system and inadequate capacity for forest fire control with Forest department

2.3.5 Old, Vulnerable Buildings

Old, vulnerable buildings in AJ&K are another alarming threat. People residing in these dangerous buildings and other neighboring buildings are at risk. Falling of these dangerous buildings can cause men and material losses at any time. Muzaffarabad, Bhimber, Kotli, Bagh these are most dangerous cities as old buildings are existing in these cities. In most earthquakes like EQ 2005 in AJK, the collapse of structures like houses, schools, hospitals and public buildings results in the widespread loss of lives and damage. Earthquakes also destroy public infrastructure like roads, dams and bridges, as well as public utilities like power and water supply installations. Past earthquakes show that over 95 per cent of the lives lost were due to the collapse of buildings that were not earthquake-resistant. Though there are building codes and other regulations which make it mandatory that all structures in earthquake-prone areas in the region must be built in accordance with earthquake-resistant construction techniques, new constructions often overlook strict compliance to such regulations and building codes.

However, after EQ 2005, almost all the damaged public and private buildings are being and have been constructed earthquake resistant by design and other aspects in EQ affected

districts. A special emphasis must be given in other districts of AJK to ensure earthquake resistant construction of new structures.

Most of the buildings are newly constructed after EQ 2005 in Muzaffarabad, Neelum, Bagh, Haveli, Jhelum Valley and Rawalakot districts and are up to approved EQ resistant design. However, maximum buildings in Kotli, Bhimber, Sudhnuti and Mirpur districts are not earthquake-resistant and are potentially vulnerable to collapse in the event of a high intensity earthquake.

The lack of easy availability of the seismic safety codes and standards, in particular their latest revisions, has been frequently cited as one of the major factors responsible for the poor implementation of earthquake-resistant construction practices.

Chapter 3

Institutional Systems for Disaster Management in AJ&K

Chapter 3: Institutional Systems for Disaster Management in AJ&K

This section presents institutional systems for disaster management in AJ&K. The institutional systems for disaster management are based on a review of the State Disaster Management Act 2008 and discussions with relevant stakeholders.

3.1 Disaster Management System before Earthquake 2005

In the pre-earthquake (2005) era, Crisis Management Cell of the Ministry of Interior was charged with the responsibility of coordination of emergencies. The Civil Defence Organisation was Responsible for Maintaining Normal Life Activities/ its Restoration without delay, if disturbed due to Enemy Action or Natural Calamities. The Focus of the above Institutional Arrangements remained Primarily on Post Disaster Response i.e. reactive instead of proactive approach was pre dominant.

The Relief Commissionerate System in terms of the West Pakistan National Calamity Act of 1958 meant for providing Relief Assistance. Under the 1973 Rules of Business, the subject of Disaster Relief was assigned to the ERC of the Cabinet Division (Pakistan).

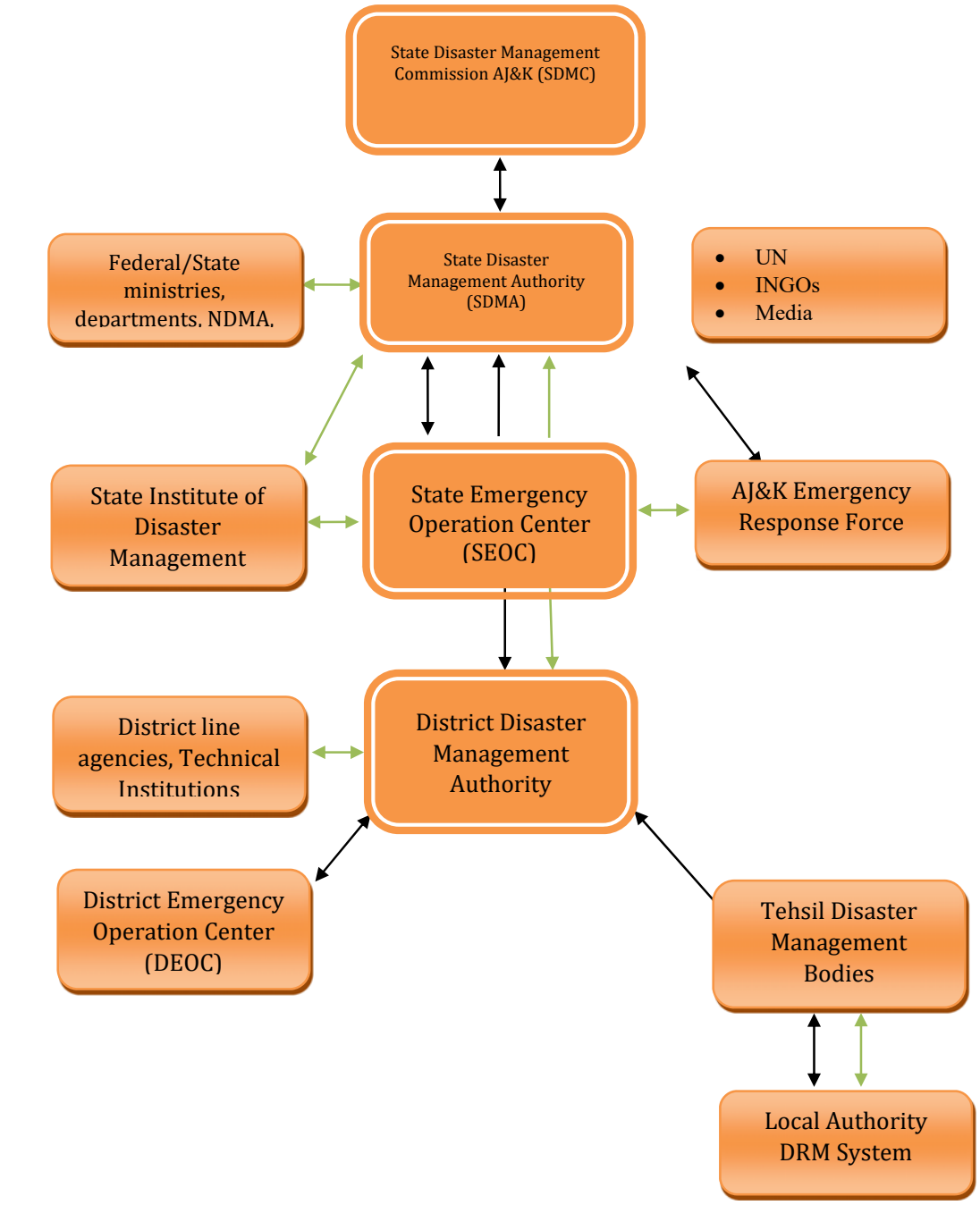
Historically disasters have been occurring in localized areas in each district and their affects have been limited mainly to the local communities. There was a lack of government focus and capacities for risk analysis and risk reduction. Lack of disaster risk management plans also remains a major gap. Even the districts that have suffered from frequent hazards don't have any systematic plans. AJK lacked application of building codes for construction of housing and infrastructure in hazard prone areas. This could be attributed to lack of trained construction workforce, lack of monitoring and evaluation mechanism etc. AJK was also lacking in an effective system for emergency response, e.g. Emergency Operations Centers, response plans, SOPs to deal with various hazards and capacities in search and rescue, firefighting, medical first response, evacuation etc.

3.2 Disaster Management System after Earthquake 2005

A reactive emergency response approach has remained the predominant way of dealing with disasters in AJK. The heavy damage brought about by the earthquake has led AJK to initiate State level efforts in developing a structure for disaster management focusing on prevention, mitigation and integration of responses by conducting a review of traditional disaster management systems and policies on emergency response. The need for strong institutional and policy arrangements has been fulfilled with the promulgation of State Disaster Management Ordinance, 2007 and it became the State Disaster Management Act in 2008. The State Disaster Management Commission (SDMC) has been established under the Chairmanship of the Prime Minister as the highest policy making body in the field of disaster management. As an executive arm of the SDMC, the State Disaster Management Authority (SDMA) has been made operational to coordinate and monitor implementation of State Policies and Strategies on disaster management. Accordingly, District Disaster Management

Authorities (DDMAs) have been established in all ten districts. The DDMAs are going to be the linchpin of the whole system and would play the pivotal role of the first line of defense in the event of a disaster.

Structure of Disaster Management Organizations



The roles and functions of the disaster management organizations are regulated by the State Disaster Management Act 2008 as follows,

3.2.1 State Disaster Management Commission (SDMC)

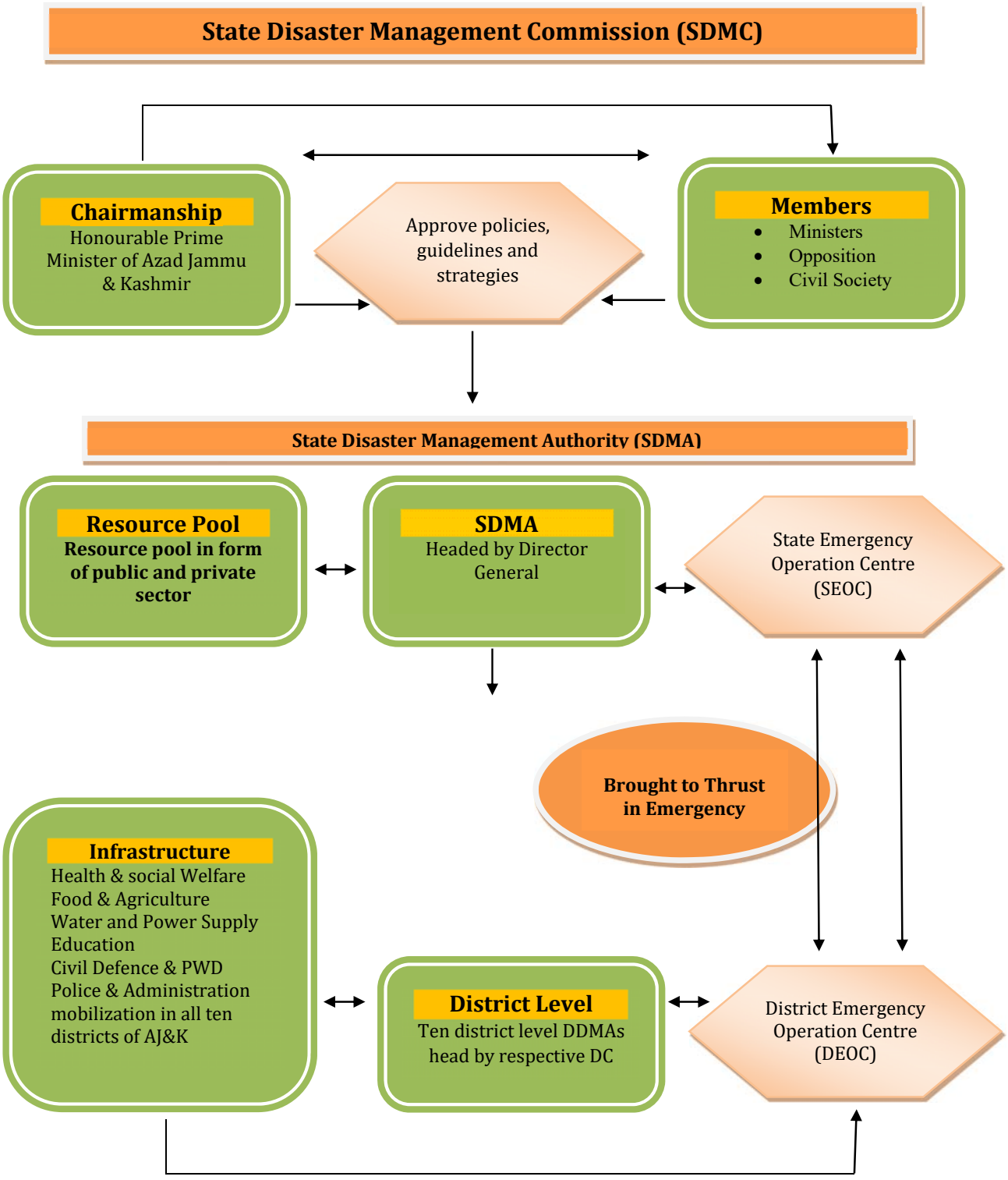
The Act stipulates the constitution of highest policy making body for disaster risk management in AJ&K by the name of State Disaster Management Commission (SDMC).

The SDMC comprises of:

- The Prime Minister of Azad Jammu and Kashmir who shall be the Chairperson, ex-Officio
- Leader of Opposition
- Senior Minister in the Cabinet
- Minister for Communication, Works, Reconstruction and Rehabilitation
- Minister for Health
- Minister for Social Welfare
- Minister for Civil Defense
- Chief Secretary, Azad Govt of the State of Jammu & Kashmir
- Senior Member, Board of Revenue, Azad Govt of the State of Jammu & Kashmir
- Inspector General Police, Azad Govt of the State of Jammu & Kashmir
- Secretary Finance, Azad Govt of the State of Jammu and Kashmir
- Representatives of civil society or any other person appointed by the Prime Minister
- Director General State Disaster Management Authority, to be appointed under sub-section (3) of section 8 shall act as ex officio secretary of the commission

The powers and functions of SDMC may: -

- Lay down policies on disaster management
- Approve the plan for territory of Azad Jammu and Kashmir
- Approve plans prepared by the departments, division & districts
- Lay down guidelines to be followed by the government
- The commission may constitute advisory committee/s as required
- The commission shall meet as and when necessary and at such time and place as the chairperson of the commission may think fit (proposed meeting schedule at least two times every year besides times when required).


State Disaster Management Commission (SDMC)
Chairmanship
Honourable Prime Minister of Azad Jammu & Kashmir
Approve policies, guidelines and strategies
Members
Ministers
Opposition
Civil Society
State Disaster Management Authority (SDMA)
Resource Pool
Resource pool in form of public and private sector
SDMA
Headed by Director General
State Emergency Operation Centre (SEOC)
Brought to Thrust in Emergency
Infrastructure
Health & social Welfare
Food & Agriculture
Water and Power Supply
Education
Civil Defence & PWD
Police & Administration
mobilization in all ten districts of AJ&K
District Level
Ten district level DDMAs head by respective DC
District Emergency Operation Centre (DEOC)

3.2.2 State Disaster Management Authority (SDMA)

The State Disaster Management Authority is a multi-sectoral, multi-disciplinary representative body that shall act as focal agency for mainstreaming disaster risk reduction into development planning, disaster preparedness and shall coordinate emergency response and early recovery.

The SDMA shall become a focal point to facilitate and guide other public and civil society organizations in disaster responsive development planning and management of emergency response. Additionally, it is to work on capacity building of line agencies and civil society organizations to develop detailed preparedness plans and coordinate effective and timely disaster response. Under Azad Jammu & Kashmir Disaster Management Act 2008, SDMA has been given a status of Relief, Disaster Management and Civil Defence Secretariat headed by the Secretary.

SDMA shall comprise of the following members: -

- Chief Secretary GoAJK as Chairman
- Secretary / DG SDMA
- Secretary Electricity
- Secretary Finance
- Secretary Agriculture and Animal Husbandry
- Secretary Health
- Secretary Social Welfare
- Secretary Local Govt and Rural Development
- Secretary Law, Justice, Parliamentary Affairs and Human Rights
- Commissioner Relief
- Director General Civil Defence
- Additional Secretary (Home)
- Divisional Commissioners, Muzaffarabad, Poonch, Mirpur

The SDMA shall perform following functions:

- Act as implementing, coordinating and monitoring body for disaster risk management.
- Prepare the plan to be approved by the commission.
- Implement, coordinate and monitor the implementation of the policy.
- Lay down guidelines for preparing disaster risk management plans by different ministries or departments.
- Provide necessary technical assistance to governments, district management authorities for preparing their disaster risk management plans in accordance with the guidelines laid down by the commission.
- Coordinate response in the event of any threatening disaster situation or disaster.
- Lay down guidelines for, or give directions to the concerned ministries and departments and District Management Authorities regarding measures to be taken by them in response to any emergency.

- For any specific purpose or for general assistance requisition the services of any person and such person shall be a co-opted member and exercise such power as conferred upon him by the authority in writing.
- Promote general education and awareness in relation to disaster risk management.
- Perform such other functions as the commission may require it to perform.

Other Key Roles of SDMA

- Continuously monitor hazards, risks and vulnerable conditions within the State
- Develop guidelines and standards for State and local stakeholders regarding their role in disaster risk management,
- Ensure preparation of disaster risk management plans by all districts;
- Coordinate implementation of State disaster risk management plan in accordance with the National Disaster Management Plan,
- Promote education, awareness and training on disaster risk reduction and response;
- Provide necessary technical assistance and advice to local authorities for carrying out their functions effectively;
- Coordinate emergency response in the event of a disaster, through the State Emergency Operations Centre (SEOC);
- Develop specific capabilities to manage threats that exist in the State.

The SDMA in AJK will ensure the creation of a Platform for Disaster Risk Management. The Platform will be a coordinating body that brings together technical staff of development practitioners, NGOs and government departments involved in Disaster Risk Management across the State to meet on regular basis and exchange information, debate options and decisions on activities formulated for referral to the Government, donors, NGOs and other actors. It will be an open forum of high level technical staff representing a broad grouping of organizations at the State level with interest in disaster risk management and building resilience of communities against potential hazards.

The platform will be responsible for addressing disaster risk and development issues in the State, for building trust and understanding, as well as maintaining institutional memory of the key State actors. The platform will meet once a month, or as need may dictate and will be chaired by the Secretary (or his representative) of the SDMA. The Committee will share approaches and guidelines on methods and approaches for the coordination of both information and appropriate response measures on disaster risks.

The platform will promote, strengthen and support the multi-agency approach to disaster risk management in AJK. Specifically, the Terms of Reference will be:

- Develop and implement mechanisms to coordinate the flow of disaster risk management and information in the province, and develop procedures to ensure appropriate dissemination and access to the information among the stakeholders.
- Coordinate the effective management of information and reporting among stakeholders and when necessary shift the focus of such meetings from information sharing to action planning and response coordination.

- Develop coordinated response mechanisms to be adopted by all relevant stakeholders. Such guidelines should promote mitigation and early response activities.
- Develop and manage a geographical targeting and distribution system for food and non-food responses to affected areas faced with stress conditions with the primary objective being to avoid parallel structures and improve efficiency and impact.
- Provide technical advice and guidance to all relevant bodies on matters of disaster risk reduction and management as appropriate.

3.2.3 District Disaster Management Authority (DDMA)

The district(s) would be key administrative units for effective disaster risk management planning and implementation, also envisaged in the Azad Jammu & Kashmir Disaster Management Act, 2008. The Deputy Commissioners would serve as the chairman-ex officio of the District Disaster Management Authority. Currently, ten DDMAs have been established and are responsible for the whole spectrum of Disaster Management at district level.

As per the Azad Jammu & Kashmir Disaster Management Act, 2008, The District Authority shall consist of such number of members, as may be prescribed by the Government, and unless the rules otherwise provide, it shall consist of the following members, namely: -

(a) Deputy Commissioner of the District who shall be Chairperson, ex officio;

(b) SSP/SP of the District, member, ex officio

(c) The District Health Officer, member, ex-officio;

(d) The Assistant Director Civil Defence member, ex-officio;

(e) Such other district level officers, to be appointed by the Government;

(f) Member of Legislative Assembly of Azad Jammu and Kashmir from the respective affected area.

The DDMA shall:

- Prepare a disaster risk management plan including district response plan for the district based upon local risk assessment
- Coordinate and monitor the implementation of policies & plans
- Ensure that the areas in the district vulnerable to disasters are identified and measures for the prevention of disasters and the mitigation of its effects are undertaken by the departments of the government at the district level as well as by the local authorities
- Ensure that the guidelines for prevention, mitigation, preparedness and response measures as laid down by the authority are followed by all departments of the government at the district level and the local authorities in the district
- Give directions to different authorities at the district level and local authorities to take such other measures for the prevention or mitigation of disasters as may be necessary

- Lay down guidelines for preparation of disaster risk management plans by the departments of the Govt. at the districts level and local authorities in the district
- Monitor the implementation of disaster risk management plans prepared by the departments of the government at the district level
- Lay down guidelines to be followed by the departments of the government at the district level
- Continuously monitor hazards, risks and vulnerable conditions within the district
- Organize and coordinate specialized training programmes for different levels of officers, employees and voluntary rescue workers in the district
- Facilitate community training and awareness programmes for prevention of disaster or mitigation with the support of local authorities, governmental and non-governmental organizations
- Set up, maintain, review and upgrade the mechanism for early warnings and dissemination of proper information to public
- Prepare, review and update district level response plan and guidelines
- Coordinate with, and give guidelines to, local authorities in the district to ensure that pre-disaster and post disaster management activities in the district are carried out promptly and effectively
- Review development plans prepared by the district line departments or local authorities with a view to make necessary provisions therein for prevention of disasters and mitigation
- Identify buildings and places which could, in the event of disaster situation be used as centres or camps and make arrangements for water supply and sanitation in such buildings or places
- Establish stockpiles of relief and rescue materials or ensure preparedness to make such materials available at a short notice
- Provide information to the Authority relating to different aspects of disasters management
- Encourage the involvement of non-governmental organizations and voluntary social welfare institutions working at the grassroots level in the district for disaster management
- Ensure communication systems are in order, and disaster management drills are carried out periodically
- Perform such other functions as the government may assign to it or as it deems necessary for disaster risk management in the district

3.2.4 Local Authorities

Communities are first responders in case a disaster strikes, with support of basic administrative units like Union Councils and Tehsils. Hence, it is of paramount importance that these administrative units and communities have requisite knowledge and skills and have access to adequate physical, technical and financial resources to plan and manage disaster management activities.

Few departments may have representation at UC or community level; Institutions at this level are the frontline of disaster risk reduction and response. For many departments this is the

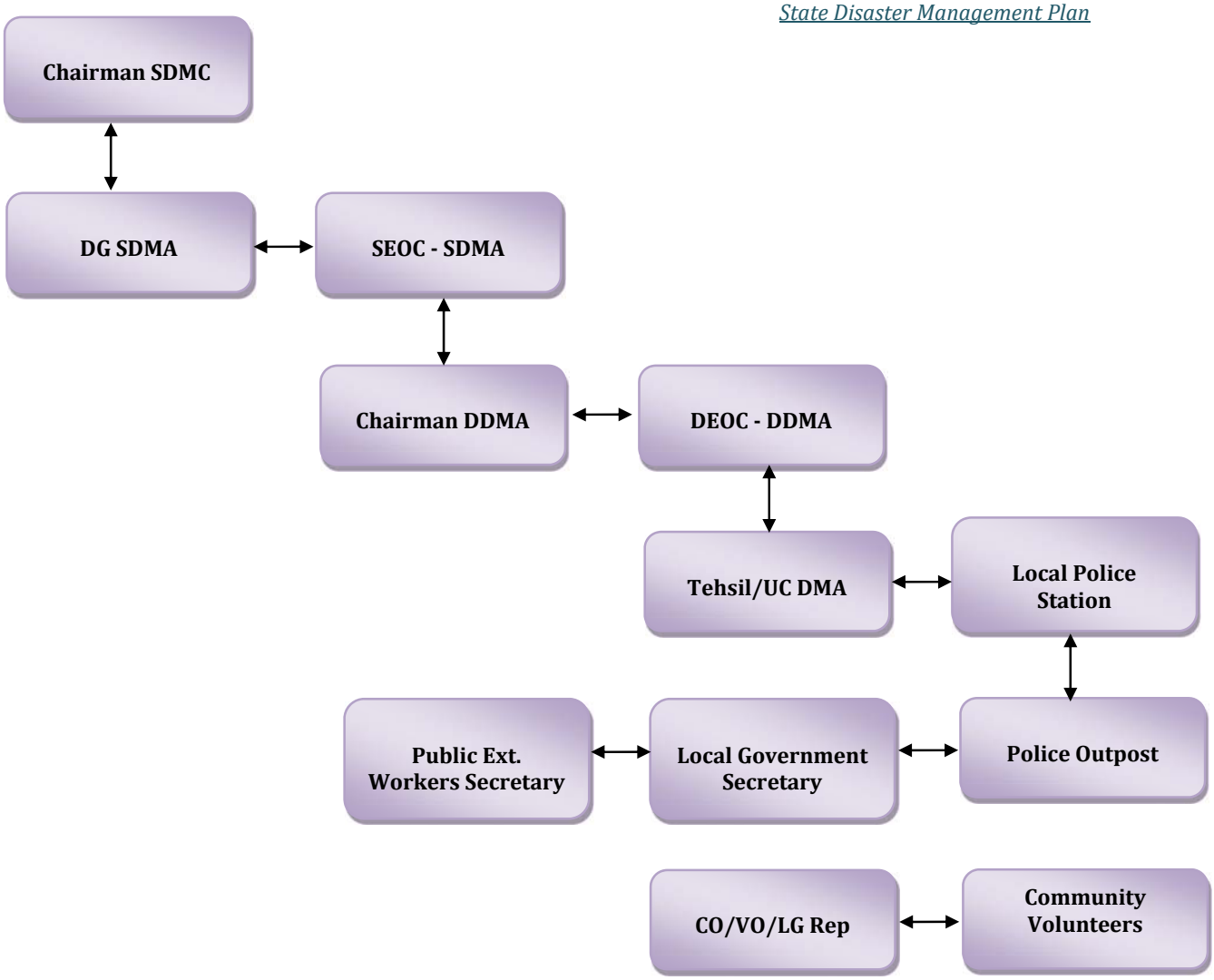
lowest level of administration where they interface directly with communities; agriculture, education, health, police, revenue and others. Extension workers of above departments could play a significant role in promoting risk reduction. For example, agriculture extension workers could promote awareness of drought, flood or cyclone resistant crops. Health workers could raise people's awareness about potential diseases that may occur after a flood or drought and how to prepare for them. Education officials could work on school disaster preparedness. Similarly, Tehsil Authorities have an important role in organizing emergency response and relief; e.g. damage and loss assessment, recovery needs assessment. Other key players include; extension workers, police, fire services, community organizations (COs), traditional leaders and NGOs. Appropriate local structures would be established for risk reduction and preparedness. This could be compensated with effective coordination and by encouraging community engagement in disaster risk management. These tiers could play critical role in identifying potential risk reduction measures, by sharing local wisdom or traditional practices, by compiling preparedness plans and coordinating effective response. These tiers could provide immediate rescue and relief services, undertake damage and need assessments amongst others.

The Azad Jammu & Kashmir Disaster Management Act 2008 sets functional responsibilities for local authorities (below district level) which are:

- Ensure that its officers and employees are trained for disaster risk management
- Ensure that resources relating to disaster risk management are so maintained as to be readily available for use in the event of any threatening disaster situation or disaster
- Ensure that all construction projects under it or within its jurisdiction conform to the standards and specifications laid down for prevention of disasters and mitigation by the Authority and the District Authority
- Carry out relief, rehabilitation and reconstruction activities in the affected area in accordance with the district plan.
- The local authority may take such other measures as may be necessary for the disaster management.

Although the Act highlights the importance of local authorities by describing their functional responsibilities in Chapter V, however it is silent on the organizational structure at local (Tehsil and UC) level. The review of Act will be suggested to clear the organizational setup at local level and summary proposing the following arrangement shall be presented to the government for approval accordingly.

The Assistant Commissioner shall be the Chairman of Tehsil Level Disaster Management Committee and Instructor Civil Defense and Incharge Rescue 1122 shall be important member of Tehsil Committee. UCs Secretary will be a Chairman of a UC level Disaster Management Committee and Patwari UC, Livestock, Agriculture, Health representatives at UC level shall be member of UC Disaster Management Committee. At village level school Headmaster, Imam Masjid, Lady Health Worker and selected notables will be members of this committee. It will be responsibility of DDMAs to constitute and bring these UCs and village level committees in physical form. Registration of these committees may be part of Act and through DDMAs these committees may be registered with SDMA under the Act.



State Disaster Management Steering Committee (SDMSC)

3.2.5 Community Based Organizations

The Great Hanshin Awaji Earthquake of 1995 was the first milestone, proving the effectiveness of community participation. Statistics show that 72% of the people were either self-evacuated or were rescued from the debris by their neighbors. This indicates the importance of community, and a community-based disaster management committee immediately after a disaster.

Since the community participation and involvement has become a universal process and the same is acknowledged in the National Disaster Management Plan (NDMP) 2012-2022, therefore promotion of disaster risk management at local and community levels will be ensured and the strategies in this regard, in line with the NDMP, will be devised.

In order to promote community level disaster risk management activities, the capacity of existing community organizations will be developed and enhanced by district and Tehsil authorities. In the absence of community organizations, new groups would be established to

work on disaster risk reduction and management. CBOs will be trained about local early warning system, evacuation, first aid, search and rescue, firefighting etc. Linkages would be developed between CBOs and relevant local agencies; e.g. agriculture, banks, health and veterinary services to promote disaster preparedness. Skills and knowledge of CBO leadership will also be developed in financial management, people management, resource mobilization, interpersonal communication and presentation and negotiation skills. The provision of Citizen Community Boards (CCBs) in Local Government Ordinance (LGO 2001) provides a good opportunity to organize communities and mobilize resources for issues like local level disaster risk management.

3.2.6 State Institute of Disaster Management (SIDM)

The Azad Jammu &Kashmir Disaster Management Act 2008, envisages establishment of State Institute of Disaster Management which shall primarily be responsible for planning and promoting training, research and developing core competencies in the area of disaster risk management, documentation and development of state level information base, relating to disaster management policies, prevention mechanisms and mitigation measures.

The SIDM, as laid down in the Act is responsible to:

- Develop training modules, undertake research and documentation in disaster risk management and organize training programmes
- Formulate and implement a comprehensive human resource development plan covering all aspects of disaster risk management
- Provide assistance in state level policy formulation
- Provide required assistance to the training and research institutes for development of training and research programmes for stakeholders including government functionaries
- Provide assistance to the government in the formulation of state level policies, strategies, disaster risk management framework and any other assistance as may be required by the governments for capacity building of stakeholders; government including its functionaries, civil society members, corporate sector and people's elected representatives
- Develop educational materials for disaster risk management including academic and professional courses
- Promote awareness among stakeholders including college or school teachers and students, technical personnel and others associated with multi-hazard mitigation, preparedness and response measures
- Do all such other lawful things as are conducive or incidental to attainment of the objectives
- Undertake any other function as may be assigned to it by the government

3.2.7 State Disaster Management Fund

As envisaged in the Azad Jammu & Kashmir Disaster Management Act, 2008, government, by the notification of official gazette shall create a fund to meet the implications of disaster risk management activities and emergency response expenditure.

The State Disaster Management Fund shall be financed from the following sources, namely: -

(a) grants made by the Federal Government;
(b) grants mad by the government;
(c)loans, aid and donations from the national or international agencies; and
(d) donation received from any other source.

Upon issuance of funds, following shall become part of the fund/be financed from:

(a) Prime Minister's Disaster Relief Fund;
(b) Any other Fund relatable to natural calamities established at State level as the Government may determine;

The State Disaster Management Authority, towards meeting the expenses for emergency preparedness, response, mitigation, relief and reconstruction, shall administer the State Disaster Management Fund.

3.2.8 Emergency Procurement and Accounting

Where by reason of any impending disaster situation or disaster, the SDMA or DDMA is satisfied that immediate procurement of provisions or materials or the immediate application of resources are necessary for rescue or relief it may authorize the concerned department or authority to make the emergency procurement and in such case, the standard procedure requiring inviting of tenders shall be deemed to be waived.

A certificate about utilization of provisions or materials by the controlling officer authorized by the Authority or District Authority, as the case may be, shall be deemed to be a valid document or voucher for the purpose of accounting of emergency procurement of such provisions or materials.

Chapter 4

Roles and Responsibilities of Key Stakeholders

Chapter 4 - Roles and Responsibilities of Key Stakeholders

The recommended actions and roles for various stakeholders at each stage of disasters have been compiled in this section in consultation with respective agencies. The Standard Operating Procedures (SOP) have been prepared with avowed objectives of making concerned departments understand their duties and responsibilities regarding disaster management at all levels. All departments and agencies will prepare their own action plans in respect of their responsibilities, under the SOP for efficient implementation.

4.1 Government Departments

The following government departments in AJK perform different functions in their areas of mandate that contribute to development and disaster risk management in the State. Generally, government departments will do the following in relation to disaster risk management and response being the institutional members of SDMA:

a) Establishment of Emergency Centre in their own departments for the coordination and in time response in case of any emergency.
b) Provision of cranes, dumpers, loaders tractors, road rollers, heavy trucks, generators, search lights and other machinery and cutters and other equipment necessary at the scene of incident.
c) Availability of standby skilled trained and qualified staffs that have the capacity of deal with any type of disaster.
d) Repair, maintenance and replacement of hanging and damaged electric wires in case of disaster in collaboration with power supply companies.
e) Establishment of mobile emergency teams for on spot repair of vehicle / Fire tenders and other heavy machinery.
f) Keeping sufficient stock of search lights, heavy duty bulbs, lantern, lights torches, trolleys, ropes, toe-chain, helmets etc. required in emergency.
g) Keeping standby arrangement to meet all emergencies related to electricity break down and cases of electrocution
h) Displacement of heavy machinery out of rush area to meet any emergency and to reduce reacting time.
i) Removal of debris, obstacles/road blocks to ensure smooth flow of traffic
j) Remove any encroachment obstructing the relief work.
k) Restoration of normalcy after disaster or major livelihood disruption in the province.
l) Other department specific activities in relation to disaster risk management are:

4.1.1 Revenue Department

The AJ&K Board of Revenue is the highest Court of appeal and revision in Revenue cases in the State of Azad Jammu & Kashmir. It is the controlling Authority in all matters related with the collection of land Revenue, Administration of the land, preparation and maintenance of records and any other matter relating thereto. The Board of Revenue is vested with general

superintendence and control over all other revenue officers in the state. The following are the main functions of the Revenue department in connection with disaster management.

Preparedness

a) Micro level land use planning
b) Strict implementation of land use policy and plan
c) Sensitize the revenue field staff, district and divisional officers with issues and challenges of disaster management.
d) Livestock census and population census
e) Policy formulation and monitoring of rehabilitation work of the calamities affected population.
f) Develop plans for relief and rehabilitation of LOC affected persons.
g) Planning for safeguarding Mangla Dam.
h) Developing strategies for ensuring DRR interventions in private Housing Schemes.
i) Plan for efficient utilization of AJ&K Transport Authority in case of any disaster
j) Computerization of Land Records – AJKLRMIS as it will be helpful in paying compensations in case of looses associated with land.
k) Pre-positioning of stocks in the vulnerable areas.
l) Effective linkage with SDMA

Response

a) Acquisition of land for accommodating the affected population /camp establishment
b) Assessment of losses and damages to the affected population.
c) Settlement and re-assessment of the displaced population.
d) Making the rental/lease arrangements with land lords in case of availing land for camps.
e) Rehabilitation of refugees/ Displaced population
f) Policy formulation and monitoring of rehabilitation work of the calamities affected population.
g) Transfer of state land from one Department to another Department if required.
h) Devising and implementing the compensation package with the support of SDMA for the affected population.

4.1.2 Department of Agriculture

Department of Agriculture in AJK has a role in assessment of damage to agricultural crops and impact of possible fertility loss. Their main role is to provide seeds and necessary planting material and other inputs to assist in early recovery.

Mitigation

a) Designate a focal point for disaster management within the Department.
b) Identify areas likely to be affected by any anticipated hazard.

c) Allocate funds in annual budget for implementation of disaster risk management activities in hazard prone areas;
d) Organize distribution of seeds, seedlings fertilizers and agricultural inputs for affected farming community.
e) Arrange for keeping stocks of seeds, fertilizers and pesticides
f) Undertake vulnerability and risk analysis for food and agriculture hazard-prone areas, particularly in relation to floods, droughts, and erosion;
g) Ensure sustainable livelihoods in areas of recurrent climate risks (i.e., flood and drought prone areas) by promoting supplementary income generation from off-farm and non-farm activities;
h) Promote effective insurance and credit schemes to compensate for crop damage and losses to livelihoods due to natural hazards;

Preparedness

a) Coordinate with SDMA and jointly identify appropriate actions for reducing vulnerability of food and agriculture to disaster risks;
b) Coordinate with SMDA, and research institutions to establish warning systems for identification of risks to food and agriculture sectors;
c) Develop disaster risk management plan to deal with hazards and disasters with relation to department's mandate and assets;
d) Promote contingency crop planning to deal with year to year climate variations and crop diversification including use of hazard resistant crops, to deal with shifts in climate patterns;
e) Develop capacity and raise awareness of staff of departments at State levels, local extension workers and farmers on disaster preparedness for food and agriculture sectors;

Response

a) Assist in saving crops, agricultural land and livestock in disaster situation;
b) Monitor damage to crops and identify steps for early recovery
c) Quantify the loss and damage within the quickest possible time and finalizes planning of agriculture rehabilitation
d) Make available inputs like seed plant, fertilizers and agricultural equipment to victims of disasters on credit basis;
e) Ensure adequate availability of food stocks in disaster situation;
f) Organize ration depots at location required by the local authorities;
g) Restoration of flood damages to agricultural fields, and link roads during emergency
h) Provision of agricultural machinery to farmers on subsidized rates for harvesting and threshing of wheat and paddy.
i) Ensure availability of adequate supply of seeds, seedlings, fertilizers, pesticides and agricultural implements to the affected farmers

4.1.3 Animal Husbandry (Livestock) Department

The livestock play very important economic, social and cultural functions for rural households in AJK once they contribute to improve income and wellbeing of the farm family. Livestock helps on food supply, family nutrition, family income, asset savings, soil productivity, livelihoods, transport, agricultural traction, agricultural diversification and sustainable agricultural production, family and community employment, ritual purposes and social status.

Impacts of disasters are high on the weaker sections of the community. Many of the poor are landless or small holders in AJK. This section largely depends on animals, for livelihood. It is apparent that even though animals are the main source of livelihood to the poorest of the poor in the State, disaster management of animals do not figure anywhere in preparedness, mitigation or rehabilitation. There is a significant participation of women in conventional animal husbandry system where a large array of indigenous breeds of domestic and semi-domestic animals live in absolute harmony with man and nature; a situation that can prevent at least some disasters.

Mitigation

a) Designate a focal point for disaster management.
b) Undertake vulnerability and risk analysis for food, livestock sectors in hazard-prone areas, particularly in relation to droughts and locust;
c) Coordinate with SDMA and jointly identify appropriate actions for reducing vulnerability and risk exposure to livestock,
d) Coordinate with SMDA, and research institutions to establish warning systems for identification of risks to livestock sector;
e) Develop capacity and raise awareness of staff of the department at all levels, local extension workers and farmers on disaster preparedness for livestock sectors;
f) Ensure sustainable livelihoods in areas of recurrent climate risks (i.e. flood and drought prone areas) by promoting supplementary income generation from off-farm (e.g. animal husbandry) and non-farm activities; provide market outlets for the products of rural farmers.

Preparedness

a) Provide early warning information to livestock farmers regarding drought.
b) Select and earmark highlands for use as shelter for livestock during flash floods.
c) Prepare schemes for supplementary arrangements for rehabilitation of livestock and recouping their loss.
d) Programme for vaccination for protection of livestock against contagious diseases.
e) Take up schemes for procurement of animal feed on emergency basis for distribution in the affected areas.
f) Establish fodder bank schemes as security against fodder shortage for livestock due to disasters in order to ensure fodder security to the rural livestock economy
g) Provide veterinary services to the livestock farmers

h) Allocate funds in annual budget for implementation of disaster risk management activities in hazard prone areas with relation to livestock sub-sector;
i) Promote contingency planning to deal with year to year climate variations and that trigger and exacerbate drought
j) Develop disaster risk management plan to deal with hazards and disasters with relation to department's mandate and assets;

Response

a) During floods assist the response agencies for operations relating to the rescue and shifting of stranded livestock and poultry.
b) During floods arrange for the quick vaccination and treatment of livestock and poultry at shelter places. (emergency animal vaccines during outbreaks of animal diseases)
c) During prolonged droughts and in times of other extreme bad weather arrange emergency animal feeds for sustainability of livestock population.
d) Dispatch Veterinary Teams with appropriate equipment and medicines to aid affected livestock.
e) Arrange a rapid survey to assess the loss.
f) Arrange for disposal of dead bodies of animals.

4.1.4 Irrigation and Small Dam Organization

The Department of Irrigation and small dams was established in year 2001. Previously it was a small functional unit of Agriculture department. However, it is still in the embryonic stage to become a well-equipped department. The Irrigation network in AJK comprises irrigation channels, drains, tube-wells in southern districts, small dams and some flood protection infrastructure on the main rivers flowing in the State.

The role of the Department of irrigation and small Dams in AJK is very critical for improving and expanding irrigation systems to cope with drought situations and manage flood problems.

The Department can play a vital role in disaster mitigation in relation to drought and floods, as they affect agricultural production, irrigation systems and water supply and management. Some of these mitigation activities include rehabilitation and management of watersheds and water catchment areas and enforcement of land use patterns. Details of the irrigation channels, agricultural area and major crops are attached at Annex.

The core functions of the Irrigation and Small Dams Department in relation to disaster risk management will be:

Mitigation

a) Designate one Liaison Officer in the Department as the Disaster Management Focal Point
b) Develop capacities of the Irrigation Department to mitigate floods and droughts
c) Promote Watershed Development Programs and Develop Schemes for restoration/conservation of irrigation systems

d) Ensure efficient management of flood forecasting and warning centres and improve procedure of flood forecasts in collaboration with Pakistan Met. Department and intimation to appropriate authorities.
e) Operate Flood Information Centre in the flood season every year.
f) Collect all the information on weather forecast, water level of all principal rivers flowing through the State
g) Inform all concerned about daily weather news and issue regular press bulletins.
h) Take steps for strengthening of flood protection works and irrigation channels before the flood season
i) Provide for and executing plans for the management of river floods in the State, and to construct and maintain flood protection programs/works;
j) Undertake vulnerability and risk analysis for flood prone areas;
k) Coordinate with SDMA and jointly identify appropriate actions for reducing vulnerability to flood and other risks that may disrupt livelihoods in the irrigation areas.

Preparedness

a) Since flash floods get triggered within short time-spans, take steps to alert all in collaboration with SEOC of SDMA through telephone and wireless according to needs.
b) Mount watch on flood protection works and canal systems.
c) Complete repairs of flood protection work in the pre flood season
d) Develop disaster risk management plan to deal with hazards and disasters with relation to department's mandate and assets;
e) Allocate funds in annual budget for implementation of disaster risk management activities in flood and drought prone areas;
f) Construction of micro dams for the storage of flash-water with a view to maintain and recharge the aquifer to ensure regular availability of irrigation water through neighboring springs, tube wells, and open surface wells.

Response

a) Open the Control Room in the Department.
b) Launch emergency repair operations for critically damaged flood protection works, canals and other irrigation network.
c) Take up sustained programmes for rehabilitation of flood protection works and irrigation channels
d) De-silt of irrigation Channels after the floods
e) Providing assistance and evacuating trapped people during floods

4.1.5 Forest, Wildlife and Fisheries Department

Forest Departments have historically been the organizations responsible for implementing forestry programmes in AJK. Forests are an integral part of the livelihoods and ecosystem in AJK. The Forest Department is responsible for the development and promotion of forest and

soil conservation activities, watershed management, wildlife conservation and Fisheries. The department takes care of the protection of the forest, wildlife and the aquatic resources.

Mitigation

a) Designate one Liaison Officer in the Department as the Disaster Management Focal Point
b) Plantation and appropriate engineering measures to mitigate the landslide hazard at the identified landslide affected areas in the State.
c) To provide technical advice for rangeland planting and the development of tree nurseries for forestation and reforestation programmes particularly in landslide area.
d) Coordinate with the SDMA and other scientific agencies to gather information about hazards and risks prevalent in rangelands that may lead to desertification and land sliding. Supply of drought resistant seeds of tree species to farmers and communities.
e) Control grazing of animal to rangeland areas that have endangered tree species and may trigger land sliding.
f) Supply of timber, firewood, grazing grass and other minor forest produce through open public sales.
g) Develop recreational facilities in a sustainable manner in the rangeland areas.
h) Ensure a pollution free livable environment in the areas of mandate.
i) Offer forestry educations to institutions and schools.
j) Management of fisheries resources
k) Conservation of fish stock and Development of fisheries potential

Preparedness

a) Aggressive enforcement of Forest & Environmental Laws
b) Establish a landslide Management and investigation cell
c) To develop a disaster risk management plan in line with the broad mandate of the department and build the capacity of departmental staff on disaster risk management.
d) Publish materials for communities and other stakeholders about seasonality of hazards and risks in areas of grazing for pasture and water

Response

a) Coordinate emergency response activities through SDMA and make resources available to SDMA upon the receipt of disaster situation reports.
b) Constitute a Disaster Management Unit.

4.1.6 Health Department

The Health department, an executive unit of the State government, is responsible to provide health services and deals with all matters related to regulating the health sector in the light of health policies and programs' guidelines jointly devised by military &non-military health professionals. The health set-up in AJK provides technical assistance, policy cover, and

implementation of some preventive programs only. Therefore, statistics on health facilities and human resources may be seen keeping this observation. The mission of the department is to provide health services to all through augmentation of sustainable health initiatives focusing on human resource development and private sector and community participation.

Department of Health has a responsibility in the reduction and prevention of suffering during natural and man-made disasters, as well as in the investigation and response to outbreak of communicable diseases.

The main functions in relation to disaster risk management are:

Mitigation

a) Designate one Liaison Officer in the Department as the Disaster Management Focal Point
b) Carry out and disseminate vulnerability and risk evaluation of the population health related issues;
c) Conduct hazard based mapping of all health care facilities, including vulnerability assessment (infrastructure and organizational setup) and integrate hazard resilience measures;
d) Develop policy framework for the department and plan on emergency preparedness and response within the health sector.
e) To ensure pre-positioning of Emergency Health Kits and Personnel.
f) Develop a disease surveillance system to identify hotspots for communicable disease in the State;
g) Establish and operate an early warning system for health threats based on the routine health information and in collaboration with other departments.
h) Enhance disaster management capacities of health work force (all cadres at all levels) in collaboration with other departments;
i) Prepare protocols and guidelines to address all priority public health issues as part of preparedness, response and recovery plans;
j) Integrate disaster preparedness and response capacities into all existing and future health programs at State and district level;
k) Build effective linkages and coordination with all health agencies/ stakeholders;

Preparedness

a) Develop disaster risk management plan to deal with communicable diseases, injuries following mass causality accidents, cross border firing and disasters with relation to department's mandate and assets;
b) Allocate funds in annual budget for implementation of disaster risk management activities
c) Train volunteers on emergency preparedness programmes such as first aid and preventive measure against diseases in disaster prone areas and in areas along the LoC.
d) Assess likely health impacts and share with Disaster Management and relevant agencies for planning Purpose.

e) Prepare a list of medical and paramedical personnel in disaster prone areas and disseminate it to concerned administrators.
f) Coordinate with SDMA and jointly identify appropriate actions for reducing vulnerability to health risks
g) Act as focal point for managing all aspect of healthcare preparedness, response and recovery in a disaster situation in close coordination with the SDMA;
h) Prepare disaster risk management plan for each level of health care facilities, including management of mass casualties, epidemics and submit this plan to the SDMA for better coordination of efforts;
i) Provide technical support in all health related areas to SDMA and DDMAs.
j) Device strategies for community involvement in all aspects of emergency preparedness, response and recovery plans with regards to health sector;
k) Stand by arrangements to meet any medical needs during and after the incident and stocking of sufficient medicines in all hospitals/medical centres.
l) Establishment of temporary team to provide vaccination and medication when required.
m) Arrangement of patients' beds and earmarking of patient wards to meet any emergency/crisis needs.
n) Provide blood transfusion facilities and motivate the people to donate blood.

Response

o) Mobilize medical teams and paramedical personnel to go to the affected areas as part of the Rapid Assessment and Quick Response Teams.
p) Provide medical assistance to the affected population
q) Receive causalities and injured in case of a major incident.
r) Provide mobile medical services and ambulance service with medical facilities to affected areas.
s) Carry out technical assessment on health infrastructure availability and need
t) Establish emergency health operation to ensure better coordination and mobilization in emergency/ disaster situation at all levels;
u) Set-up medical camps and mobilize emergency health teams including mobile

4.1.7 Planning and Development Department

The role of the Planning Department is to plan and judiciously distribute the meager financial resources to improve socio-economic conditions of the masses of the State. The Planning and Development Department is the planning organization at the State level that prepares an overall Five Years Plan and the Annual Development Programme. It acts as a catalyst between different departments in order to improve the pace and quality of economic development in the State.

The Planning & Development Department has an important role regarding allocation of funds on priority basis for disaster mitigation and rehabilitation projects. It needs to ensure that development programmes implemented in disaster vulnerable areas of the State incorporate disaster mitigation measures.

The main functions in relation to disaster risk management are:

Mitigation &Preparedness

a) Designate one Liaison Officer in the Department as the Disaster Management Focal Point.
b) Undertake vulnerability, risk and capacity analysis for development programs and projects.
c) Ensure disaster risk reduction is incorporated in all development programmes.
d) Prepare hazard and vulnerability maps at the national level for different kinds of disasters.
e) Accord appropriate priority to disaster mitigation projects like embankments, afforestation, landslides management, communications and construction of safe buildings.
f) Establish disaster management funding mechanisms to ensure adequate resources for mitigation and preparedness work, and quick availability of resources for relief and rehabilitation when required.
g) Coordinate with SDMA and jointly identify appropriate actions for reducing vulnerability to disaster risks
h) Assist development projects and programs to incorporate DRR/M in their implementation.

Response

a) Assist SDMA in the evaluation of damages and losses after disaster
b) Allocate funds for the repair, reconstruction of damaged infrastructure after considering their overall loss and damage.
c) Provide information for the announcement of early warning for different kinds of disasters based on hazard forecast and vulnerability database.
d) Coordinate the government's view on economic issues particularly after disaster.

4.1.8 Environment Protection Agency

The Environment Protection Department of Government of AJ&K is working under the Planning & Development Department. This department is of vital importance as its mandate is very curtail in implementing the environmental protection measures. In order to mitigate certain nature of hazards like land sliding, erosion, water bodies contaminations, the aggressive implementation of environment laws are of quite indispensable, particularly in protecting the water bodies being polluted from disposal of city waste and other refuse. EPA plays an important role in improving the plight of common man and bringing about a perceptible change within the society by minimizing and eliminating adverse environmental effects of, wastes of all kinds and pollution detrimental to public health, safety and welfare.

Main functions and duties in relation to disaster risk management are:

Mitigation

a) Designate one Liaison Officer in the Department as the Disaster Management Focal Point.
b) Assess the environmental impact of development programmes particularly of ongoing Hydro-power projects in different parts of State. Environmental Examination (IEE) and Environmental Impact Assessment (EIA).
c) Undertake risk analysis for environmental hazards vulnerability assessment of natural resources (forest, rivers, lakes, streams, protected areas) to natural and human induced hazards.
d) Develop disaster risk management plan to deal with hazards and disasters in relation to department's mandate and assets.
e) Aggressive implementation of environmental protection laws
f) Ensure budgetary allocation for environment related disaster risk management activities.
g) Coordinate with SDMA and jointly identify appropriate actions for reducing vulnerability to environmental hazards.
h) Administer laws, rules and regulations relating to the environment within the State.
i) Create awareness in public for environmental issues
j) Incorporate Natural Disaster Risk Assessment in the Environmental Impact Assessment guidelines.
k) Implement programmes for conservation and rehabilitation of natural resources in order to reduce risks of natural hazards; e.g. reforestation, combating desertification, conservation of special natural resources; e.g. rivers and other water bodies.

Preparedness

a) Undertake the research on climate change impact and identify climate change adaptation measures.
b) Create an Emergency Response Cell in the department to respond to environment related emergencies.
c) Response
d) Develop mechanisms for assessment of environmental losses and damages in the aftermath of disasters and their rehabilitation.

4.1.9 Communication and Works (C&W) Department

The Communication & Works department plays a significant role in the development of Azad Jammu & Kashmir as it provides services in developing physical infrastructure like roads, bridges and other modes of communication to support developmental activities. The Department has an important role in providing and restoring communication links during disasters.

The main functions in relation to disaster risk management include:

Mitigation

a) Designate one Liaison Officer in the Department as the Disaster Management Focal Point.
b) Carry out survey of condition of all roads network/ systems at State level.
c) Develop model designs of various facilities and infrastructure (bridges, roads) for safer construction in hazard-prone rural and urban areas.
d) Formulate guidelines for safe construction of public work.
e) Prepare list, with specifications and position, of heavy construction equipment, debris/ road clearance Machinery in the State.
f) Ensure that builders, contractors and masons use safer construction methods as per the international best practices;
g) Allocate funds for promoting safer construction practices;
h) Monitor construction of road infrastructure in hazard prone areas to ensure that safer construction techniques are followed;
i) Incorporate disaster risk assessment in the planning process for construction of all roads and bridges;

Preparedness

a) Prepare a disaster risk management plan with relation to Department programs, infrastructure and mandate.
b) Organize periodic training of engineers and other construction personnel on disaster resistant construction technologies.
c) Instruct all officials at construction sites to keep manpower and materials prepared for protection and repair of damaged road site.
d) Direct construction authorities and companies to preposition necessary, machinery, workers and materials (search & rescue facilities) in or near areas likely to be affected by disaster.

Response

a) Organize immediate rehabilitation of roads and other infrastructure for restoration of public transport routes after disaster.
b) Provide assistance to the damage assessment teams for survey of damage to roads infrastructure.
c) Take steps to clear debris and assist search and rescue teams.
d) Collate and disseminate information regarding operational and safe routes and alternate routes, fuel availability etc. to personnel operating in the field.
e) Launch repair missions for damaged critical infrastructure and routes.
f) Take steps for prompt removal of uprooted trees on the roads.
g) Assess damage to transportation infrastructure.
h) Take steps to ensure speedy repair and restoration of transport links.

4.1.10 Physical Planning and Housing / Public Health

Physical Planning & Housing Sector comprises Buildings, Public Health Engineering and Central Design Office and is mandated to design, prepare and implement Public Sector schemes besides deposit works. Sector is determined to implement its Vision keeping the Mid Term Development Framework (MTDF) targets in view.

The department of Physical Planning and Housing has a vital role in provision and maintenance of vital public infrastructure. The department will prepare its own contingency plan for the maintenance of public infrastructure, retrofit important common buildings and identify safer places for relocation. The department also plays an important role in developing appropriate national building codes and byelaws and their proper implementation. In the post disaster phase, the department will take adequate steps to undertake building damage assessment and promote reconstruction.

Mitigation

a) Designate one Liaison Officer in the Department as the Disaster Preparedness Focal Point.
b) Take precautionary steps for the protection of government property against possible loss and damage during disaster.
c) Undertake vulnerability and risk assessment of department's assets, infrastructure and services.
d) Formulate guidelines for safe construction of public works.
e) Prepare list, with specifications and position, of heavy construction equipment in the State.
f) Develop building codes for safer construction of houses, buildings and infrastructure in hazard-prone areas for multiple hazards; e.g. earthquakes, floods, landslides etc.
g) Develop model designs of various facilities and infrastructure for safer construction in hazard-prone rural and urban areas;
h) Ensure that builders, contractors and masons use safer construction methods as per the international best practices;
i) Allocate funds for promoting safer construction practices and implementation of disaster risk management activities in relation to access of safe drinking water;
j) Monitor construction of government buildings and infrastructure in hazard prone areas to ensure that safer construction techniques are followed;
k) Incorporate disaster risk assessment in the planning process for construction of new buildings, roads and bridges;
l) Retrofitting of all government buildings which do not comply with the disaster resilient construction techniques, including, residential and non-residential government buildings, dak bungalows and circuit houses etc.
m) Improvement of sewerage system and sanitary conditions to control flood risk.
n) Maintain and update records of all water supply schemes using Management Information System (MIS).

Preparedness

a) Prepare a disaster risk management plan with relation to Department programs, infrastructure and mandate.
b) Develop guidelines on conduct of damage and loss assessment to infrastructure and housing sectors in the wake of a disaster, and conduct assessments after disasters.
c) Coordinate with SDMA / DDMAs and jointly identify appropriate actions for reducing vulnerability of infrastructure and services.
d) Organize periodic training of engineers and other construction personnel on disaster resistant construction technologies.
e) Instruct all officials at construction sites to keep manpower and materials prepared for protection and repair of public works.
f) Direct construction authorities and companies to preposition necessary workers and materials (search & rescue facilities) in or near areas likely to be affected by disaster.
g) Identify and plan for rehabilitation locations for those living in disaster vulnerable areas.
h) Prepare building regulations for safe construction
i) Make available piped water, in adequate quantity, for drinking and house-hold purposes.
j) Prepare technical design for mitigation of risks to the newly identified schemes.
k) Protection of water sources from contamination by continuous water treatment and stream pollution control

Response

a) Provide sites for rehabilitation of affected population.
b) Create access route for emergency response following major disasters
c) Carry out detailed technical assessment of damage to public works.
d) Assist in construction of temporary shelters.
e) Organize repairs of buildings damaged in the disaster
f) Prepare detailed programmes for rehabilitation of damaged public works.
g) Arrange technical assistance and supervision for reconstruction works as per request.

4.1.11 Local Government& Rural Development Department

LGRD is one of the main departments in the State that has the mandate to implement vulnerability reduction projects to alleviate poverty and improve people's livelihoods.

The Local Government and Rural Development (LG & RD) has access to communities at the grassroots level. The LG & RD handles small scale projects at the ground level such as water supply, dug wells, sanitation, small roads and community infrastructure.

Main functions in relation to disaster risk management are:

Mitigation

a) Designate one Liaison Officer in the Department as the Disaster Management Focal Point.
b) Encourage disaster resistant technological practices in buildings and infrastructure.
c) Develop disaster risk management plan.
d) Allocate funds in the annual budget for the implementation of disaster risk management activities.
e) Undertake vulnerability and risk analysis for rural populations.
f) Coordinate with SDMA to build community resilience to disaster.
g) Undertake vulnerability analysis of local government infrastructure in hazard prone areas.
h) Orient department staff in hazard prone areas on disaster risk assessment

Preparedness

a) Encourage the people in earthquake prone areas to adopt earthquake resistant technologies.
b) Prepare maps showing population concentration and distribution of resources.
c) Report activities in periodic meetings of the District Disaster Management Authority Committee convened by the Deputy Commissioner.
d) On the basis of its developmental responsibility, liaise with other line departments and agencies for a coordinated mitigation approach.
e) Activate Disaster Management Focal Point.
f) Alert all concerned about impending disaster.
g) Ensure safety of establishments, structures and equipment in the field
h) Ensure formation of committee for rescue, relief and rehabilitation work and local volunteer team.
i) Make available piped water, in adequate quantity, for drinking and house-hold purposes.
j) Prepare technical design for mitigation of risks to the newly identified schemes.
k) Protection of water sources from contamination by continuous water treatment and stream pollution control

Response

a) Ensure information flow from affected area and maintain regular contact with State and district EOC (24hrs).
b) Coordinate the response activities of District Disaster Management Authorities.
c) Ensure availability of drinking water at times of need.
d) Provide necessary infrastructure to carry out relief works.
e) Assess initial damage and Quantify the loss/damage.
f) Organize reconstruction of damaged houses on self-help basis with local assets and materials received from the response organizations.
g) Arrange repair of link roads, water supplies and cleaning of canals.
h) Take up repair/reconstruction work of infrastructure damaged by disaster.
i) Equip and develop the capacities of emergency response

4.1.12 Electricity Department

Electricity Department of Azad Jammu and Kashmir was developed to promote electricity and to improve financial effectiveness of the state.

The Department is responsible for assisting the state in implementation of overall government policies related to power/electricity.

The major functions of the Department are to ensure transparency of regulatory framework, accommodate, promote and facilitate to the people of the state of Azad Jammu and Kashmir.

Mitigation

a) Designate one Liaison Officer in the Department as the Disaster Management Focal Point.
b) Encourage disaster resistant technological practices during the installation of electricity network.
c) Develop disaster risk management plan.
d) Allocate funds in the annual budget for the implementation of disaster risk management activities.
e) Develop contingency plans for different water and power infrastructures e.g. Hydro-power stations, Dams, transmissions etc.

Preparedness

a) Undertake vulnerability and risk analysis for electricity supply network.
b) Undertake vulnerability analysis electricity network in hazard prone areas.
c) Orient department staff in hazard prone areas on hazard risk assessment.
d) Maintain stocks for repair, maintenance and replacement of power infrastructure supply restoration.

Response

a) Provide temporary power supply at the place of major incident or disaster.
b) Disconnect and reconnect power supply as appropriate to avoid secondary hazards of electricity fire following a major disaster.
c) Attend to snapping wire and remove broken or snapped wires immediately especially in times of disaster to minimize secondary hazards.
d) Repair and replace hanging and damaged power lines that may cause other hazards.
e) Maintain power supply lines and address of public complaints promptly in case of power failure.
f) Provide safety measures and instructions on safe and friendly ways of using electric power.

4.1.13 Department of Education

Education lies at the centre of the human and societal development. Both formal and non-formal education and particularly basic education and training especially for girls, are

vehicles for empowerment and essential to addressing root causes of poverty, inequality and exclusion. A powerful correlation exists between education and the attainment of goals aimed at building the resilience of communities. Education has been a priority of the Govt. of the state of Azad Jammu & Kashmir as about 30% of its total recurring budget, besides, 7% of the total development budget is allocated to this sector. As a result of this substantial investment, AJ&K's literacy rate is 77%* which is significantly higher than the national average of Pakistan.

The Department will conduct training programme for teachers and children on disaster management. The Department will coordinate with the local authority and arrange for mock drills, search and rescue drills. The community of students and teachers can be effectively utilised for dissemination of disaster management awareness and education to the general public.

The following are the main functions of the department in relation to disaster risk reduction and management:

Mitigation

a) Identify one Liaison Officer in the Department as Disaster Management Focal Point
b) In consultation with relevant stakeholders and Ministry of Education, include disaster related subjects in the curricula in schools, colleges and technical education institutions
c) Arrange for training of teachers and students about the steps to be taken at different stages of disaster and organise them, through coordination with SDMA/DDMAs, as volunteers and inspire them for rescue, evacuation and relief works.
d) Ensure that construction of all educational institutions in earthquake zones is earthquake resistant
e) Implement school, college and university level activities to enhance the awareness of students and to promote preparedness in educational institutions through conducting drills, reducing vulnerability etc.;
f) Identify and document vulnerable educational institutions and infrastructure of the department in hazard-prone areas;
g) Implement actions to reduce the vulnerability of infrastructure in education sector in hazard-prone areas, e.g. retrofitting, renovation, rebuilding etc.;
h) Locate new schools, colleges, universities and other educational buildings located in hazard-prone areas to higher standards of hazard resilience;
i) Identify and inventory vulnerable educational institutions and infrastructure of the department in hazard-prone areas.

Preparedness

a) Develop a disaster risk management plan for the Department covering aspects of risk reduction, preparedness and response and curriculum development on disaster risk education in schools and learning institutions;
b) Conduct drills for various disaster situations like earthquake, fire, terrorist attacks etc.

c) Encourage local educational authorities and teachers to prepare school disaster response plans and their implementation;
d) Allocate funds for safer construction and disaster preparedness activities at school, college, and university levels in hazard-prone areas;
e) Conduct orientation programs to raise awareness of education authorities, professors and teachers about disaster risks in hazard-prone areas;

Response

a) In the event of a disaster, place required number of education institutions and their buildings, under the control of the SDMA/DDMAs for using as emergency shelter and relief centre if necessary.
b) Students and staff can provide local voluntary assistance for distribution of relief material and assistance to special needy people in the locality.
c) Provide provisional assistance on education in periods of disaster to ensure the continuity of learning
d) Determine the extent of loss in educational institutions and prepare plans for their rehabilitation.

4.1.14 Department of Civil Defence

The Civil Defence will develop its capacity for disaster preparedness and response in the emergency in close coordination with the SDMA and DDMAs. Some of the key functions are:

Preparedness

a) Standardize and specify Civil Defence equipment and fire appliances for Fire Brigades, industries and other institutions;
b) Provide First Aid, fire safety and rescue training to communities, individuals and organizations;
c) Improve community awareness on public safety;
d) Recruit/induct operational staff for search and rescue;
e) Enhance capacity of the existing search and rescue teams;
f) Organize volunteers, train them in rescue and relief and first aid
g) Ensure the provision of trained rescue workers / Razakars and First Aid staff;
h) Educate and train volunteers on first aid and emergency evacuations and protection procedures against poisonous gases, chemical/biological/radiological explosions or attack;
i) Participate in emergency drills with other stakeholders;
j) Specify, coordinate and enforce Fire Protection measures in urban and commercial concerns and in other premises considered critical.
k) Organize Warden Service in classified towns and train its volunteers for civil defence services.
l) Inspect Municipal Fire Brigade and fire protection measures in industrial/commercial.

Response

a) Search and rescue activities
b) First aid and psycho social support to injured and traumatized
c) Evacuation of damaged buildings/structures and demolition
d) Emergency first aid and transport;
e) Assist in debris clearance and restoration of essential services;
f) Identification and diffusion of unexploded bombs;
g) Provide emergency rescue equipment.
h) Work with the Fire Brigade in rescue and first aid operations
i) Liaise with the armed forces on matters relating to Civil Defence
j) Provide assistance, render advice and impart training in bomb detection and disposal
k) Assist in relief and camp management
l) Security and management of relief stores, warehouses and distribution
m) Training of other organizations like police etc. in rescue, relief, first aid, psycho social support

4.1.15 AJK Emergency Service Rescue 1122

AJK Emergency Services known as Rescue 1122 is established in AJK with the aim to maintain a state of preparedness to deal with emergencies and provide timely response, rescue and emergency medical treatment to the victims. At moment the rescue 1122 emergency service is established as a development scheme of Civil Defense department and operative in Muzaffarabad, Jhelum Valley, Rawalakot, Plandri, Kotli, Bhimber and Mirpur while work for expansion to other major cities such as Bagh, Neelum, Kahuta etc. is underway under the Planning and Development Department,

AJK Emergency Services Rescue 1122 Ordinance 2014 has already been passed for the establishment of a comprehensive Emergency Service in State.

The ordinance outlines following functions for the Emergency Services:

a) To maintain a state of preparedness to deal with emergencies.
b) To provide timely response, rescue and emergency medical treatment to the victims of any emergency.
c) To establish a system for rapid communication, exchange of information and quick response to combat or deal with an emergency.
d) To arrange for a universal toll free emergency dial-in number to be used throughout State.
e) To play a lead role and coordinate the working of other organizations or agencies which have lawful authority to respond to an emergency.
f) To arrange transport where necessary for carrying persons require emergency medical treatment from the emergency area to the nearest hospital or health care unit having arrangements for emergency medical care and treatment.
g) To establish community emergency response teams through enlistment, training, coordination and supervision of volunteers to assist the Service in safety promotion and management of emergencies.

h) To impart training and grant certificates to rescuers, volunteers and other private persons for due performance of emergency management duties.
i) To establish direct contact with local and international organizations and training institutions to maintain the Service according to international standards.
j) To collect, compile, maintain and analyze emergency response data and statistics relating to emergencies and to use it for research and prevention of such emergencies.
k) To suggest measures for the prevention or mitigation of hazards endangering public safety on roads, public parks and other public places with regard to public safety provisions
l) To encourage, facilitate and train staff of non-governmental organizations and educational institutions for emergency management.
m) To register and ensure minimum standards and code of conduct to be followed by rescue vehicles, ambulances and patient transportation services.
n) To perform such other functions as may be assigned to it by the Emergency Service to achieve the purpose of AJK Emergency Service Ordinance 2014.

4.1.16 Home Department/ Police

This is one of the main departments to provide support to the disaster management organizations in dealing with disaster situation. Police Department is one of the important Departments of the Government of AJK, which is responsible for maintenance of law & order and protection of life and property of the citizens. The role of Police is very crucial in terms of public safety and security in daily life and in times of emergencies and disaster situation.

Following are the overall Roles and Responsibilities of the Police Department:

Mitigation

a) The Inspector General Police shall be the Focal Point for the Department.
b) Identify the 'High Risk' and 'Risk' areas for different disasters and instruct the existing police installations located in those areas for keeping themselves in readiness for undertaking emergency rescue, evacuation relief operations.
c) Coordinate the wireless frequency of Police with the wireless network of other departments.
d) Establish the Disaster Control Room at District level.
e) Maintain communications with the police installations in the areas likely to be affected by disaster.
f) Instruct all concerned to accord priority to disaster related wireless messages if required by appropriate officials.
g) To effectively monitor law and order and any crisis situation in the State and ensure efficient, coordinated and timely response at appropriate levels
h) Ensure law and order during any disaster situation in the affected areas.
i) Aid and cooperate with other agencies for the prevention of destruction of public property by violence, fire or natural calamities.

j) To ensure smooth and speedy flow of information by collecting, analyzing, processing and disseminating information to all concerned.
k) Every year before the advent of monsoon season prepare operations plan in consultation with SDMA/DDMAs.
l) Repair and replace damaged / defective equipment to ensure complete preparedness.

Preparedness

a) Impart training to the members of Police Force in first aid, evacuation, rescue and relief operations.
b) Train volunteers from among citizens, voluntary organizations
c) Arrange drills for fire extinguishing, rescue, evacuation and transportation of injured persons and prepare coordinated Action Plans in cooperation with concerned local agencies
d) Ensure security measures at evacuation points, in evacuated areas, at relief centres and godowns.
e) Protect resources and equipment required and being used at the scene of incidence /rescue.
f) Ensure easy access for emergency rescue vehicles to disaster sites.
g) Arrange sufficient space for the deployment of emergency vehicles by managing traffic signals.

Response

a) On receipt of directives from the SDMA/DDMA for evacuation - organize personnel and equipment for evacuation and undertake evacuation operations
b) Provide necessary help in evacuation of causalities from the affected area and arrange traffic cover.
c) Carry out search & rescue operations.
d) Set up emergency evacuation shelters, and transport affected people to the shelters
e) Carry out firefighting operations
f) Provide reflective lights / reflectors around the scene of incident at night, to facilitate the working of rescue workers, fire fighters and to indicate the troubled area.
g) Provide assistance to victims of road accidents
h) Prevent harassment of women and children during any emergency.
i) Maintain law and order, especially during relief distribution.
j) Protect life, property and liberty of citizens.
k) Preserve and promote public peace.
l) Prevent public nuisance.
m) Keep close watch for any criminal and anti-state activity in the area.
n) Arrange security of government property and installations damaged in a disaster.
o) Participate in damage and need assessment.
p) Coordinate with other offices for traffic management in and around damaged areas.
q) Assist the local administration in putting a stop to theft and misuse in relief operation.

4.1.17 Department of Information

The most critical role of Department of Information is broadcasting / disseminating warnings to communities before a disaster occurs. It also has to play a major role in education and awareness programmes for better organized preparedness and response at government and community levels.

Other functions in relation to disaster risk management may include:

Mitigation & Preparedness

a) Identify one Liaison Officer in the Department as Disaster Information Focal Point
b) Popularize the techniques of preparedness and survival during pre-disaster, disaster and post disaster period through television, radio and other publicity media.
c) Ensure strict performance of the allotted duties by radio, television, news media and publications related departments.
d) Take proper and adequate security steps for the protection of own installations and properties.
e) Prepare guidelines / policy for necessary action by mass media on reporting disasters.
f) Arrange quick collection of weather bulletins to reflect the possibility of floods.
g) Launch information programme for quick dissemination disaster warnings to appropriate agencies and community groups.
h) Provide information to communities about precautionary measures they can take to avoid loss of life and property from hazards.
i) Inform the public with timely and factual information about the extent of disaster, losses caused and the current situation of hazard.
j) Advice public about measures to be adopted during the emergency period in order to avoid further losses; e.g. evacuation, unsafe areas, water purification techniques.
k) Inform about actions being taken by authorities/aid groups to save lives and property.
l) Relay messages concerning welfare of isolated or trapped groups for the benefit of families, relatives, friends and rescue teams

Response

a) Disseminate warning messages to at-risk communities in an easy to understand language through multiple channels, while being sensitive to people's access and timing issues.
b) Facilitate communication among affected people and their relatives, friends, families in other parts of the country or world.
c) Highlight needs of survivors to make sure that all groups of people affected by the disaster receive appropriate aid, irrespective of their social, ethnic, political status.
d) Highlight the need for application of minimum standards to ensure that minimum needs of disaster survivors in terms of water, sanitation, shelter, food and health are met.
e) Communicate about potential secondary risks to minimize further loss or damage
f) Communicate about rehabilitation and reconstruction plans of authorities, UN and NGOs, others in the affected areas.

g) Encourage survivors' participation in recovery through conducting surveys and communicating the opinions of public to authorities.
h) Ensure that the news to be broadcasted reflects the true and clear presentation of the actual position and does not create panic in the minds of the people and also advises them to desist from taking unreasonable steps.
i) Take steps for publicity of news and directives relating to the situation issued by the SDMA/DDMAs.
j) Curtail normal programmes to broadcast essential information on disaster if requested by the SDMA.
k) Arrange visit to the affected area by the local and national journalists in the interest of publication of accurate and true report in the news.
l) Arrange dissemination of information of the short and long term measures of different ministries, Departments/Agencies for relief and rehabilitation of the affected people.
m) Influence for integrating risk reduction in rehabilitation and reconstruction programmes

4.1.18 Social Welfare& Women Development Department

The department has an important role in disaster management as women are more vulnerable to disasters due to their socio-cultural status. The department will take special steps to reduce vulnerability of women in disaster prone areas. The main mission of the department is to eliminate gender discrimination against women, help women achieve equal status to that of men in all walks of life. The department will also arrange for protection of manpower and organize special camps for the disabled, widows, children and other vulnerable groups. It will also provide necessary help and assistance for socio-economic rehabilitation.

The functions in relation to disaster risk management include:

Mitigation & Preparedness;

a) Designate one liaison officer as focal point and inform all concerned.
b) Sensitization of disaster managers related to gender issues in disaster management.
c) Prepare special projects for socio economic uplifting of women towards disaster risk reduction.
d) Make institutional arrangements for involvement of women in disaster risk management
e) Organize health camps for regular medical checkups of women and aid to the needy.
f) Assist in provision of drinking water facilities near settlements.
g) Organize training programs for women to cope with disaster situations.

Response

a) Involve the Health Ministry in catering to special health needs of women.

b) Ensure that needs of women survivors are addressed in post disaster situations during the relief rehabilitation and reconstruction phases
c) Establish relief camps for women and ensure fulfillment of basic needs of women in general relief camps.
d) To take steps for safety of women and girls in disaster affected areas.
e) Prepare special programmes for the rehabilitation of women.
f) Ensure separate sanitation facilities for women in relief camps.
g) Introduce special vocational training programs for women.
h) Facilitate participation of women in the management of relief, rehabilitation and reconstruction activities.
i) Support post-disaster rehabilitation of livelihoods of women survivors, which is mostly in the informal sector and is ignored many times.

4.1.19 AKMIDC

In AJ&K mineral exploration activities started in 1973 by AKMIDC, a state owned corporation and emphasis was laid on assessment of potential economic deposits and an analysis of value of the different minerals discovered in the area so far amount to 137.915 million tons.

In addition to preparation and implementation of AKMIDC own contingency plans, the Department will perform the following functions:

Mitigation & Preparedness

a) One Liaison Officer in the Department is to be designated as the Disaster Management Focal Point.
b) Issue detailed instructions to the employees about their duties and responsibilities in precautionary, disaster and post-disaster stages of normal disaster.
c) Arrange regular training for mining employees in the disaster prone areas on disaster issues.
d) Coordinate with SDMA and jointly identify appropriate actions for reducing vulnerability to accidents in mines and industries.
e) Perform periodical inspection of every mine by making periodic inspections to verify the safety provision of Mines.
f) Make inquiries in case of fatal accidents and to take punitive action against the defaulters as provided under the law.
g) Conduct mine safety training to the supervisory staff of mines by arranging refresher courses.

Response

a) Evacuation of the mineworkers from the mines on the receipt of early warning.
b) To keep in contact with the Disaster Management Authorities.
c) Provide equipment for search and rescue.
d) Provide search and rescue personnel on the request of the SDMA/DDMA
e) After assessment of the loss/damage due to disaster, plan for rehabilitation of mines.

4.1.20 Industries Department

The mission of the Industries Department is to promote and facilitate Industry. The department of Industries has established 6 Industrial Estates in various districts of Azad Kashmir with basic infrastructure like roads, water supply, and sewerage system and telephone and electricity facilities. The number of medium & large scale Industries which have already been established in different districts of Azad Kashmir is 1970.

Functions related to disaster risk management include:

Mitigation & Preparedness

a) Designate one Liaison Officer in the Department as the Disaster Management Focal Point.
b) Ensure all possible steps for the security of manpower, implements, stock, installations / factories etc.
c) Ensure that all industrial zones / areas must have in-built safety / fire control units in the overall frame-work of the construction plan to cater for not just fire but also chemical leakages
d) Prepare listing and locations of industries and establishments for possible sourcing of relief material during disasters.
e) Ensure training on preparedness programmes to be adopted at different levels for all manpower employed in factories and establishments in disaster vulnerable areas.
f) Promote the preparation of emergency preparedness plans by all industrial units.
g) Proper waste management system should also be included in industrial zones for both solid and liquid wastes.
h) Establish systems to monitor implementation of DRR guidelines by industrial sector.
i) Develop system of incentives and disincentives for industry to promote application of disaster safety.
j) Implement awareness raising programmes for industrial sector including Chambers of Commerce and Industry (CCI) on integrating disaster risk management in project planning and implementation stages.
k) Monitor and encourage implementation of safety codes in industry.
l) Develop disaster risk management plan with regards to the mandate of the Department.
m) Develop guidelines for industrial sector to ensure safety of industry and its production processes in hazard-prone areas

Response

Request industries to provide emergency relief material such as food products, temporary shelter, medicines and medical equipment and search & rescue equipment.

Take steps to plan for rehabilitation of industries adversely affected by disasters.

4.1.21 Special Communications Organization (SCO)

SCO raised since 1976, is providing state-of-the-art, modern IT and Telecom facilities in the most difficult region of Azad Jammu & Kashmir. Current services include landline Telephone (PSTN), Mobile (GSM), Wireless Local Loop (WLL), Internet Broadband (DSL) and Digital Cross Connect (DXX). Vision of the SCO is stipulation of reliable, effective, innovative and up-to-date voice and data communication services to the people living in the most rugged / arduous terrain. The SCO can play an important role in providing communication links during disasters.

The functions of SCO in relation to disaster risk management include;

Mitigation & Preparedness

a) Designate one Liaison Officer in the Department as the Disaster Management Focal Point.
b) Introduce mobile phone network in all the districts of AJK including remote areas.
c) Take steps to ensure power back up for communication systems during possible emergency situations.
d) Take proper and adequate security steps for the protection of own installations and properties.
e) Provide support to the Disaster Management Committee and ensure unsuspended links with SDMA.
f) Deliver early warning information to the agencies and communities requiring them.

Response

a) Ensure to operate communication systems round the clock (24 hours).
b) On request, provide additional communication lines for emergency communication.
c) On request, establish communication links in the affected areas.
d) Provide measures for satellite and other wireless communication from the area affected by disaster and are out of cellular coverage.
e) Provide mobile communication facilities to the Rapid Assessment and Quick Response Teams in the remote areas.
f) Assess damage to telecommunication infrastructure and immediately take steps to restore it.
g) Take steps to fully restore and rehabilitate any damaged communication infrastructure. (SoPs for such damage assessments and restoration of communication networks are already in place by SCO)

4.1.22 Pakistan Army

The Pak Army has an important role of providing search and rescue assistance, security, logistics, and if necessary, assistance in distribution of relief items and provision of equipment for emergency response. Army can provide trained personnel with specialized skills such as

in road and debris clearance machinery, communication technology for placement in isolated areas, and can provide specialized transportation systems.

In relation to disaster risk management Pak Army can assist the SDMA and DDMA by carrying out following functions;

a) Designate one Liaison Officer of the Army Commander as the Disaster Preparedness Focal Point.
b) Prepare operational Plan for providing the assistance during disaster.
c) Establish the Disaster Control Room.
d) Issue cautionary instructions to all concerned.
e) Organize task forces for working of disaster control units. Each unit should be composed of, engineers, doctors with medicines and nursing assistants.
f) Earmark a reserve task force, if needed.
g) Move task forces to the convenient positions, if needed.
h) Distribute emergency relief material to the affected people.
i) Send task forces to disaster affected areas.
j) Conduct survey in affected areas and assess requirements of relief and rehabilitation.
k) Assist local administration in removing the dead bodies and debris in affected areas.
l) Set up field hospital if required.
m) Participate in reconstruction and rehabilitation operation if requested.

4.2 Other Stakeholders

4.2.1 Pakistan Red Crescent Society

The Pakistan Red Crescent Society AJK plays a vital role in elevating the suffering of affected people across the State. The society works as an auxiliary to the government to ameliorate the suffering of the most vulnerable people in distress without discrimination. The Society assists the public authorities e.g. SDMA/DDMAs in crises, emergencies and disasters but do not replace their responsibilities. The main activities of the Society are relief work during and after conflict, disaster relief and auxiliary health and welfare services, which include a wide range of activities for the less privileged and marginalized people in both urban and rural areas. The Society provides ambulance and search and rescue service at times of emergencies. The role of PRCS in rapid need assessment is very instrumental in devising the response strategy for any sort of eventuality. It has an effective and continuous programme of capacity building of volunteers, CBOs, and district government officials. The capacity that enables PRCS to support SDMA is attached in the annex.

4.2.2 Non-Governmental Organizations

a) These will work in close coordination with the government departments in relation to disaster risk management as per the core functions, mandate and resources at their disposal.

b) Mobilize communities and develop local level capacities for early warning, disaster preparedness and response.
c) Implement programmes for community vulnerability reduction; e.g. strengthening livelihoods, safer construction practices, drought mitigation.
d) Participate in disaster risk management activities such as training, public education, damage assessment, rehabilitation and construction projects in hazard prone areas.
e) Formulate disaster risk management plans in order to share resources and information.
f) Link with SDMA to ensure that strategic policy and operational implementation incorporates their participation.

Chapter 5

State Policies and Strategies for Disaster Management

Chapter–5: State Policies and Strategies for Disaster Management

This section presents comprehensive state policies and strategies for disaster management. The state policies and strategies are long term orientations to establish efficient and effective disaster management systems in AJK. The actions/programmes are measures to be taken over the next five years.

5.1 Key; Issues in Disaster Management in Azad Jammu & Kashmir

Azad Jammu & Kashmir (AJK) has a very diverse and ironic hazard and risk profile with almost all natural and human-induced hazards embodied; that threaten to affect the lives and livelihood of its citizens. The natural disasters include, earthquake, flood, landslides, drought, avalanches, lightning while forest fires, road accidents, cross border firing, old and vulnerable buildings are major human induced hazards. Disasters historic profile of AJK is full of miseries among those EQ, Flash floods, torrential rains and landslides are recurring phenomenon. Vulnerability of the mountain people is a function of geographic location, livelihood and social arrangement which is partly driven by processes of uncertainty of climate and lack of access to services such as information, knowledge and technology. The devastations and human losses in 2005 Earthquake followed by the floods of 2010, 11, 13, 14, 15 and torrential rains in 2016 have revealed the vulnerability of AJK society and exposure to disasters. Damages and losses were massive but could have been largely reduced if disaster risk management (DRM) approaches had been enacted by the Government institutions and disaster risk reduction (DRR) measures had been incorporated into physical, social and economic development. But the capacity of the organizations like SDMA, DDMAs and Rescue 1122 in the State is quite meager to cope with the emergent challenges of repeated disasters in the region.

Key issues in disaster management can be categorized into following six areas.

5.1.1 Strengthening disaster management administration at State and district level

The Disaster Management Act, 2008 lays down institutional and coordination mechanisms for effective disaster management (DM) at the State, and district levels. As mandated by this Act, the Government of AJ&K created a multi-tiered institutional system consisting of the State Disaster Management Authority (SDMA) headed by the Secretary/ Director General and the District Disaster Management Authorities (DDMAs) by the Deputy Commissioners of the respective districts. These bodies have been set up to facilitate the paradigm shift from the hither to relief-centric approach to a more proactive, holistic and integrated approach of strengthening disaster preparedness, mitigation and emergency response. But the capacity of SDMA and disaster response institutions in AJK to deal with all the spectrum of disaster management cycle is quite weak as these institutions are still at the nascent stage

5.1.2 Enhance disaster management system in the stages of pre-, during and post disaster periods.

Emergency response has remained a predominant activity of disaster management in AJK. The Pakistan Army plays a significant role in disaster management, especially emergency response and early recovery phases. For mitigation and preparedness in the pre-disaster stage, the disaster risk management concept should be placed at the project formulation period. During the post –disaster stage, there are no clear institutional systems or funding sources in disaster rehabilitation and reconstruction. Therefore, the district and state government need to prepare disaster management plans covering actions and measures to be taken in all stages of pre, during and post disaster situations.

5.1.3 Establish mechanisms for monitoring and assessment of disaster risks

There is a lack of knowledge and information about hazard identification, risk assessment and management, and linkages between livelihoods and disaster preparedness. Risk and vulnerability assessments of hazards are prepared by different agencies like FFC, PMD, NDMA, SDMA and DDMAs, but they are not effectively integrated. Risk assessment and monitoring of hazards is essential for disaster risk management. A multi-hazard approach to disaster risk reduction should be placed into risk assessment and a multi-hazard early warning system to save lives, property and livelihoods should be established.

5.1.4 Promote mechanism for disaster risk reduction measures into development

Disaster risk management, development planning and environmental management interventions operate in isolation and integrated planning between these sectors is almost non -existent. The State development plan should include a disaster risk reduction approach as a part of the State's sustainable development policies. There are no long term, inclusive and coherent planning systems to address disaster issues with a long term state vision. Still there is a lack of central authority for integrating disaster management into development planning.

5.1.5 Promote disaster risk management at local and community levels

There is a lack of knowledge and skills of officials in relevant agencies and civil society in disaster management. State level disaster preparedness and mitigation measures are oriented towards structural measures and undermine non-structural measures such as training, education and awareness of disaster risk management. Disaster related departments and organizations remain under resourced, untrained and not given required training and education. The community is the heart of disaster management. Enhancing knowledge and capacities of people regarding their livelihood protection from disasters are important in disaster management.

5.1.6 Strengthen capacity of players in disaster management

Training is an integral component of capacity building and it needs to be designed for specific needs and equipped with a practical approach. Strengthening of human resources is essential to disaster management. Participants in disaster management included government organizations at state, district, tehsils and Union Councils levels, NGOs, CBOs, international donor agencies, private sector enterprises, religious organizations, civil defense, police and the community. Since each of these have specific work areas, strengths and weaknesses. It is important for them to complement each other's efforts for achieving an efficient overall disaster management system. For the purpose of capacity building in disaster management, the state institute of disaster management (SIDM) shall play a key role. Comprehensive disaster management courses and practical training shall be prepared by SIDM and it needs to develop symbiotic linkages with other research institutions and universities to enhance knowledge of disaster management.

5.2 Disaster Management Policies and Strategies

The following disaster management policies are identified to establish a more efficient disaster management system in AJK. These policies are guidelines and covering all actions raised by National Disaster Management Plan of NDMA and also in line with Hyogo Framework for Actions.

These priority areas provide broad descriptions of key strategies to achieve the overall goal of reducing disaster risk and vulnerability. The State Disaster Risk Management Plan refers to the National Plan and has adopted a set of these component objectives to enhance its own capacities in AJ&K. These have been further detailed into concrete activities and work plans to build disaster risk management capacities. Each strategic intervention has been explained in terms of its fit within the local environment and in turn provides basis for the Disaster Risk Management – work plan (2016 – 2026).

5.2.1 INTERVENTION 1: Strengthening the State level institutional and legal system for disaster management

Review

One of the priority areas in disaster risk management is the institutional and legal arrangements, which are intended to establish the administrative base for disaster management. The devastating earthquake of October 2005 brought about an acute awareness among AJ&K government institutions and communities of the critical need for disaster risk management. Also an optimistic outcome of the tragedy was the increased sensitization about the administrative base for disaster management with institutional and legal arrangements. The promulgation of the State Disaster Management Ordinance 2007 was the turning point of the state disaster management administration in AJ&K. The ordinance became a State Disaster Management Act in 2008. The Act regulates disaster management organization at State and districts levels and defines the roles and responsibilities of each level of government. The State Disaster Management Authority of AJ&K was established as the

executive arm of the State Disaster Management Commission. SDMA is responsible to covers the broad spectrum of DRM activities in AJ&K. It achieved the status of Relief, Disaster Management and Civil Defence Secretariat in 2011, headed by the Secretary. The institutional structure of SDMA limited only to directorate of operation and administration that too with the very limited human resource of 09 in numbers, similarly with lower operational capacity of having only 03 vehicles for general operations and 05 logistic trucks donated by UNWFP. The financial expenses/budget of SDMA based on Government grants which hardly occupy even the staff salaries. The directorate of DRM and Climate Change strategic planning unit couldn't be established yet to work on DRM and Climate Change strategic planning. Similarly, the DDMA structure were notified and established at each district level The DDMAs are the linchpin of the whole system and expected to play the pivotal role of the first line of defense in the event of a disaster, but no dedicated human resources have been allocated yet. Although the State Disaster Management Act 2008 envisages the establishment of DDMAs at district level and State Disaster Management Steering Committee and State Disaster Management Fund at State level, but it was not followed in its true spirit owing the similar nature of constraints. Similarly, the weak coordination among the Disaster Management Authorities and other State departments resulted the duplication of efforts.

Key Issues & Requirements

There is a need to establish a comprehensive institutional structure at all levels and each level body should know its roles and responsibilities as well as specific tasks for all stages of pre-disaster, during disaster and post- disaster. Furthermore, the roles and efforts to be taken by civil society, the community and individuals should be clearly established to reduce disaster risk. The government should promote and support their activities.

Requirement

Keeping in view the future trends of disasters verses the low coping capacities of State and District authorities, the institutional capacity of the disaster management authorities especially the SDMA's capacities need to be strengthened on priority basis. Similarly, a dedicated DRM and Climate Change strategic planning unit need to be established, responsible for coordinating the DRM related interventions, capacity building of the government stakeholders and implementation of the projects and programmes as well as climate change adaptation and mitigation.

Relevant government organizations in disaster management should prepare for disaster risk reduction, emergency response and rehabilitation and reconstruction plans. Such plans should take into account the existing capacity of human resources and propose measures to enhance the capacity of the organizations. SDMA shall provide technical guidelines and coordination among disaster management organizations by holding meeting and workshops periodically.

After formulation of plans for each organization, drills and training should be carried out based on the plans. The results of the drills and trainings shall be reflected to improvement of the disaster management plans in order to ensure efficient and effective operation of the plans. At the same time, the capacity of the organizations and personnel should be improved.

Developing partnership among the relevant departments and State/district disaster management authorities through regular meetings and information sharing is of vital needs, therefore, constitute a multi-sectorial Steering Committee of Disaster Management need to be in place. For this purpose, the political will should be renewing alongside donors support for disaster risk reduction. The detail plan of action is followed below with the broader objective; to develop strategies against the gaps in the current DRM system and operationalize the institutional mechanism for effective disaster management at AJ&K.

Strategies

Strategy -1: Strengthen the disaster management Authority by establishing a well-equipped DRR and Climate Change strategic planning unit at SDMA.

(Provide a platform for climate change research studies to facilitate, coordinate and cooperate in climate change relevant research studies, projects, programmes and advocacy events undertaken by Government and Non-Government Organizations and Academic Institutions.)

Strategy -2: Formulate disaster risk management plans and strengthen the institutional capacity of DRM focal point in each department declared as institutional members of SDMA as per DRM Act 2008.

Strategy -3: Strengthening the coordination forum for periodic stakeholder's meetings.

Strategy -4: Implement drills and trainings of disaster management activities in the organizations to improve their capacities.

Strategy -5: Establishment of State Disaster Management Fund (SDMF) as envisaged in the AJ&K Disaster Management Act, 2008. (b) Establish District Emergency Fund (DEF) at each DDMA/DCO office.

Strategy -6: Constitute State Disaster Management Steering Committee (SDMSC) under section 03 (VII) of the AJ&K Disaster Management Act, 2008.

Actions to be implemented in 2016 – 2020

The above strategies shall be implemented through the various actions shown in the below table.

Strategies	Activities	Responsible Organization
1. Establish a well-equipped DRR and Climate Change strategic planning unit at SDMA.	1.1 Designate full time Director and allied staff for DRM and CC strategic planning unit.	Govt of AJK/SDMA
	1.2. Designate full time Director, Deputy Director, Assistant Director and allied staff for DRM and CC strategic planning unit.	Govt of AJK/SDMA
	1.3. Procurement of the office equipment/fixtures, operational vehicles for field use.	SDMA
2. Formulate disaster risk management plans and strengthen the institutional capacity of DRM focal point in each department declared as institutional members of SDMA as per DRM Act2008	2.1 SDMA shall prepare the guidelines for plans for the disaster management organizations	SDMA
	2.2. Revised and updating of State DRM plan. 2.3. Prepare community based DMPs at tehsils level 2.4. Prepare hazard specific contingency plans 2.5. Develop sector disaster management operational plans in state ministries, departments and authorities. 2.6. specific roles and responsibilities of each level disaster management organization are recognized 2.7.All plans, roles and responsibilities of disaster management organizations must be approved by SDMC	SDMA,DDMA,SDMC,TDMC
	2.8. Issue of gazette notification to establish DRM focal points in each ministry/department.	SDMA, SDMC
3.Strengthening the coordination forum for periodic stakeholder's meetings	3.1.Establish and strengthen an effective coordination mechanism among different stakeholders and establish DRM forum with arrangements of	SDMA,DDMA and relevant departments

	periodic coordination meetings to monitor the situation.	
4.Implement drills and training of disaster management activities in the organizations to improve their capacities	4.1. Establishment of SIDM	SDMA,SDMC
	Organize capacity building trainings on DRM for DDMAs of ten districts	
	4.2. Implement drills and training and feed back to disaster operation and contingency plans	SDMA,DDMA
	4.3. Each disaster management organization implements drills and training based on its disaster operation and contingency plans.	SDMA,DDMA
5. Establishment of State Disaster Management Fund (SDMF) as envisaged in the AJ&K Disaster Management Act, 2008. (b) Establish District Emergency Fund (DEF) at each DDMA/DCO office.	5.1. Develop rules/regulations for the establishment of State Disaster Management Fund (SDMF) and District Emergency Fund (DEF).	SDMA, Finance Deptt and P&DD
	5.2. Prepare legal procedures for the utilization of the State and District funds.	SDMA, Finance Deptt and P&DD
	5.3. Develop linkages with National, State authorities, overseas AJ&K community, and public/private sector to mobilize funds/resources for SDMF and DEF.	SDMA Finance Deptt
	5.4. Advocate the share for such funds in the annual development plans.	SDMA, and P&DD
	5.5. Motivate and build confidence of donor agencies to put their share in the State and District fund	SDMA, Finance Deptt and P&DD
	5.6. Develop a mechanism for the allocation of funding to each DDMA from the SDMF.	SDMA, Finance Deptt and P&DD

	5.7. Upon issuance of funds, following shall become part of the fund/be financed from the Prime Minister disaster relief fund, federal and State loans, donations from national and international agencies.	SDMA, Finance Deptt and P&DD
6. Constitute State Disaster Management Steering Committee (SDMSC) under section 03 (VII) of the AJ&K Disaster Management Act, 2008.	6.1. By following the AJ&K Disaster Management Act 2008, exercise all the terms and conditions mentioned for the establishment of the SDMSC with necessary amendments.	SDMA, line departments and head of DDMAs
	6.2. The SDMA operational unit, administrative unit & the proposed DRR and climate change strategic planning unit would be the lead of the SDMSC.	SDMA, line departments and head of DDMAs

5.2.2 INTERVENTION 2: Conduct Multi-Hazard, Vulnerability and Risk Assessment (MHVRA)

Review

Although lot of work on disaster risk management have been carried out by various agencies after 2005 earth quake in AJK but the information on hazard risk, specific to vulnerable areas and at various levels (districts, tehsils, UCs and village) is still limited. Also information to support planning, identifying priorities and making decisions for risk reduction is not centrally available. Due to lack of such information, areas vulnerable to disasters are not clearly identified, which causes difficulty to establish disaster management policies and decision making of resource allocation for disaster risk reduction.

In the context of geographical, geomorphological and geological setting of AJ&K, there is dire need for detail MHVRA at urban and rural scale, with focus on seismic, landslide, river morphology and flooding. The micro zonation studies are of pivotal importance as micro level detail risk assessment can provide a bench mark for the formulation of disaster risk management planning and support in devising DRR strategies against the natural disasters before its occurrence. In the backdrop of 2005 earthquake, under the framework of continuous assistance for reconstruction and rehabilitation, a seismic micro zonation mapping has been developed for Muzaffarabad and Bagh cities 1 . Similarly, the State government with the technical support of NESPAK has prepared multi-hazard GIS based maps of district Muzaffarabad. But these practices were not replicated in other districts neither

updated; similarly, lacking is pre-dominantly exist to conduct a comprehensive MHVRA at State, district, cities and rural level that covers hazard and risk atlases, conduct vulnerabilities and capacities assessment and the development of hazard specific risk mapping, modeling and zonation both at macro and micro levels.

Key Issues & Requirement

Hazard, Vulnerability and Capacity Assessment (HVCA) needs to be undertaken at all 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

The SDMA needs to carry out hazard and risk assessment at State level resulting in preparation of a digitize atlases at macro level for whole of the AJ&K as per NDMA's guidelines. It will further help in conducting micro level multi-hazard, vulnerability and risk assessment and profiling of the districts (both urban and rural) in phases. The State of AJ&K is exposed to geological as well as hydro-meteorological hazards, therefore, hazard specific risk mapping, modeling and zonation of the prioritize cities with respect to earthquake, land sliding, flooding and climate change will be prerequisite to use it for planning and development.

Village, UCs, tehsils, districts and then a consolidated state level maps should include analysis on vulnerability of settlements, housing stock, important infrastructure and environmental resources. They will help in proper land use planning and 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.

Technical vulnerability assessments of critical buildings and land use planning should also be included in the MHVRA plan of action. This requirement aims to undertake technical assessment to map out hazards, vulnerabilities and underlying risk across AJ&K, and provide basis for preparedness and response planning.

Hazard Indication Maps using GIS technology would be prepared for all districts and also a consolidated map for AJ&K. These maps will serve as indispensable tools for mainstreaming DRR and would be helpful for sustainable development. A central database should be developed and located at the SEOC. The database will be made available to all stakeholders for access.

Strategies

Strategy-1: Conduct detailed multi-hazard vulnerability and risk analysis of all ten Districts

Strategy-2: Develop Hazard and Risk Atlas of Azad Jammu & Kashmir at macro level

Strategy-3: Conduct detailed multi- hazard vulnerability and risk analysis/assessments at local levels.

Strategy-3: conduct researches and studies on the impact of climate change on glaciers and ice cap.

Strategy-4: Prepare GIS based multi hazard indication maps for districts and state level

Actions to be implemented in 2016-2020

Strategies	Actions	Responsible Organizations
1. Conduct detailed multi-hazard vulnerability and risk analysis of all ten Districts	1.1. Conduct detail micro level Multi-Hazard, Vulnerability and Risk Assessment for all the districts.	Concerned DDMAs, SDMA, Land use planning department, Geology Department, AJ&K University
	1.2. Compile meta data and catalogue of natural disasters for all the districts.	Concerned DDMAs, SDMA, Land use planning department, Geology Department, AJ&K University
	1.3. Assess element at risk per hazard type.	Concerned DDMAs, SDMA, Land use planning department, Geology Department, AJ&K University
	1.4. Develop risk profiles with reference to the past disastrous event of all the districts.	Concerned DDMAs, SDMA, Land use planning department, Geology Department, AJ&K University
	1.5. Utilize Hazard and Risk Atlas of the AJ&K (Intervention 3.3.1) for the purpose of MHVRA studies at district level.	Concerned DDMAs, SDMA, Land use planning department, Geology Department, AJ&K University
	1.6. Train and build capacities of stakeholders at district level for the application of MHVRA studies.	Concerned DDMAs, SDMA, Land use planning department, Geology Department, AJ&K University
	1.7. Develop instruments to enable decision makers to take effective decisions for finalizing risk reduction policies, strategies, programmes and budgeting.	SDMA

	1.8. Support/regulate/coordinate sectoral assessment e.g., health, public works, education etc.	SDMA, Department
	1.9 Generate hazard specific maps, indicating the location of various hazards with zonation of risk levels, e.g., low, moderate and severe	SDMA
	1.10 Vulnerability atlas of AJ&K with set up of database at the state level, digitization of vulnerability atlas and preparation of database	SDMA, DDMAs, GSP,ERRA,NESPAK
2. Development of Hazard and Risk Atlas of Azad Jammu & Kashmir at macro level	2.1. Develop hazard and risk mapping with multi-hazard assessment approach.	SDMA, Land use planning department, Geology Department, AJ&K University
	2.2. Compile historical records and maps of the predominant hazards.	SDMA, Land use planning department, Geology Department, AJ&K University
	2.3 Ranking of the districts on the basis of multi hazard and risk severity	SDMA, Land use planning department, Geology Department, AJ&K University
	2.4 Consolidate the data related to element at risk from State and district levels	SDMA, Land use planning department, Geology Department, AJ&K University
	2.5 Develop, regular update and synchronize hazard and risk atlases with proper GIS and Remote Sensing based analysis	SDMA, Land use planning department, Geology Department, AJ&K University
3. Conduct detailed multi-hazard vulnerability and risk analysis/assessment at local levels.	3.1. Develop HVCA tools and assessment methodologies	SDMA,DDMAs
	3.2. Review existing data gathering methods and tools of various departments to conduct disaster risk analysis	
	3.3. Vulnerability analysis and creation of hazard maps with set-up of database for selected districts and cities	SDMA,DDMAs
	3.4. Digitization of vulnerability/hazard maps and the preparation of database	SDMA

4. Conduct researches and studies on impact of climate change	4.1. Policy on impact of climate change on glaciers	SDMA,SDMC, WAPDA,
	Establishment of GLOF EWS for selected vulnerable areas	SDMA,WAPDA
5. Preparation of GIS based Hazard Indication Maps	5.1 Produce GIS based Hazard Indication Maps of different hazards.	SDMA,GSP,NESPAK
	5.2 Organize trainings to read, understand the maps for proper planning and development in future according to the maps.	SDMA,GSP

5.2.3 INTERVENTION 3: Disaster risk management through training, education and awareness

Review

The purpose of DRM training, education and awareness activities is to enhance the capacity of experts in relevant organizations and the general public to be able to conduct disaster management activities in an effective and efficient manner. after the establishment of SDMA some DRM training courses have been offered to SDMA and DDMAs staff.

Training, education and awareness have come up as an important strategic priority especially in the aftermath of earthquake 2005. Although the State Disaster Management Act 2008 envisages setting up training institute for disaster management but it was not take up seriously till to date due to many unavoidable reasons. Furthermore, there is no such center for scientific research/academic institution of disaster management that conducts quality research, develop curriculum and maintain record of disaster events, impacts and activities. The main reason is the absence of human resource plan and common training modules for awareness and training programme at State level. This comprises the lack of trained human resource at all levels for planning and subsequent execution of DRR policies and programs at State level. It has been observed that the developmental sector put their efforts to aware, educate and sensitize general public but a lot of duplication have occurred with more concentration on few disasters effected districts and union councils while many effected districts and UCs are ignored or remained deprived. Similarly, the school safety and awareness raising campaign also put on the low priority in the capacity building programmes.

Key Issues & Requirements

Three types of efforts i.e., “self-help efforts”, “mutual-help efforts”, and “public-help efforts” are needed to reduce disaster risk. The self-help efforts are DRM measures to be done by individuals. The mutual-help efforts are measures to be conducted by groups of people or the community to support each other in disaster management. The public-help efforts are measures to be conducted by government agencies. The human resource development in disaster management has different needs depending on different target groups. In AJK, it is

essential to strengthen the capacity of emergency response. It is also necessary to build capacity for disaster mitigation and preparedness.

With regard to the capacity building and awareness programme, the most important need is to institutionalize disaster management education in the academia. With this approach, scientific research on disaster management and climate change adaptation need to be conducted and training modules would be standardized. It needs to have a DRM resource development center to keep records of disaster occurrence, impacts, and different activities, avoid duplication and increase access to DRM information and interventions. The capacity building initiatives for the policy makers, politicians, SDMA, DDMAs staff, line departments, media, civil society organization and general public through DRR/M awareness and sensitization workshops and seminars would be beneficial for the overall disaster management system at all level.

The following agenda aim to aware, train and educate disaster management authorities and communities for the development and management of disaster risk management activities.

Strategies

Strategy -1: Development of curriculum for short courses and diploma courses in disaster management under the geology department at university of AJ&K.

Strategy-2: Establish Disaster Management Resource Centre at SDMA

Strategy-3: Development of DRR/M curriculum and initiation of DRM as subject in academic institutions at various universities of AJ&K

Strategy-4: Development of DRR/M curriculum at school level under school safety programmes

Strategy-5: Launch DRR awareness campaign at various level

Actions to be implemented during 2016-2020

The above strategies shall be implemented through various actions as below.

Strategies	Actions	Responsible Organizations
1. Development of curriculum for short courses and diploma courses in disaster management under the geology department at university of AJ&K	1.1. Develop curriculum for short courses and diploma courses	University of AJ&K, NIDM, SDMA, and HEC
	1.2. Introduce fee based diploma and short courses	University of AJ&K, NIDM, SDMA, and HEC
	1.3 Conduct scientific research on different aspects of the Disaster Management	University of AJ&K, NIDM, SDMA, and HEC

	1.4 Recruitment of staff and necessary logistic arrangements for undertaking the activities	University of AJ&K, NIDM, SDMA, and HEC
2. Establish Disaster Management Resource Centre at SDMA	2.1 Establish Disaster Management Resource Centre (DMRC) at SDMA including of requirement of staff and provision of equipment's	SDMA, SIDM, Relevant organizations
	2.2. Develop a Disaster Management Information System (DMIS) to document DRM interventions and activities to be/been conducted by the Government and other partners working in disaster management field	SDMA, SIDM, Relevant organizations
	2.3 Archiving database about past devastating disasters and its impact.	SDMA, SIDM, Relevant organizations
	2.4 Make legal arrangements for the DMCs registration and develop database of DMCs/CBOs/CSOs for effective networking	SDMA, SIDM, Relevant organizations
	2.5 Document lesson learns and best practices of the DRM initiatives	SDMA, SIDM, Relevant organizations
	2.6 Make arrangements for the easy access to the information regarding DRM at all level in the form of periodicals, brochures, pamphlets, and research journals	SDMA, SIDM, Relevant organizations
3. Development of DRR/M curriculum and initiation of DRM as subject in academic institutions at various universities of AJ&K	3.1. Constitute an expert board of academia and DRR professionals to develop plan of action for developing curriculum and offering DRM related courses at different department at various universities	Concerned Universities of AJ&K, NIDM, SDMA and HEC
	3.2. Offer courses for students on disaster risk management of different credit hours	Concerned Universities of AJ&K, NIDM, SDMA and HEC

	3.3. Conduct scientific research on disaster risk management and climate change for higher studies	Concerned Universities of AJ&K, NIDM, SDMA and HEC
4. Development of DRR/M curriculum at school level under school safety programmes	4.1. Constitute an expert board of Ministry of Education, education specialists and DRR professionals to developing and initiation DRR/M curriculum at school level	Education Department, Concerned DDMAs, and SDMA
	4.2. Development of school safety curriculum for class middle and above	Education Department, Concerned DDMAs, and SDMA
	4.3. Conduct regular drills and simulation exercises & TOTs for teachers on school based DRM and school safety	Education Department, Concerned DDMAs, and SDMA
	4.4. Implement phase wise school safety programme in all districts	Education Department, Concerned DDMAs, and SDMA
5. Launch DRR awareness campaign at various level	5.1. Launch phase wise DRR campaign at all districts and continue for the forthcoming phases	SDMA, DDMAs, TMAs, Mass Media, Rescue 1122, Civil Defence, I/NGOs, UCDMCs
	5.2. Develop close liaison with mass media for promoting public awareness campaign during emergencies and peace time	SDMA, DDMAs, TMAs, Mass Media, Rescue 1122, Civil Defence, I/NGOs, UCDMCs
	5.3 Conduct series of departmental seminars/workshops/meetings to advocating DRR mainstreaming	SDMA, DDMAs, TMAs, Mass Media, Rescue 1122, Civil Defence, I/NGOs, UCDMCs

5.2.4 INTERVENTION 4: Establish/strengthening Multi-Hazard Early Warning and Evacuation Systems

Review

A multi-hazard early warning information is crucial in making accurate and timely issuing public warnings and alerts to mitigate disaster impacts.

Pakistan Metrological Department (PMD) has already installed some system for river flood in AJK. Radar system is installed at Mangla and telemetric instruments at Domel and Kohala but these arrangements are outdated. AJ&K is dependent on the Islamabad base station for

receiving weather forecast information. The institutional arrangements for hazard monitoring at AJ&K are not up to the mark to deliver timely and reliable information. For flash flood and landslide hazards there is no early warning system in AJK as these are recurring phenomenon. Therefore, the remote mountainous communities as well as the settled areas are facing trouble in receiving timely alerts. The reason is the lack of capacities with the State authorities to formulate a comprehensive multi-hazard early warning plan and adopt modern technologies for the transmission of warning alerts from district to household level. Over all in AJ&K hazard monitoring institutional arrangements are either weak or ill-equipped to deliver timely and reliable information. There are concerns around the communication arrangement and mechanisms especially to remote mountainous areas. The multi-hazards early warning system exhibited itself as an important and strategic area of information.

Key Issues & Requirement

Disaster historic profile of AJK is full of huge damages like EQ 2005, flood 2010, 2012 and 2014. The effects of such damages cause a vicious cycle in AJK, the disaster cause huge economic loss that becomes a setback in the effort to eradicate poverty, and the lives of the people become worse.

A multi –hazard early warning system is an important tool to break out of the vicious cycle and it has become a major consideration in AJK. Until now however, technical efforts to develop a multi-hazard EWS have not been successful because of insufficiency of cooperation of relevant agencies. It is also necessary to enhance and strengthen the technical capacity of EWS, particularly in weather forecasting systems for mitigation of hazard risks. Furthermore, communities are not aware of EWS and lack knowledge of disaster prevention measures as a whole.

The rapidly evolving hazard monitoring with added reliability combined with cheaper modes of communication has made it even more accessible. The availability of mobile technology in AJ&K should be seen as major development that could help for effective dissemination of early warning information. Also there are other technological tools which are becoming increasingly important in the backdrop of increased frequency and impact of disasters. Local media's role will be reviewed, enhanced and utilized to improve dissemination of warnings. Community Based EWS should be established and linking communities with warning agencies would be an essential component. Initiatives will be taken to build capacities of communities in early warning by connecting them and by providing necessary equipment. Assistance from technical agencies such as the PMD, FFC, WAPDA, GSP, etc. will be sought to assist the SDMA. Major stakeholders in relation to a multi hazard EWS are: -

NDMA, FFC, PMD, WAPDA, GSP, ERRA, Pak Army

SDMA, Irrigation department, Civil Defense, Rescue 1122(Fire Brigade)

DDMA, Revenue, Police, C&W, Civil Defense

Others, NGOs, INGOs, Mosques, Schools, Media etc.

The SDMA needs to build a partnership with these federal and State authorities and private sector for the establishment of multi-hazard early warning system with doable planning. For

productive results, an upgraded multi-hazard early warning system should be in place at State level to ensure accuracy in the early warning information generation. The following interventions formulated with the broader objective to enhance the capacity of State authorities to collect, monitor and analyze prevailing hazards information and effectively disseminate end to end multi hazard early warning information.

Strategies

Strategy-1: Strengthen weather forecasting and early warning systems

Strategy-2: Prepare hazard maps at local scale in targeted locations

Strategy-3: Strengthen early warning dissemination systems

Strategy-4: Develop capacity of early warning and evacuation systems

Strategy-5: Establish community based early warning system in all districts

Actions to be implemented during 2016-2020

The above strategies shall be implemented through the various actions as below: -

Strategies	Actions	Responsible Organizations
1.Strengthen weather forecasting and early warning systems	1.1.Establishment of few new scientific instruments at different appropriate places	PMD
	1.2.Strengthening multi hazard and disease early warning system in ten districts	SDMA, Ministry of Health, DDMAs
	1.3.Establishment of river flood forecast and warning system with real time rainfall and water level observation linked with NDMA and PMD	SDMA, PMD, NDMA,WAPDA
	1.4. Establishment of flash flood forecasting and warning system including local flash flood forecasting centers.	PMD in consultation with SDMA,DDMAs
	1.5.Establishment of new tide level monitoring network including data communication system	PMD
	1.6.Establishment of GLOF and snow melt flash flood forecast and warning system	PMD/WAPDA

	1.7.Establishment of seismic intensity reporting system including data communication system	PMD
	1.8.Expansion of automatic weather observation system	PMD in consultation with SDMA
2.Prepare Hazard Maps at local scale in targeted locations	2.1.Finalization of hazard map and capacity development against local flash flood	PMD, FFC, SDMA
	2.2.Preparation of landslide hazard maps based on the topographical and geological analysis	PMD, GSP, SDMA,FFC
3.Strengthening early warning dissemination system	3.1.establish inter coordinated system among SDMA, DDMAs, NDMA,PMD	SDMA, DDMAs,NDMA, PMD, NGOs
	3.2.Disease early warning transfer at community level in ten districts	SDMA,DDMAs, Ministry of health
4.Develop capacity of early warning and evacuation systems	4.1.Enhancement of research activities for snow/glacier/glacier lakes in AJK	SDMA, PMD, WAPDA
	4.2.Enhancement of community enlightment for EWS	SDMA,SIDM,DDMAs NGOs
5.Establish community based early warning system in all districts	5.1 Provide means of communication/equipment to community disaster management committees in all districts	Concerned DDMAs, UCDMCs, LGRD and I/NGOs
	5.2 Establish SMS alert system, authorized by DDMAs, and install wireless system and flood gauges in all districts	Concerned DDMAs, UCDMCs, LGRD and I/NGOs
	5.3 Establish SMS alert system, authorized by DDMAs, and install wireless system and flood gauges in all districts	Concerned DDMAs, PTA, Cellular companies, UCDMCs, LGRD and I/NGOs
	5.4 Enhance community understanding on EWS through scheduled training, simulation exercises and drills	Concerned DDMAs, UCDMCs, LGRD and I/NGOs

5.2.5 INTERVENTION 5: Mainstreaming DRR into development and climate change adaptation and mitigation

Review

The government policy on development is reducing poverty, promoting economic growth and increasing the wealth of AJK State. The disaster risk reduction shall secure sustainable growth, rescue poverty and create a disaster resilient society. Therefore, mainstreaming disaster risk reduction into development is an integrated component of the development process.

After the earthquake 2005, a holistic approach has been adopted specifically at State of AJ&K. All the developmental projects were design with the lens of disaster risk reduction and climate change adaptation and mitigation. The lesson learnt of the great earthquake prevails not only in the reconstruction phase but it changed the modus operandi of the society towards disaster resilience. Laws and Acts were put in place; disaster management authorities and committees were established. But somehow the plans and policies were not properly taken up in the longer run. At the movement, the DDMAs are not fully functionalized; Sectoral plans are not synchronized with the disaster management plans and climate change adaptation/mitigation measures. The enforcement of DRR check list and land use regulations are somewhat remained a draft in the rapid and un-planned construction. The relocation of critical facilities in the disaster prone areas also remained a big challenge for the State government. The cross border tension always remained an unresolved issue, around two hundred and thirty-three villages of District Neelum, Muzaffarabad, Jhelum Valley, Bagh, Haveli, Rawalakot, Kotli and Bhimber are located on Line of Control (LoC) and approximately 0.403 million populations out of total estimated 4. 61 million populations of AJ&K is exposed to Indian firing.

Key Issues & Requirements

An important issue that needs to be integrated into government procedures is to promote adoption of risk sensitive approaches in development planning and programming in all sectors. The purpose of mainstreaming efforts is to ensure that all development infrastructure in hazard- prone areas are built to higher standards of hazards resiliency; e.g., schools, hospitals, roads, bridges, dams and telecommunications infrastructure etc. This can be done by incorporating risk and vulnerability assessment into the project planning stage and by including vulnerability reduction measures in project implementation, in case the proposed projects are found vulnerable to hazard risks.

The State government is the main driver of devising and implantation of disaster resilient and environmental friendly development. The State government should officially demarcate the hazard prone areas i.e. area under active fault line, reservation boundaries of rivers and lands with steep slopes, landslide prone area etc. and provide incentives to the vulnerable communities for the purpose of relocation. A detail risk assessment of the critical facilities and vulnerable infrastructure should be done and retrofitting would be carried out wherever appropriate. Similarly, the changing modes of climate and its effects needs to be addressed through public private partnership in term of climate change adaptation and mitigation The detail agenda of the mainstreaming process are as follow with the underline broad objective

to promote DRR mainstreaming and enforcement of policies and regulations aimed to integrate DRR and climate change harmony into the developing planning and practices.

Strategies

Strategy-1: Mainstreaming DRR and Climate Change Adaptation and Mitigation principles and practices into the developmental programs and policies

Strategy-2: Set up sectoral guidelines on mainstreaming disaster risk reduction.

Strategy-3: Establish Criteria to assess development projects from a risk reduction perspective.

Strategy-4: Development and enforcement of land use planning on the basis of disaster risk assessment

Strategy-5: 5. Integrating DRR into education and health facilities development planning and construction

Actions to be implemented during 2016-2020

The above strategies shall be implemented through various actions as below: -

Strategies	Actions	Responsible Organizations
1. Mainstreaming DRR and Climate Change Adaptation and Mitigation principles and practices into the developmental programs and policies	1.1.Establish state level DRR &CC adaptation mainstreaming working group	SDMA, P&DD and line departments
	1.2.The state development plan and poverty reduction plan should include disaster risk reduction & climate change adaptation as priority policy	SDMA, P&DD and line departments
	1.3. Identify the sectors which can directly or indirectly affected by the changing climate and its impact in term of disasters	SDMA, P&DD, academia and line departments
	1.4 Develop DRR and climate change mitigation/adaptation planning in the context of environmental protection and conduct in all district	SDMA, P&DD, academia and line departments
	1.5 Develop knowledge base on climate change mitigation/adaptation through	SDMA, P&DD, academia and line departments

	research, trainings, awareness and advocacy	
	1.6 Develop/encourage partnership among the public and private/government partnership to mitigate climate change threats	SDMA, P&DD, and relevant departments
2.Set up sectoral guidelines on mainstreaming disaster risk reduction	2.1 Undertake case studies on previous experiences and draw up sectoral guidelines accordingly	SDMA, Planning and Development Department
3.Establish criteria to assess development projects from a risk reduction perspective	3.1. Conduct cost-benefit analysis of integrated risk reduction into development sectors	SDMA, Planning and Development Department
	3.2. Establish the evaluation criteria and guideline for mainstreaming DRR into development projects.	SDMA, Planning and Development Department
	3.3.Disseminate the evaluation criteria to district governments by workshops and meetings	SDMA, Planning and Development Department
	3.4.Review the development programme by the criteria set by NDMA and Planning Commission of Pakistan	SDMA, Planning and Development Department
4.Development and enforcement of land use planning on the basis of disaster risk assessment	4.1 Form a land use planning committee with the representatives from S/DDMAs, land use planning department, P&DD, revenue department, irrigation, finance and planning, communication and work etc. to review the land use policy and propose amendment in the light of DRR measures	Land use planning, SDMA directives, Planning and Development and Revenue department.
	4.2 Develop and enforce land use plan on the basis of disaster risk assessment	Land use planning, SDMA directives, Planning and Development and Revenue department.
	4.3 Officially demarcate the hazard prone areas i.e. area under active fault line, reservation boundaries of	Land use planning, SDMA directives, Planning and Development and Revenue department.

	rivers and lands with steep slopes, landslide prone area etc.	
	4.4 Provide incentives to the vulnerable communities for the purpose of relocation	Land use planning, SDMA directives, Planning and Development and Revenue department.
5.Integrating DRR into education and health facilities development planning and construction	5.1 Conduct detail MHVRA of the vulnerable schools & health facilities in all districts	Health and Education Department, SDMA, C&W and P&DD
	5.2 Develop specifications against each hazard while standardizing school and health facility design	Health and Education Department, SDMA, C&W and P&DD
	5.3 Introduce applicable methods of retrofitting in the existing vulnerable buildings and organize trainings for engineers and local masons on retrofitting techniques	Health and Education Department, SDMA, C&W and P&DD

5.2.6 INTERVENTION 6: Strengthen DRM system through awareness raising programme for disaster resilient communities

Review

The local communities, local infrastructure and local economy are directly affected by disasters. A "Community and Local Level Risk Reduction Programme" is the heart of disaster risk reduction. Local communities and authorities are the first player to respond to any disaster. Considering this characteristic of the disaster situation, it is important that disaster risk reduction programmes are implemented for awareness and capacity development at the local level, including local government officials, communities and civil society organizations. Effective utilization of local resources is essential in all the stages of disaster management, i.e., preparedness, response, recovery and reconstruction. Additionally, local level disaster management plans at the village, UC, Tehsil and district are vital in disaster risk reduction.

Under the one UN joint programme, the State of AJ&K in collaboration of UNDP initiated Community Based Disaster Mitigation projects in several districts. The main theme was to introduce and strengthen CBDRM initiatives in the region to make DRM activities more sustainable. But after the earthquake 2005, the vulnerable communities of low income category were more concerned on receiving relief rather than strengthening preparedness due to their poor economic conditions and lack of awareness. The reason behind was the dependency syndrome of the local authorities/organizations and communities prevails in

dealing even the local disasters. Moreover, the CBDRM has been restricted to non-structural measures only like formation of committees and training and ignoring the structural measures required for enhancing community resilience.

Key Issues & Requirement

By reviewing these ongoing projects, the following issues are identified regarding CBDRM activities and awareness programmes for the general public.

In the areas that have experienced disaster frequently, risk perceptions by citizens are relatively high. However, knowledge of disasters and countermeasures against disasters are insufficient.

Citizens are not aware that disaster risk management is the joint effort of "self-help, mutual-help and public-help". Most citizens expect public assistance in the first place, but they are not aware of what they can do and what neighboring communities can do for disaster risk management.

CBDRM is a comprehensive process of leading the vulnerable communities as disaster resilient actors. The approach emphasis both on, structural and non-structural measures. At AJ&K, the non-structural component of CBDRM has almost done and it seems that communities are well aware about the disaster occurrence and how to respond to specific hazards. Under the one UN joint programme, a total of 109 UCDMCs have been formed in the six out of ten districts. There is need to reactivate these committees and provide necessary training and response management equipment in different phases. To ensure sustainability of DRM projects, initiating either by the government or NGOs, it is necessary to enhance the capacities of the community actors through active involvement in the projects for ensuring sustainability and durability. Moreover, special emphasis should be given to break the dependency syndrome of the affected communities by initiating small grants schemes in the disaster hit areas specifically. The detail work plan is under mentioned with the broader objective to build the capacities of the disaster-affected communities through CBDRM approach for initiating community level disaster preparedness and risk reduction activities.

Strategies

Strategy-1: Organize/revise UC level Disaster Management Committees (DMCs) in all districts

Strategy-2: Building capacities of the Disaster Management Committees (DMCs) through TOTs and CBDRM related trainings

Strategy-3: Establish disaster mitigation measures incorporated with existing development programme

Actions to be implemented during 2016-2020

The above strategies shall be implemented through the various actions as below: -

Strategies	Actions	Responsible Organizations
1. Organize/revise UC level Disaster Management Committees (DMCs) in all districts	1.1 Organize phase wise meetings at UC level by the DRR and CC strategic unit of SDMA for the establishment of DMCs at all UCs level	DDMAs, SDMA, UCDMCs, LGRD, PRC,AJKRSP, I/NGOs and other CSOs
	1.2 Revise/reactivate DMCs in 49 UCs of three districts of Muzaffarabad Division namely Muzaffarabad, Jhelum Valley, Neelum during phase-I	DDMAs, SDMA, UCDMCs, LGRD, PRC,AJKRSP, I/NGOs and other CSOs
	1.3 Revise/reactivate DMCs in 73 UCs of four districts of Poonch division namely Poonch, Bagh, Sudhnoti and Haveli during phase-II	DDMAs, SDMA, UCDMCs, LGRD, PRC,AJKRSP, I/NGOs and other CSOs
	1.4 Organize DMCs in 72 UCs of three districts of Mirpur division namely Bhimber, , Kotli and Mirpur during phase-III	DDMAs, SDMA, UCDMCs, LGRD, PRC,AJKRSP, I/NGOs and other CSOs
	1.5 Develop standard DMC structure and TORs for the executive and general members of the committee	DDMAs, SDMA,
	1.6 Define operational areas for the DMCs in pre, during and post disaster phases	DDMAs, SDMA,
	1.7 Make legal arrangements for the DMCs registration	DDMAs, SDMA, Law department
	1.8 Develop database of the volunteers and trained staff of the DMCs	DDMAs, SDMA, UCDMCs,
	1.9.Conduc raising awareness campaigns for the general public utilizing various media such as radio, TV, internet, posters, mosques and schools, Newspapers etc.	DDMAs, SDMA, UCDMCs, LGRD, PRC,AJKRSP, I/NGOs and other CSOs

2. Building capacities of the Disaster Management Committees (DMCs) through TOTs and CBDRM related trainings	2.1 Develop curriculum and plan CBDRM related training programs and selection of DMCs	DDMAs, SDMA, UCDMCs, AJKRSP, I/NGOs
	2.2 Phase I. Conduct CBDRM related trainings for DMCs and select the potential trainers	DDMAs, SDMA, UCDMCs, AJKRSP, I/NGOs
	2.3 Phase II. Conduct TOTs for the potential trainers of the phase I	DDMAs, SDMA, UCDMCs, AJKRSP, I/NGOs
	2.4 Phase III. Facilitate and conduct CBDRM related trainings for other communities through master trainers of phase II	DDMAs, SDMA, UCDMCs, AJKRSP, I/NGOs
	2.5.Preparing evacuation maps at districts levels	DDMAs, UCDMCs,
3.Establish disaster mitigation measures incorporated with existing development programme	3.1.Planning small scale mitigation measures during CBDRM activities	DDMAs, SDMA, UCDMCs, AJKRSP, I/NGOs
	3.2.Mitigation measures for community DRM are incorporated in local government development programme	DDMAs, SDMA, UCDMCs, AJKRSP, I/NGOs

5.2.7 INTERVENTION 7: Infrastructure development for disaster risk reduction

Review

A well distributed and safe infrastructure is vital for disaster risk management. In AJK, however, the vulnerability of the population to natural hazards has increased due to ill planning in disaster prone areas. In addition, inadequate management of infrastructure has caused damages to population. The following issues of infrastructure development are to be considered for disaster risk management.

Many villages are remote and isolated due to mountainous terrain. Strengthening of physical infrastructure is vital for mitigation of underlying risk factors and effective response during disasters. It is essential to execute evaluation of physical infrastructure, especially transportation, traditional mud houses and communication facilities.

The SDMA has taken every effort to reduce the hazard risks in terms of disaster mitigation measures since its establishment in 2007. These measures are mainly focused on non-

structural measures such as institutional, training and capacity building activities in disaster management. At the same time SDMA should pay more attention to structural measures to reduce hazard risks. Old and vulnerable buildings in AJK are another alarming hazard that may cause human and material losses at any time. SDMA and AJK government require to pay attention towards policy making, building codes enforcement, demolishing, alternate accommodation and compensation etc. A detailed survey regarding dangerous buildings should be conducted and communities should be warned earlier.

Population growth in urban areas, cities, towns of AJK is increasing day by day. To prevent widespread damage due to disaster in urban areas, it is necessary that urban planning and development should consider disaster risk management. Local governments and DDMAs need to make efforts to create a disaster –resistant urban structures. Also urban drainage systems need attention and proper consideration for efficient flow in heavy rain fall season.

In order to provide safety for the residents at LoC, community-type bunkers need to be built at various places (preferably besides the schools and health facilities) along the Line of Control in Azad Jammu and Kashmir for the safety of residents living in border areas in region. These bunkers will be linked with the existing road network in order to ensure the communication between these areas with district and sub-divisional headquarters.

Strategies

Strategy-1: Develop schools, hospitals and other important public facilities resilient against disasters

Strategy-2: Enforce the building codes and conduct survey of old buildings

Strategy-3: Implement appropriate structural measures in flood prone areas.

Strategy-4: Enhance disaster risk management capacity in urban areas.

Actions to be implemented during 2016-2020

The above strategies shall be implemented through the various actions as below: -

Strategies	Actions	Responsible Organization
1. Develop schools, hospitals and other important public facilities resilient against disasters	1.1.Structural vulnerability evaluation for schools and hospitals in AJK	SDMA,LGRDC, DDMA, Education & Health Departments
	1.2.Preparation of guidelines for new public buildings construction in the areas vulnerable to disasters	SDMA, DDMAs,, PPH
	1.3.Retrofitting works of important public facilities(schools, hospitals)	PPH, Education & Health Departments

2. Enforce the building codes and conduct survey of old buildings	2.1.Preparation of guidelines for housing construction in the areas vulnerable to disasters	SDMA, DDMA,PPH, Planning and Development, Development authorities
	2.2.Policy formulation regarding demolishing of dangerous buildings, alternate accommodation and compensation policy	SDMC, SDMA, Planning and Development
	2.3.Conduct detail survey of old buildings in all districts	DDMAs, Civil Defense, PPH,LGRDC
3. Implementation of appropriate structural measures in flood prone areas.	3.1. Establishment of comprehensive and integrated flood management plan in AJK	SDMA,DDMAs ,Irrigation Department
	3.2. Construction and rehabilitation of flood control/mitigation structures	SDMA, Planning and Development, Irrigation Department
4. Enhance disaster risk management capacity in urban areas.	4.1.Formulation of urban disaster management plan to propose corresponding countermeasures against natural hazard risk in the urban areas.	SDMA,DDMAs
	4.2.Enforcement of effective land use control and regulations based on urban disaster management plan, introduction of the space needed for evacuation and disaster relief into land utilization programme	SDMA, DDMAs, Planning and Development, PPH

5.2.8 INTERVENTION 8: Strengthening of the State emergency response system

Review

To mount an effective response system, it is of paramount that organization roles and coordination mechanism has been strengthened. To enhance the emergency response capacities at State and district level, State Emergency Operation Centre (SEOC) along with SOPs, established under the one UN DRM JP but its location and current status is not up to the mark. Although, the unit is functional, but still resource deficient and working with limited scope. Similarly Rescue 1122 and Civil Defence are also struggling for survival due to resource constraints. At district level the establishment of warehouses and DEOCs remained a constant issue. The population residing along the LoC area of AJ&K suffers the grave consequences of

cross border tension and Indian firing in terms of life losses, permanent injuries and disabilities, property and livelihood losses also remained a big challenge for the State government. The SDMA, Civil Defence, Rescue 1122 and relief comes under the one secretariat. The limited resource allocation specifically for emergency preparedness and response activities in the annual development plans is very meager to combat emergency situation at State and district level.

Key Issues & Requirement

It is imperative to develop a system under the management of SDMA to organize effective disaster response at state and district levels. Therefore, development of institutional mechanisms should be undertaken and technical and operational capacity of involved agencies should be enhanced.

Enhancing the coping capacities of the response organizations (Rescuee1122, SDMA/DDMAs etc.) with the provision of the Hi-tech response equipment along with the trained human resource and operational vehicles are crucial to meet any eventuality. The emergency response management system, modalities and coordination mechanism need to be discussed and agreed while developing State emergency response management plans and policies. For effective emergency response, strengthening and establishment of emergency operation centers, warehouses, Rescue 1122 services, capacity building programmes for government officers and volunteers and the development of all hazard specific contingency plans are quite urgent. The recent Indian firing/shelling on Line of Control has revealed the vulnerability of people living along the LoC. This situation demands immediate attention to reduce such vulnerabilities of the population living along the LoC by putting a swift emergency response system in place. The detail plan of action is following below with the core objective to minimize the adverse effects of all hazards through effective and appropriate actions and effective responses to ensure the timely and coordinated delivery of relief and assistance following a disaster

Strategies

Strategy-1: Construction of storage facilities/warehouses at district level for prepositioning of food, medicine, relief supplies and rescue equipment.

Strategy-2: Strengthening of State Emergency Operation Centre (SEOC) at SDMA and establishment of District Emergency Operation Centers (DEOCs) at all districts.

Strategy-3: Strengthening response capacity of SDMA & expanding the Rescue 1122 services in all districts

Strategy-4: Conduct Government Officers Emergency Response Exercise (GOERE).

Strategy-5: Establish/strengthen State disaster response force at UC level

Actions to be implemented in 2016-2020

The above strategies shall be implemented through the various actions as below: -

Strategies	Actions	Responsible Organizations
1. Construction of storage facilities/warehouses at district level for prepositioning of food, medicine, relief supplies and rescue equipment	1.1. Construction of storage facilities/warehouses at State and district level	SDMA, DDMAs, WFP, Donor agencies
	1.2 Equip the warehouses with designated staff, storage material relevant to the prevailing hazards and geographical settings and communication means	SDMA, DDMAs, WFP, Donor agencies
2. Strengthening of State Emergency Operation Centre (SEOC) at SDMA and establishment of District Emergency Operation Centers (DEOCs) at all districts.	2.1. Develop a State of the art SEOC at SDMA at appropriate location & establishment of EOCs in all districts to deal with emergencies at district level	SDMA, DDMAs, P&DD, Donors, NDMA
	2.2. Procurement of equipment/fixtures for the SEOC,DEOCs and Equip all the EOCs with the required capacities	SDMA, DDMAs, P&DD, Donors, NDMA
	2.3. Human resource development for the all EOCs	SDMA, NDMA
	2.4. Establish a reporting system for regular information sharing with NDMA, DDMAs and other concerned departments.	SDMA, NDMA
3. Strengthening response capacity of SDMA &expanding the Rescue 1122 services in all districts	3.1 Develop PC-I for the establishment of Rescue 1122 services in the remaining three districts.	SDMA, Rescue 1122
	3.2 Enhancing the coping capacities of the response organizations (Rescuee1122, SDMA/DDMAs etc.) with the provision of the hi-tech response equipment along with the trained human resource is crucial to meet any eventuality.	AJK Govt., Federal Govt, P&DD and Donor agencies.

	3.3 Strengthening the life care service network for any emergency by providing at least ten (10) number of life care units in each district.	AJK Govt., Federal Govt, P&DD and Donor agencies.
	3.4 Provide operational vehicles to SDMA and recovery vehicles to Rescue 1122.	AJK Govt., Federal Govt, P&DD and Donor agencies.
	3.5 Establish a system for rapid communication and set up at least five telecommunication facilities with SDMA, and PMD to exchange information and quick response to combat or deal with an emergency	SDMA and NDMA,PMD
	3.6 Establish Rescue 1122 control rooms at all districts for better coordination and effective liaison with all other organizations managing emergencies	Donor agencies. Rescue 1122,P&DD, and SDMA
	3.7 Conduct advance trainings for staff in context of the multi emergency response management	Rescue 1122 and SDMA
	3.8 Expand the scope of Rescue 1122 towards disaster preparedness activities i.e. to establish community emergency response teams through enlistment, training, coordination and supervision of volunteers to assist the service in safety promotion and management of emergencies	Rescue 1122 and SDMA
4. Conduct Government Officers Emergency Response Exercise (GOERE)	4.1 Conduct GOERE activities for SDMA , DDMAs and rescue 1122 in all districts to focus on disaster contingency planning and simulation exercises at each district level, aligned to vulnerabilities of respective districts with respect to various disasters	NDMA, SDMA, NIDM, DDMAs, TMAs, State and District line departments

	4.2.Carryout simulation/mock exercises specific to the geographical area and type of the prevailing hazard	NDMA, SDMA, NIDM, DDMAs, TMAs, State and District line departments
	4.3. The training exercises be decentralized at sub-district level	NDMA, SDMA, NIDM, DDMAs, TMAs, State and District line departments
5. Establish/strengthen State disaster response force at UC level	5.1 Establish/strengthen State disaster response force in disaster affected UCs at all districts	SDMA,DDMAs, Civil Defense, NIDM
	5.2 Develop SOPs for Volunteer Disaster Response Force	SDMA,DDMAs, Civil Defense, NIDM
	5.3 Registration of volunteers on area basis for the activity and maintaining an updated record of the inducted and trained volunteers	SDMA, DDMAs, Civil Defense,
	5.4 Conduct volunteer training program focus on the key areas of emergency response i.e. evacuation, relief camp management, care of vulnerable groups, information and guidance to effectives and support in various assessments /surveys	SDMA,DDMAs, Civil Defense, NIDM

5.2.9 INTERVENTION 9: Capacity Development Planning for Post Disaster Recovery

Review

The rescue and relief mission in the aftermath of 2005 earthquake is one of the prime examples of coordinated and effective response globally. But when it's come to the post disaster reconstruction programmes, the affected areas of AJ&K are not yet fully recovered. Along with non-availability of funds, the other major challenges on this account are the systematic incorporation of risk reduction approaches into the design and implementation in the reconstruction programmes. The affected communities are usually reluctant to observe the costly building codes/designs and often refuse to relocate from the vulnerable areas thus the underlying risks in the reconstruction process is prevailing. Another major challenge in the recovery phase often seen at AJ&K is the non-availability of a centralized data about planning, policies and capacities of all stakeholders involved in disaster management activities. Therefore, most of the humanitarian organizations worked in bit and pieces in the recovery phase and leaded the communities to dependency.

Key Issues & Requirement

Disaster Needs Assessment is one of the important measures in post disaster recovery. One of the critical issues of post disaster recovery is a lack of capacity to conduct Disaster Need Assessment in AJK. There are no guidelines for formulation of Recovery and Rehabilitation Plans for disasters. This condition caused in delays for recovery and rehabilitation initiatives.

All the key stakeholders would have responsibility to develop a consultative and doable master plan for successful recovery that cover the needs of the effectives of 2005 earthquake and flood 2014, but also provide full proof recovery in future. To achieve this, conduct series of consultation meetings and workshops to incorporate ministerial/departmental and other relevant stakeholder's inputs and information for the developing of risk transfer strategies for safer construction practices, similarly promote the involvement of financial institutions and community in disaster risk reductions practices. The under mentioned interventions followed the objective to develop a doable master plan and enhance the capacities of disaster management authorities and communities to recover from any diversity.

Strategies

Strategy-1: Prepare guidelines for post disaster recovery programmes and activities

Strategy-2: Develop capacity of stakeholders in post disaster recovery

Strategy-3: Develop system and methodology for recovery needs assessment

Strategy-4: Cash grant strategy to achieve successful recovery

Actions to be implemented during 2016-2020

The above strategies shall be implemented through the various actions as below: -

Strategies	Actions	Responsible Organizations
1.Prepare guidelines for post disaster recovery programmes and activities	1.1.Preparation of guidelines for the formulation of recovery and rehabilitation plans	SDMA,DDMAs
	1.2.Documents of lessons learnt regarding recovery from the EQ2005, Flood 2010 and flood 2014 by related agencies	SDMA, DDMAs
	1.3.Establishment of funding system for post disasters recovery and rehabilitation	SDMA
2. Develop capacity of stakeholders in post disaster recovery	2.1.Holding of orientation workshops for line ministries and other stakeholders on post disaster recovery programme design and implementation	SDMA,SERRA, Central Design Office, Development Authorities

	2.2. Database on technical capacity of relevant stakeholders in designing and implementing recovery programmes	SDMA, SERRA, Central Design Office, Development Authorities
	2.3.Set-up of a system to coordinate and monitor flood early recovery activities	SDMA,DDMAs, relevant organizations
	2.4.Capacity development of research activities for new techniques of recovery and rehabilitation	SDMA,NDMA, Research institutions
3. Develop system and methodology for recovery needs assessment	3.1.Preparation of guidelines for recovery needs assessment and recovery programme design and management for multiple sectors	NDMA,SDMA
4.Cash grant strategy to achieve successful recovery	4.1 Provide access to Disaster Risk Financing and Insurance (DRFI) instruments can be made contingent upon compliance with earthquake-resistance building codes.	SDMA, I/NGOs, Private sector, LGRD, Financial institutions i.e. Banks, insurance companies etc.
	4.2 Develop a catastrophe risk financing strategy to increase the financial response and recovery capacity of the State government. Such a strategy could suggest a layered system: a) State DM reserve for funding the response and recovery following frequent but low impact hazard events; b) Contingent credit facilities and emergency loans to finance the medium layer of risk and c) Parametric insurance or catastrophe bonds to finance rare but high impact events.	SDMA, I/NGOs, Private sector, LGRD, Financial institutions i.e. Banks, insurance companies etc.
	4.3 Replicate the good practices and lesson learnt during recovery process of earth quake 2005,flood 2010 and flood 2014	SERRA,SDMA,DDMA and Development Authorities

5.3 Priority Action Programmes for Five Years

Above mentioned strategies shall be implemented in line with the following implementation schedule.

Priority	Strategy	App. cost (PKR. M)	Time Frame				
			2016	17	18	19	20
PRIORITY AREA-1. Strengthening the State level institutional and legal system for disaster management	1: Strengthen the disaster management Authority by establishing a well-equipped DRR and Climate Change strategic planning unit at SDMA.	100.00					
	2: Formulate disaster risk management plans and strengthen the institutional capacity of DRM focal point in each department declared as institutional members of SDMA as per DRM Act 2010.	50.00					
	3: Strengthening the coordination forum for periodic stakeholder's meetings.	3.0					
	4: Implement drills and trainings of disaster management activities in the organizations to improve their capacities.	4.0					
	5: Establishment of State Disaster Management Fund (SDMF) as envisaged in the AJ&K Disaster Management Act, 2008. (b) Establish District Emergency Fund (DEF) at each DDMA/DCO office.	300.00					

	6: Constitute State Disaster Management Steering Committee (SDMSC) under section 03 (VII) of the AJ&K Disaster Management Act, 2008.	5.00					
PRIORITY AREA: 2 Conduct Multi-Hazard, Vulnerability and Risk Assessment (MHVRA)	1: Conduct detailed multi-hazard vulnerability and risk analysis of all ten Districts.	120.00					
	2: Develop Hazard and Risk Atlas of Azad Jammu & Kashmir at macro level.	20.00					
	3: Conduct detailed multi-hazard vulnerability and risk analysis/assessments at local levels	200.0					
	4: Conduct researches and studies on the impact of climate change on glaciers and ice cap.	10.0					
	5. Prepare GIS based multi hazard indication maps for districts and state level	10.00					
PRIORITY AREA 3: Disaster risk management through training, education and awareness	1: Development of curriculum for short courses and diploma courses in disaster management under the geology department at university of AJ&K.	50.00					
	2: Establish Disaster Management Resource Centre at SDMA.	70.00					
	3: Development of DRR/M curriculum and initiation of DRM as subject in academic institutions at various universities of AJ&K	50.00					
	4: Development of DRR/M curriculum at school level under school safety programmes	10.0					

	5: Launch DRR awareness campaign at various level	12.0					
PRIORITY AREA 4: Establish/strengthening Multi-Hazard Early Warning and Evacuation Systems	Strategy-1: Strengthen weather forecasting and early warning systems	70.00					
	Strategy-2: Prepare hazard maps at local scale in targeted locations	6.0					
	Strategy-3: Strengthen early warning dissemination systems	7.0					
	Strategy-4: Develop capacity of early warning and evacuation systems	5.0					
	Strategy-5:Establish community based early warning system in all districts	10.00					
PRIORITY AREA 5: Mainstreaming DRR into development and climate change adaptation and mitigation	Strategy-1: Mainstreaming DRR and Climate Change Adaptation and Mitigation principles and practices into the developmental programs and policies	1.50					
	Strategy-2: Set up sectoral guidelines on mainstreaming disaster risk reduction.	1.00					
	Strategy-3: Establish Criteria to assess development projects from a risk reduction perspective.	4.00					
	Strategy-4: Development and enforcement of land use planning on the basis of disaster risk assessment	2.00					
	Strategy-5: Integrating DRR into education and health facilities	2.00					

	development planning and construction						
RIORITY AREA 6: Strengthen DRM system through awareness raising programme for disaster resilient communities	1: Organize/revise UC level Disaster Management Committees (DMCs) in all districts	20.00					
	2: Building capacities of the Disaster Management Committees (DMCs) through TOTs and CBDRM related trainings	5.00					
	3: Establish disaster mitigation measures incorporated with existing development programme	5.00					
PRIORITY AREA 7: Infrastructure development for disaster risk reduction	1: Develop schools, hospitals and other important public facilities resilient against disasters	60.00					
	2: Enforce the building codes and conduct survey of old buildings	30.00					
	4: Implement appropriate structural measures in flood prone areas.	80.00					
	5: Enhance disaster risk management capacity in urban areas.	6.00					
PRIORITY AREA 8: Strengthening of the State emergency response system	1: Construction of storage facilities/warehouses at district level for prepositioning of food, medicine, relief supplies and rescue equipment.	200.00					
	2: Strengthening of State Emergency Operation Centre (SEOC) at SDMA and establishment of District Emergency Operation Centers (DEOCs) at all districts.	50.00					
	3: Strengthening response capacity of SDMA &	100.00					

	expanding the Rescue 1122 services in all districts						
	4: Conduct Government Officers Emergency Response Exercise (GOERE).	0.80					
	5: Establish/strengthen State disaster response force at UC level	50.00					
PRIORITY AREA-9: Capacity Development Planning for Post Disaster Recovery	1: Prepare guidelines for post disaster recovery programmes and activities	1.50					
	2: Develop capacity of stakeholders in post disaster recovery	1.50					
	3: Develop system and methodology for recovery needs assessment	1.20					
	4. Cash grant strategy to achieve successful recovery	1.0					
Total Cost		PKR. 1734.5 Million					

Chapter 6

Standard Operating Procedures for Disaster Response

Chapter – 6: Standard Operating Procedures for Disaster Response

6.1 State Emergency Operation Centre (SEOC)

State Emergency Operation Centre (SEOC) a facility to control the operations and coordination of resources, focusing on emergency response and recovery structure. SEOC is a critical part of SDMA for managing all the emergency process. The existing setup of SEOC at SDMA is not in accordance with standard design and facilities. Clear operating procedures, staff roles and responsibilities are required as is an effective workspace and a safe location.

A properly designed Emergency Operations Centres (EOC) will be established to serve as an effective and efficient facility for coordinating emergency response and recovery efforts. SEOC will serve number of uses including operations, training, meetings and other uses. The SEOC will optimize communication and coordination by effective information management and presentation. The Director General, SDMA will be responsible for:

- Activation of the EOC
- Operation of the EOC
- Staffing the EOC

Purpose:

The primary purpose of the SEOC is to perform following four functions: -

- Information collection, analysis and dissemination.
- Coordination & communication.
- Resource Management
- Monitoring and Analysis.

The SEOC will utilize the Incident Command System (ICS) structure during all activations.

Incident Command

The Incident Command System (ICS) provides a management structure and system for conducting emergency operations. It is applicable to small scale daily operational activities as well as major mobilizations. ICS, provides EOC and operational staff with a standardized operational structure and common terminology.

All the activities including response, rescue, relief and recovery shall be coordinated by SEOC and executed by District Disaster Management Authorities, Rescue 1122, Civil Defence Department, Local Government and other line departments in AJ&K. The Director General SDMA will be responsible for supervising all SEOC activities. He shall perform as Incident Commander (IC) during state of emergency situation.

SEOC Decision Making

Strong management will be needed during SEOC operations. SEOC should be activated as soon as possible to ensure that rapid decision making can occur. During the incident response phase, the real-time tracking of incidents and response resources is critical. Resources may be in short supply while multiple requests for services pile up. An operations log capability is needed to fulfill the requirement of documenting, tracking and managing the response to an infinite number of concurrent incidents.

An efficient system of command and control is an essential pre-requisite to the successful coordination of resources in emergency response operations. Operations are based on three (3) phases: ALERT, ACTIVATION, STAND DOWN.

Phase	Action
Alert	SDMA management receives information -threat from an early warning centre SDMA management advises the Chairman SDMC SDMA management informs relevant Primary and Support Agencies Management puts SEOC on Alert if warranted
Activation	SDMA management advises Chairman SDMC that assistance is required SDMA management activates appropriate response mechanism in the region Level of response to be proportional to the hazard SDMA management to advise Chairman SDMC if assistance is needed from the Federal level Chairman SDMC liaises with the NDMC and NDMA for Federal assistance
Stand Down	SDMA management advises the Chairman SDMC that assistance is no longer required SDMA management advises Liaison Officers and arranges time and location for debriefing Primary and Support Agency personnel are debriefed and complete final tasks Final reports completed and distributed by various agencies in accordance with relevant Standard Operating Procedures Evaluation of response

It will be at the discretion of the DG SDMA to activate the appropriate action as the conditions and resources may dictate.

EOC Activation Levels:

The level of the SEOC activation will depend on the nature and scope of the threat to the State. Localized road accident may require only a minimal activation of the SEOC, while an impending earthquake, flood or massive landslide etc. would require full activation of the SEOC.

The levels of disaster are explained below:

Level 1- Full Scale Activation-All stakeholders activated

Level 2- Partial Activation-Some Emergency Support Functions activated

Level 3- Monitoring

On a daily basis the SEOC will be at level-3 activation

SEOC Staffing & Responsibilities:

SEOC will work for 24 hours' basis. The SEOC will perform its functions under the overall supervision of Incident Commander (Director General SDMA). However, the head of branch will be Director Operations and in charge /Focal person of SEOC will be Assistant Director Operations. Rescue 1122 will act as Emergency Response Force during limited or a small scale emergency occurrence and will report to in charge /Focal person of SEOC regarding the incident.

In charge / Focal person will issue weekly duty roster and ensure its implementations. The copies of roster will be sent to Secretary SDMA, Directors, Deputy Directors and all concerns accordingly.

In charge / Focal person will be responsible for the smooth and efficient functioning of SEOC. He will be responsible for up-keeping, proper functioning of all equipment, presence and performance of all employees on duty and record keeping accordingly in the SEOC.

The staff of SEOC will only serve in the SEOC and will perform their duties and designated role assigned by in charge officer. There will be a duty register for the officials on duty in SEOC. Every staff member on duty will maintain the duty register. He will enter his arrival and departure time on the duty register at daily basis.

Responsibilities

SEOC will collect information about weather forecast, weather alerts from meteorological department or information about any other hazard.

On daily basis, incoming messages regarding update of daily emergency situation to the SEOC will be captured in writing on specific Performa. Upon completion of this form it will be

forwarded to the Director General SDMA for appropriate action and dissemination to DDMAs, Civil Defence/ Rescue 1122 and all concerned departments immediately.

Especially in Monsoon Season and in winter, SEOC will share information regarding weather update and flood situation to all DDMAs and other stakeholders on daily basis.

Incharge of SEOC is responsible to mobilize the rescue 1122 (emergency response force) immediately on receiving any emergency call.

Incoming messages will be saved in the appropriate disaster operation file.

The Director Operation SDMA will review and approve all outgoing messages prior to being sent.

All outgoing messages will be saved in the appropriate disaster operation file.

In case of level-1 activation, a daily SEOC briefing will be held to update agencies / organizations on the status of emergency operations. Additional daily briefings will be scheduled as necessary.

A daily Situation Report will be prepared utilizing a specialized form and will be forwarded to Director General/Secretary SDMA. Additional Situation Report will be provided and disseminated as warranted.

Information will be disseminated to the public through available media outlets & other additional sources. Contact information for the media should be available in the SDMA Notification Directory.

6.2 Receipt and Dissemination of Warnings

All public warnings are to be disseminated by the SDMA upon recommendation of the Director General SDMA. Appropriate media channels will be used quickly transfer information to the general public.

Warnings and Alerts

a) Source of Warnings and Alerts

Bulletins: Warning Bulletins and Advisories may be issued by the SDMA based upon information from the Pak Meteorological Department.

Emergency contact numbers should be listed. Warnings or alert messages received from other source are to be verified by SDMA.

b) Warning and Alert Contact Points

The contact numbers to be used in case of emergency are placed in annexure

6.3 Public Information

A contact list of disaster focal persons is attached in the annex other details and contacts for disaster information will be provided by the SEOC under the guidance of the Director General, SDMA. The State Disaster Management Authority is responsible for disseminating disaster risk and response information to all the concerns.

The Director General is to be the official source of public and media information in periods of disaster. The Director General will arrange and sign off on any media briefings and interviews with key personnel and media channels.

General format for sharing information/situation report is attached in the annex.

Managing Public Information

Public information will be managed as follows:

- News conference to be held as soon as possible after the event;
- Media guidelines to be set on accessibility to information
- Ensure good communication with frequent updates and bulletins;
- Form a media pool by selecting a small number of media personnel from different media houses to represent print and electronic news on the disaster.
- Monitoring of print and electronic coverage;

6.4 Information Management and Rumor Control

The following guidelines will be used as SOPs for information management:

- Accurate and timely information will be shared with the public;
- Information will be issued by SDMA management;
- Information will be repeated frequently in the early stages;
- Media access to disaster information and will not be restricted;
- Focal persons for media management will be appointed;
- A media "background information" sheet will be regularly updated;
- Media visits to disaster site will be organized by SDMA.

6.5 Reporting, Briefings and Conferences

All response organization will share regular updates with State Emergency Operation centre (SEOC). The Chairman DDMA will collate disaster reports and supply regular detailed situation reports to the Chairman SDMC, DG/Secretary SDMA and other stakeholders. Briefings for the DG SDMA and the Public Information officer will be scheduled at intervals and include;

- New and unresolved problems
- Assistance needed from other agencies or outside organizations
- Situation updates

- Additional briefings may be organized at the request of the Director General SDMA
- Conferences of key personnel may be convened at any time by the DG SDMA to discuss and resolve major issues.
- The Director General SDMA is responsible for ensuring that any decisions reached at conferences are relayed to all personnel and acted upon.

During and Post Disaster Reports

SDMA will be responsible for preparing and sending any special reports on damages, threats or required assistance. The locations of temporary medical, feeding, or shelter facilities should be rapidly disseminated to all filed workers. A post-disaster report must be completed on deactivation of the SEOC to mark the official end of the response. This report will be used for learning lessons.

6.6 Request for Assistance

Any requests for assistance from outside the region are to be made by the Chairman SDMC and DG SDMA in accordance with the State police in vogue. Such requests are to be forwarded to the National Disaster Management Authority by the Chairman.

6.7 Relief for Affected Population

- Emergency shelter materials – blankets, bedding, plastic sheeting
- Safe Emergency evacuation and accommodation
- Water, food and clothing relief
- Medical assistance
- Security
- Longer-term relief and recovery assistance may include:
- Food stamp or food voucher programmes
- Emergency housing grants
- Welfare grants
- Nutritional supplement programmes
- Skills training

Criteria for Emergency Relief Assistance

The priorities of emergency response will be life, shelter and basic needs (water, clothes, and food). Food relief constitutes items sufficient to meet 2600 calories (average calorie requirement per person per day) for 3 days. DANA teams will determine damage Assessment and Needs Analysis (DANA). Further needs assessment will depend on the nature and scale of the disaster. The criterion for relief will be as follows:

Low-income applicants and families with many young children, the elderly and the physically/mentally challenged, those in the worst hit areas are to be prioritized. Shelter needs will follow the suggested Shelter Guideline and SPHERE standards

All individuals will be considered for basic humanitarian needs, bedding and temporary roofing materials.

Reconstruction

a) Programme participants must show:
b) Proof of ownership of the house
c) Proof of ownership of the land
d) Repairs and reconstruction will also be undertaken where required or materials provided for this, to be dependent upon funding
e) Rental properties will be a low priority
f) The uninsured will take priority over the insured
g) Owners with more than one property will be a low priority
h) Property under construction at the time of the event will be a low priority

6.8 State Disaster Management Fund (SDMF)

The State Disaster Management Fund constituted under Section 22 of AJK Disaster Management Act 2008 notified vide No. SRDC/6/86/1250-63/2013 Dated 15-05-2013 will be utilized by the State Disaster Management Commission for relief, rescue and rehabilitation of the affected population as per approved Government policy. The circumstances where cash assistance may be provided are as follows:

Relief Provided under Distressed Person Relief Act 2011 in AJK

Amount of compensation payable in case of: -

Death		Rs. 150,000/ per person
Injury	(i)	Rs. 75,000/- per person in case of permanent disability
	(ii)	Rs. 50,000/- per person in case of grievous injury.

Relief assistance provided by Federal government

Dead:	Rs. 600000/-
Injured:	
Major Injury	Rs. 100000/-
Disability/Loss of limb	Rs. 200000/-

To bring relief/assistance at par with Federal package ex-gratia/ assistance for dead and injured should be enhanced to Rs. 600000/-, Rs. 100000/- and Rs. 200000/-

Damage to Houses

House completely damaged / destroyed: PKR: 100,000

House partially damaged (depending upon the extent of damage): PKR: 60,000

Loss of cattle head

Cow, Buffalo, Horse, Donkey: PKR 20,000-30,000

Goat : PKR 30000

The compensation amount can vary depending on the availability of funding.

Procedures

- SDMA will collate and compile assessment reports on losses / damages caused to the property, infrastructure and crops from the concerned DDMAs.
- SDMA will submit reports to the SDMC for financial assistance for affected areas.
- After declaration of any area as a calamity affected, the following remissions of Government -dues / assistance is to be provided:
- The State Bank and other concerned commercial banks will be requested to defer agricultural loans in areas with damaged crops and grant new loans to enable the continuation of livelihoods.

Relief

- In case of any emergency situations will provide basic facilities to the affectees,
- Funds will be utilized to purchase relief supplies (tents, cooked food, blankets etc.)

Chapter 7

Simulation and Drills

Chapter 7: Simulations and Drills

7.1 Responsibility for Organizing Drills

The State Disaster Management Authority with other stakeholders will periodically plan and carry out practical evaluations to assess disaster response mechanisms and systems in AJK. Agencies and departments should also conduct drills of potential hazard scenarios. The SIDM will be responsible to conduct the simulations and drills. National Institute of Disaster Management (NIDM) shall be engaged to build the capacity of SIDM.

Example simulations/drills include:

a) Multi-Hazard Emergency Response Exercise
b) Earthquake Evacuation
c) Flash Flood/Floods Evacuation
d) Evacuation due to across LoC Firing
e) Responding to an explosion
f) Avoiding and reacting to active Land Slide

Since drills and simulations are scenario-based activities therefore narratives for each drill/simulation will be developed. The sample narratives for Multi-Hazard Emergency Response Exercise are attached as annex.

7.2 Simulation/Drill Schedule

There should be at least three simulations/drills in a year at divisional level. Lessons learnt from these exercises and those from the previous disaster related incidents should be incorporated in the State DRM Plan during the annual update process.

Sr.	Simulation/Drill	Location	Duration	Date/Month
1	Multi-Hazard Emergency Response Exercise	Muzaffarabad	3 Days	March
2	Earthquake Evacuation	Rawalakot	1 Day	April
3	Evacuation due to across LoC Firing	Jhelum Valley	2 Days	May

7.3 Resources for organizing drills and simulations

The SDMA will facilitate and provide resources for required drills. Departments, agencies and organizations will bear the cost of involvement in these.

Annexures

Rainfall Data

Pakistan Metrological Department

Rainfall mm of Jhelum

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	Dec	Total
2006	67.2	20.3	11.1	13.5	33.2	64	485.3	371.1	38.8	18	25	85.4	1232.9
2007	0.6	137.9	165	1.3	33.9	121.6	206.9	88.5	70.8	0	5.2	1	832.7
2008	59.3	20.3	7	111.1	36.5	184.8	197.3	66.6	65.3	24	TRACE	54	826.2
2009	56	34.4	21	31.2	22.8	49.5	130	164.3	22	0	11	TRACE	542.2
2010	2	75	18	13.2	51	76.7	259	198.3	60.1	23.4	TRACE	14.6	791.3
Average	37.0	57.6	44.4	34.1	35.5	99.3	255.7	177.8	51.4	13.1	13.7	38.8	

Rainfall mm of Garhi Dupatta

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	Dec	Total
2006	267.9	96.5	102.3	70.9	40.2	116.8	276.2	272.7	85	21.8	66.6	234.1	1651
2007	9.2	119.5	217.8	32.7	112.4	216.3	197.6	121.4	77	0	12	30.9	1146.8
2008	246.7	82.7	11.6	158	53.6	184.4	174	166.7	12.8	23	42	104.9	1260.4
2009	128.2	182.7	85	162.7	55.2	82.2	187.8	104.6	99.4	36	23	28.8	1175.6
2010	26	253	62	94.6	86.2	120.6	570.5	251.2	45.2	21.2	TRACE	22.4	1552.9
Average	135.6	146.9	95.7	103.8	69.5	144.1	281.2	183.3	63.9	20.4	35.9	84.2	

Rainfall mm of Kotli

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	Dec	Total
2006	129.4	68.4	85.9	23.2	71.4	179.8	466.4	350.2	83.6	55.6	50.2	141	1705.1
2007	1	174.2	250.1	26.2	33.5	105.8	173.6	141.6	67.7	0	6.4	6	986.1
2008	151.8	65.5	7	108	32.4	230.2	244.8	104.2	74	113.4	5	86.6	1222.9
2009	74	71.8	33	49	8	32.2	175.4	198.6	9.4	9	41.4	6	707.8

2010	21.6	127.4	63.5	19	87.4	46.8	416.4	172.6	49.6	46.1	6	31	1087.4
Average	75.6	101.5	87.9	45.1	46.5	119.0	295.3	193.4	56.9	44.8	21.8	54.1	

Rainfall mm of Muzaffarabad

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	Dec	Total
2006	171.9	101.6	100.1	68.1	74	223	613.8	374.9	70.8	62.3	105.3	187.4	2153.2
2007	6.2	107.1	256.5	63	125.8	165.4	227.9	108.5	72	0	18.5	29	1179.9
2008	217.9	67.4	11	123.3	122.6	330.7	256.6	224	132.8	30.4	47.7	145.8	1710.2
2009	113	148.9	68.8	198.2	48.1	76	175.2	177.6	77.8	8.2	29.1	31.8	1152.7
2010	33.4	319.6	67.2	59.3	52.2	100.9	554.6	180.4	100.2	28.2	1	19	1516
Average	108.5	148.9	100.7	102.4	84.5	179.2	365.6	213.1	90.7	25.8	40.3	82.6	

Tropical Rainfall Measuring Mission (TRMM)

Rainfall mm of Jhelum

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	Dec	Total
2006	78.63	32.93	27.51	12.22	46.64	73.99	385.18	315.66	83.83	52.89	27.5	110.03	1247.01
2007	2.3	132.88	186.42	8.21	42.1	154.14	264.27	135.72	75.53	0	0.27	0	1001.84
2008	97.37	36.11	11.96	123.86	33.54	175.24	242.87	124.52	63.36	23.73	1.17	39.69	973.42
2009	62.85	69.47	36.84	44.98	24.88	21.33	104.35	121.28	38.94	1.33	16.29	2.22	544.76
2010	3.61	68.4	20.79	17.46	54.67	62.55	287.05	210.66	89.55	25.56	0	19.11	859.41
2011	0	89.73	34.4	48.84	18.95	68.22	220.67	189.15	125.91	14.78	1.59	1.53	813.77
2012	67.82	37.4	13.54	66.37	15.35	12.16	165.52	267.91	139.31	10.88	0.81	17.64	814.71
2013	8.28	146.76	44.44	64.18	15.31	98.53	272.03	320.87	99.19	13.19	21.86	1.26	1105.90
Average	40.1	76.7	47.0	48.3	31.4	83.3	242.7	210.7	89.5	17.8	8.7	23.9	

Rainfall mm of Garhi Dupatta

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	Dec	Total

2006	185.04	88.76	87.22	60.97	60.53	130.9	439.66	335.46	88.07	49.47	74.57	146.43	1747.08
2007	16.41	121.76	211.39	34.42	92.85	154.89	234.98	157.15	95.04	0.05	7.79	21.5	1148.23
2008	180.72	65.88	32.29	139.25	71.95	271.44	230.01	178.96	47.96	41.07	53.57	132.55	1445.65
2009	106.52	87.12	87.21	160.76	42.18	42.58	128.16	179.22	71.41	10.32	17.11	14.03	946.62
2010	29.97	170.91	55.95	83.7	98.73	105.8	419.34	185.22	96.97	26.06	0.21	10.62	1283.48
2011	11.43	187.47	107.91	145.52	28.77	115.15	208.69	227.17	136.35	56.52	37.1	4.24	1266.32
2012	34.02	112.95	66.42	157.52	43.29	39.67	152.52	322.4	230.34	16.28	1.87	73.79	1251.07
2013	14.13	195.15	88.22	98.51	63.41	164.77	196.84	370.28	148.72	25.38	10.63	2.46	1378.50
Average	72.3	128.8	92.1	110.1	62.7	128.2	251.3	244.5	114.4	28.1	25.4	50.7	

Rainfall mm of Kotli

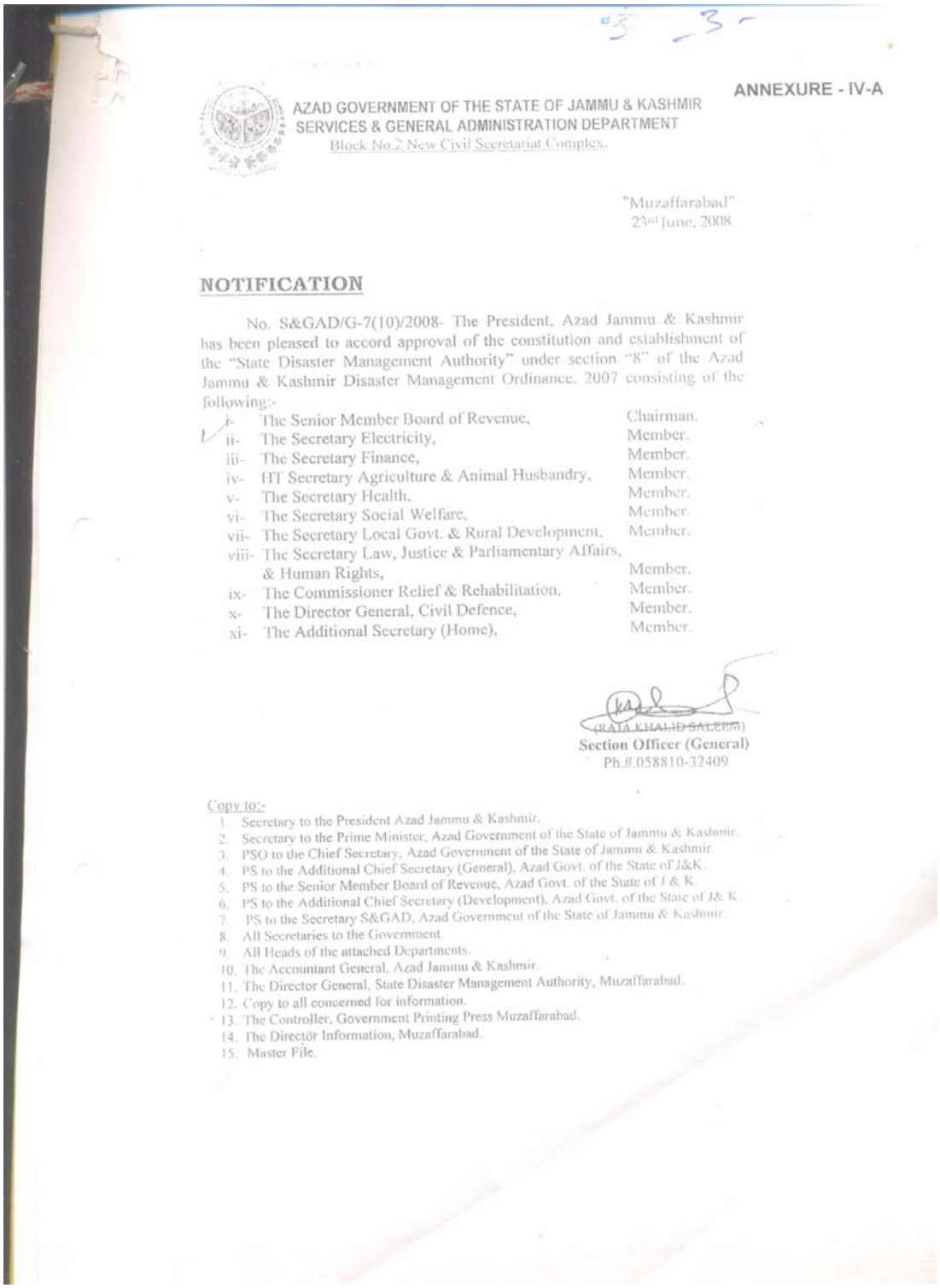
YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	Dec	Total
2006	64.98	65.28	77.49	35.9	59.95	118.11	450.82	327.09	100.95	47.09	57.27	144.59	1549.52
2007	11.53	144.82	226.51	21.07	54.77	133.12	253.77	231.37	122.39	0.04	6.2	3.69	1209.28
2008	160.91	92.07	31.27	140.08	51.31	249.42	279.14	165.07	59.56	33.18	21.87	95.64	1379.52
2009	86.31	148.58	68.09	137.85	29.97	33.41	124.4	172.68	47.81	4.38	24.11	9.69	887.28
2010	27.81	191.62	57.56	63.46	94.96	79.9	392.55	241.09	85.05	36.24	0.41	9.63	1280.28
2011	25.83	163.41	80.95	117.54	25.13	112.1	229.62	214.29	217.31	34.92	15.52	7.61	1244.23
2012	74.52	40.68	35.54	108.92	29.46	37.01	161.25	337.4	170.77	9.95	3.66	45.63	1054.79
2013	43.51	216.57	63.64	91.18	34.76	156.12	285.06	421.04	202.56	19.7	17.12	8.28	1559.54
Average	61.9	132.9	80.1	89.5	47.5	114.9	272.1	263.8	125.8	23.2	18.3	40.6	

Rainfall mm of Muzaffarabad

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	Dec	Total
2006	169.38	89.65	88.33	66.22	59.35	123.25	445.3	356.96	76.22	46.96	84.68	97.56	1703.86
2007	10.62	123.85	215.4	33.48	97.54	150.16	253.29	141.46	86.33	0.18	9.58	21.6	1143.49
2008	115.29	32.4	13.99	152.49	70.84	305.16	246.92	192.56	57.78	41.26	58.08	137.91	1424.68
2009	117.24	69.48	91.83	169.06	45.25	47.19	105.65	200.91	66.16	12.33	19.33	15.21	959.64
2010	3.6	190.17	59.8	82.36	88.71	96.89	485.44	195.25	100.44	22.09	0.23	16.63	1341.61

2011	8.01	191.79	125.27	142.84	28.11	113.69	183.72	230.14	121.19	51.73	31.24	3.85	1231.58
2012	32.13	120.09	86.19	150.74	48.86	40.98	135.69	332.9	247.16	17.16	1.52	59.49	1272.91
2013	21.78	183.06	113.43	98.67	62.36	159.68	222.32	371.55	137.03	28.34	11.28	2.9	1412.40
Average	59.8	125.1	99.3	112.0	62.6	129.6	259.8	252.7	111.5	27.5	27.0	44.4	

Notification for the establishment of State Disaster Management Authority



ANNEXURE - IV-A

AZAD GOVERNMENT OF THE STATE OF JAMMU & KASHMIR
SERVICES & GENERAL ADMINISTRATION DEPARTMENT
Block No.2 New Civil Secretariat Complex.

"Muzaffarabad"
23rd June, 2008

NOTIFICATION

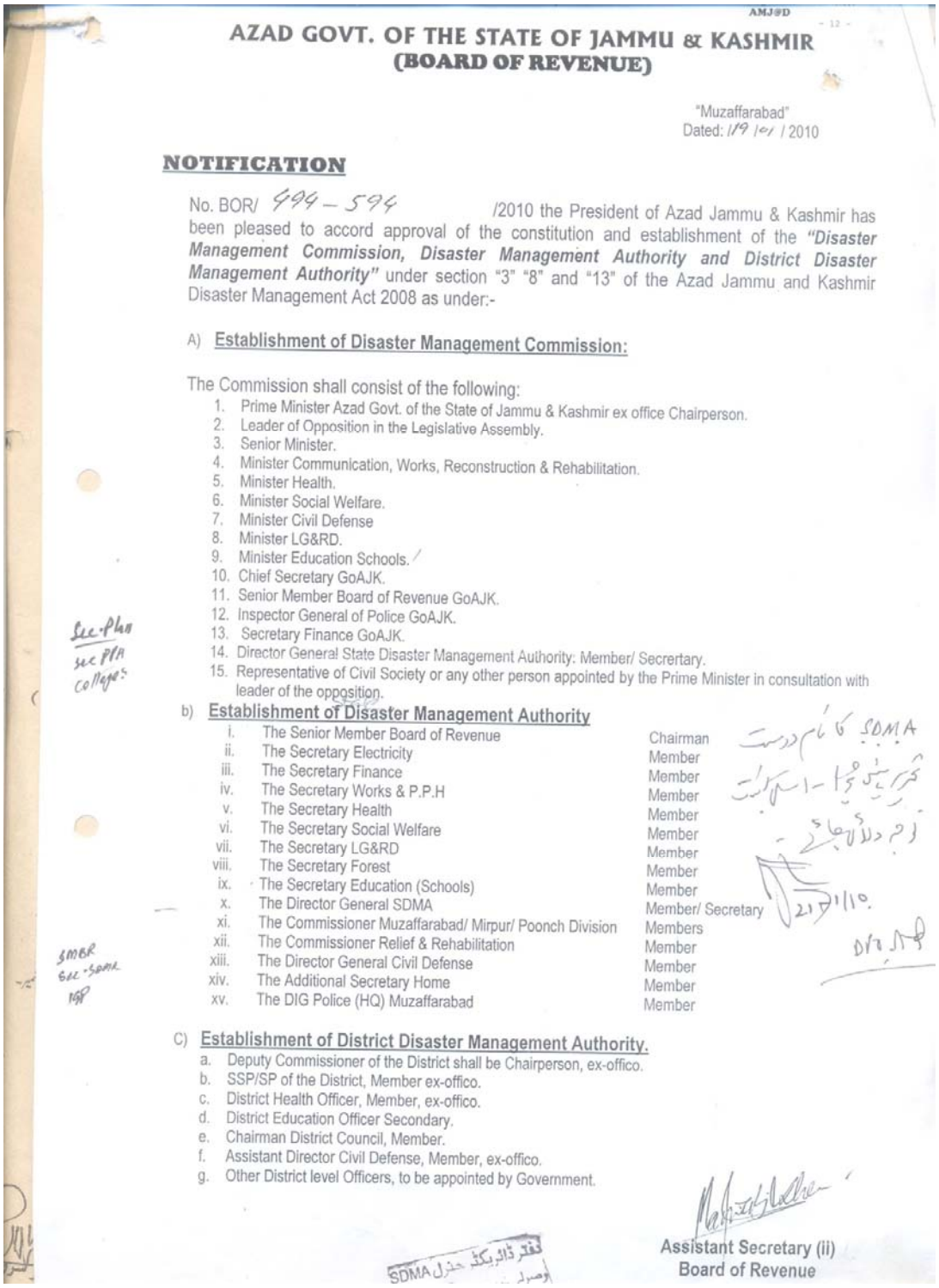
No. S&GAD/G-7(10)/2008- The President, Azad Jammu & Kashmir has been pleased to accord approval of the constitution and establishment of the "State Disaster Management Authority" under section "8" of the Azad Jammu & Kashmir Disaster Management Ordinance, 2007 consisting of the following:-

i-	The Senior Member Board of Revenue,	Chairman.
ii-	The Secretary Electricity,	Member.
iii-	The Secretary Finance,	Member.
iv-	HT Secretary Agriculture & Animal Husbandry,	Member.
v-	The Secretary Health,	Member.
vi-	The Secretary Social Welfare,	Member.
vii-	The Secretary Local Govt. & Rural Development,	Member.
viii-	The Secretary Law, Justice & Parliamentary Affairs, & Human Rights,	Member.
ix-	The Commissioner Relief & Rehabilitation,	Member.
x-	The Director General, Civil Defence,	Member.
xi-	The Additional Secretary (Home),	Member.

(RATA KHALID SALEEM)
Section Officer (General)
Ph.#.058810-32409

Copy to:-
1. Secretary to the President Azad Jammu & Kashmir.
2. Secretary to the Prime Minister, Azad Government of the State of Jammu & Kashmir.
3. PSO to the Chief Secretary, Azad Government of the State of Jammu & Kashmir.
4. PS to the Additional Chief Secretary (General), Azad Govt. of the State of J&K.
5. PS to the Senior Member Board of Revenue, Azad Govt. of the State of J & K.
6. PS to the Additional Chief Secretary (Development), Azad Govt. of the State of J& K.
7. PS to the Secretary S&GAD, Azad Government of the State of Jammu & Kashmir.
8. All Secretaries to the Government.
9. All Heads of the attached Departments.
10. The Accountant General, Azad Jammu & Kashmir.
11. The Director General, State Disaster Management Authority, Muzaffarabad.
12. Copy to all concerned for information.
13. The Controller, Government Printing Press Muzaffarabad.
14. The Director Information, Muzaffarabad.
15. Master File.

Notification for establishment of SDMC, SDMA and DDMA



AMJ&D

- 12 -

AZAD GOVT. OF THE STATE OF JAMMU & KASHMIR
(BOARD OF REVENUE)

"Muzaffarabad"
Dated: 19/01/2010

NOTIFICATION

No. BOR/ 494 – 594 /2010 the President of Azad Jammu & Kashmir has been pleased to accord approval of the constitution and establishment of the ***"Disaster Management Commission, Disaster Management Authority and District Disaster Management Authority"*** under section "3" "8" and "13" of the Azad Jammu and Kashmir Disaster Management Act 2008 as under:-

A) **Establishment of Disaster Management Commission:**

The Commission shall consist of the following:

1. Prime Minister Azad Govt. of the State of Jammu & Kashmir ex office Chairperson.
2. Leader of Opposition in the Legislative Assembly.
3. Senior Minister.
4. Minister Communication, Works, Reconstruction & Rehabilitation.
5. Minister Health.
6. Minister Social Welfare.
7. Minister Civil Defense
8. Minister LG&RD.
9. Minister Education Schools.
10. Chief Secretary GoAJK.
11. Senior Member Board of Revenue GoAJK.
12. Inspector General of Police GoAJK.
13. Secretary Finance GoAJK.
14. Director General State Disaster Management Authority: Member/ Secretary.
15. Representative of Civil Society or any other person appointed by the Prime Minister in consultation with leader of the opposition.

b) **Establishment of Disaster Management Authority**

i.	The Senior Member Board of Revenue	Chairman
ii.	The Secretary Electricity	Member
iii.	The Secretary Finance	Member
iv.	The Secretary Works & P.P.H	Member
v.	The Secretary Health	Member
vi.	The Secretary Social Welfare	Member
vii.	The Secretary LG&RD	Member
viii.	The Secretary Forest	Member
ix.	The Secretary Education (Schools)	Member
x.	The Director General SDMA	Member/ Secretary
xi.	The Commissioner Muzaffarabad/ Mirpur/ Poonch Division	Members
xii.	The Commissioner Relief & Rehabilitation	Member
xiii.	The Director General Civil Defense	Member
xiv.	The Additional Secretary Home	Member
xv.	The DIG Police (HQ) Muzaffarabad	Member

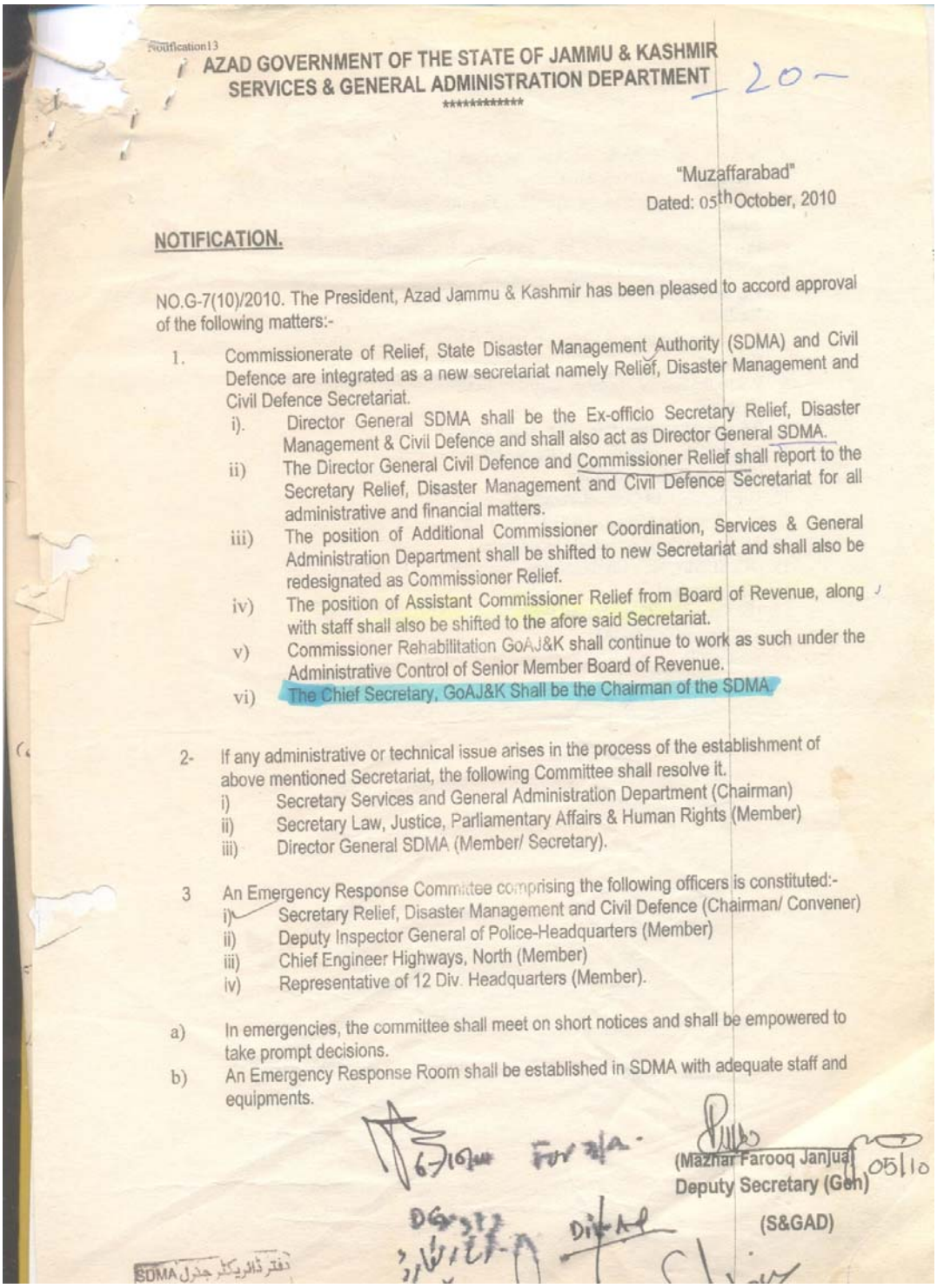
C) **Establishment of District Disaster Management Authority.**

a. Deputy Commissioner of the District shall be Chairperson, ex-offico.
b. SSP/SP of the District, Member ex-offico.
c. District Health Officer, Member, ex-offico.
d. District Education Officer Secondary.
e. Chairman District Council, Member.
f. Assistant Director Civil Defense, Member, ex-offico.
g. Other District level Officers, to be appointed by Government.

دفتر ڈائریکٹر جنرل SDMA وصول

Assistant Secretary (ii)
Board of Revenue

Notification for the Secretariat of Relief, SDMA and Civil Defence



Notification13

AZAD GOVERNMENT OF THE STATE OF JAMMU & KASHMIR
SERVICES & GENERAL ADMINISTRATION DEPARTMENT
****

"Muzaffarabad"
Dated: 05th October, 2010

NOTIFICATION.

NO.G-7(10)/2010. The President, Azad Jammu & Kashmir has been pleased to accord approval of the following matters:-

1. Commissionerate of Relief, State Disaster Management Authority (SDMA) and Civil Defence are integrated as a new secretariat namely Relief, Disaster Management and Civil Defence Secretariat.
   i). Director General SDMA shall be the Ex-officio Secretary Relief, Disaster Management & Civil Defence and shall also act as Director General SDMA.
   ii) The Director General Civil Defence and Commissioner Relief shall report to the Secretary Relief, Disaster Management and Civil Defence Secretariat for all administrative and financial matters.
   iii) The position of Additional Commissioner Coordination, Services & General Administration Department shall be shifted to new Secretariat and shall also be redesignated as Commissioner Relief.
   iv) The position of Assistant Commissioner Relief from Board of Revenue, along with staff shall also be shifted to the afore said Secretariat.
   v) Commissioner Rehabilitation GoAJ&K shall continue to work as such under the Administrative Control of Senior Member Board of Revenue.
   vi) The Chief Secretary, GoAJ&K Shall be the Chairman of the SDMA

2- If any administrative or technical issue arises in the process of the establishment of above mentioned Secretariat, the following Committee shall resolve it.
   i) Secretary Services and General Administration Department (Chairman)
   ii) Secretary Law, Justice, Parliamentary Affairs & Human Rights (Member)
   iii) Director General SDMA (Member/ Secretary).

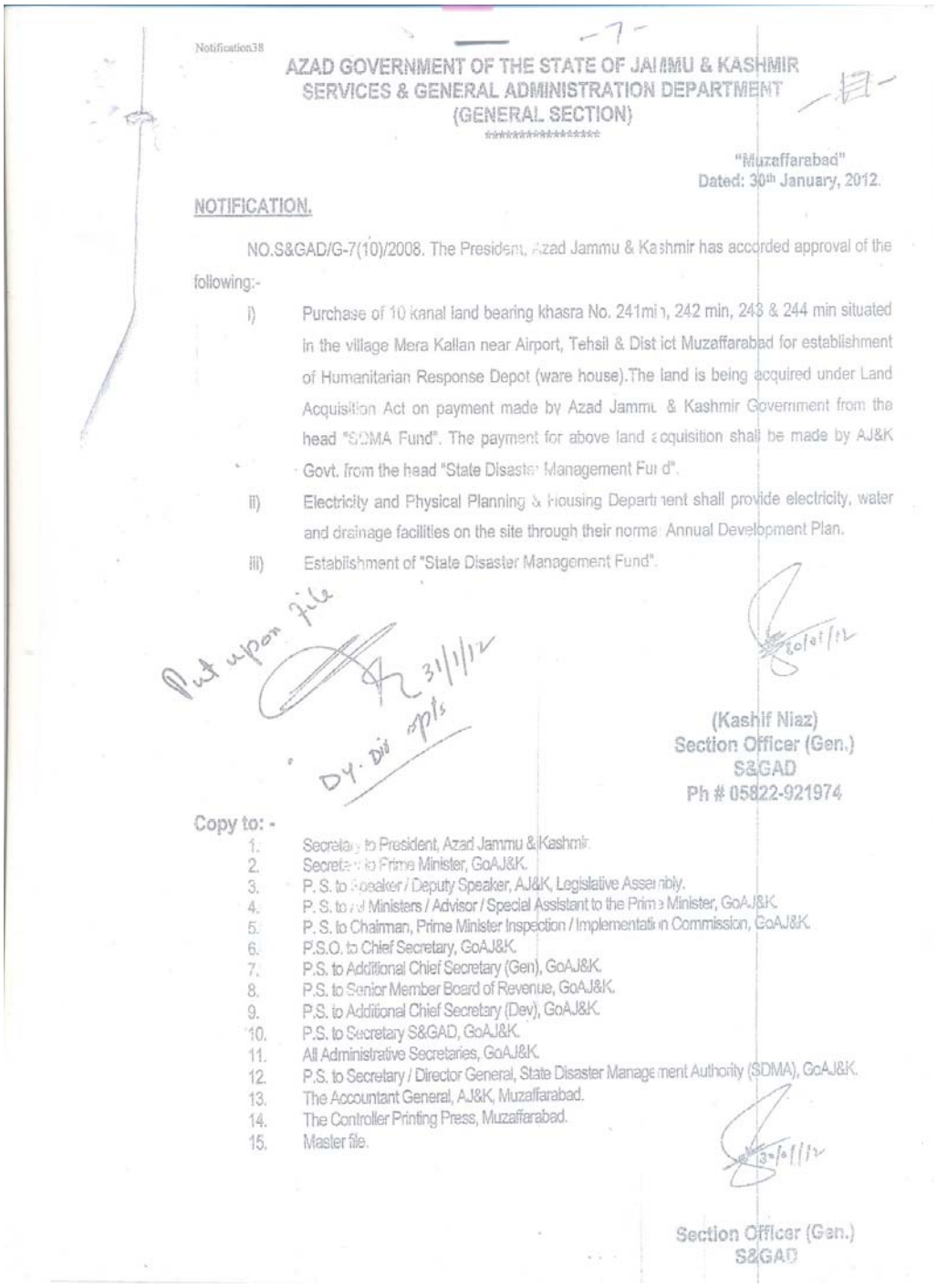
3 An Emergency Response Committee comprising the following officers is constituted:-
   i) Secretary Relief, Disaster Management and Civil Defence (Chairman/ Convener)
   ii) Deputy Inspector General of Police-Headquarters (Member)
   iii) Chief Engineer Highways, North (Member)
   iv) Representative of 12 Div. Headquarters (Member).

a) In emergencies, the committee shall meet on short notices and shall be empowered to take prompt decisions.
b) An Emergency Response Room shall be established in SDMA with adequate staff and equipments.

(Mazhar Farooq Janjua) 05/10
Deputy Secretary (Gen)
(S&GAD)

SDMA دفتر ڈائریکٹر جنرل

Notification for establishment of Stat Disaster Management fund and purchase of land



Notification38

AZAD GOVERNMENT OF THE STATE OF JAMMU & KASHMIR
SERVICES & GENERAL ADMINISTRATION DEPARTMENT
(GENERAL SECTION)

"Muzaffarabad"
Dated: 30th January, 2012.

NOTIFICATION.

NO.S&GAD/G-7(10)/2008. The President, Azad Jammu & Kashmir has accorded approval of the following:-

i) Purchase of 10 kanal land bearing khasra No. 241min, 242 min, 243 & 244 min situated in the village Mera Kallan near Airport, Tehsil & District Muzaffarabad for establishment of Humanitarian Response Depot (ware house).The land is being acquired under Land Acquisition Act on payment made by Azad Jammu & Kashmir Government from the head "SDMA Fund". The payment for above land acquisition shall be made by AJ&K Govt. from the head "State Disaster Management Fund".

ii) Electricity and Physical Planning & Housing Department shall provide electricity, water and drainage facilities on the site through their normal Annual Development Plan.

iii) Establishment of "State Disaster Management Fund".

Put upon file
31/1/12
Dy. Dir apts
30/01/12

(Kashif Niaz)
Section Officer (Gen.)
S&GAD
Ph # 05822-921974

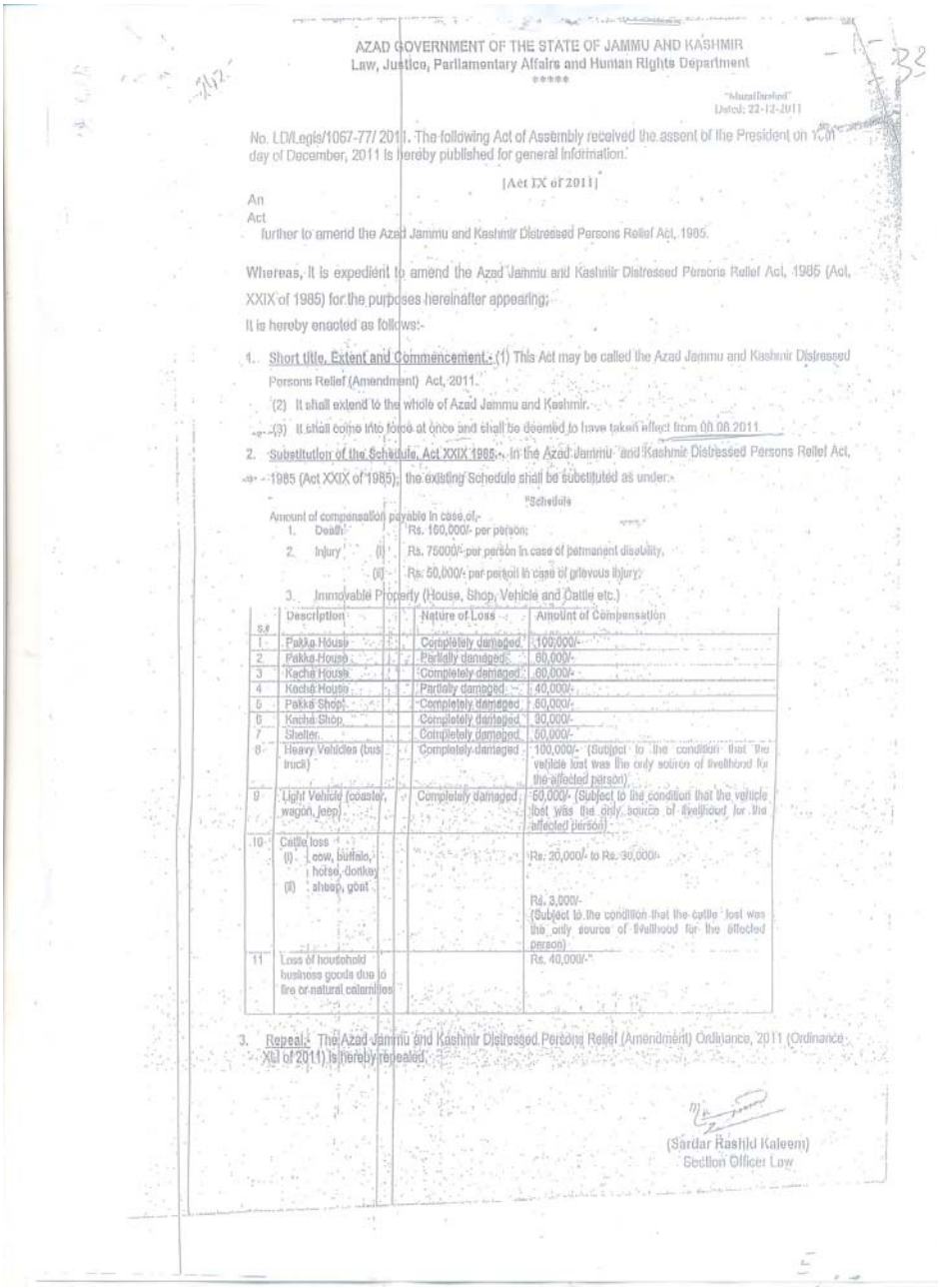
Copy to: -

1. Secretary to President, Azad Jammu & Kashmir.
2. Secretary to Prime Minister, GoAJ&K.
3. P. S. to Speaker / Deputy Speaker, AJ&K, Legislative Assembly.
4. P. S. to all Ministers / Advisor / Special Assistant to the Prime Minister, GoAJ&K.
5. P. S. to Chairman, Prime Minister Inspection / Implementation Commission, GoAJ&K.
6. P.S.O. to Chief Secretary, GoAJ&K.
7. P.S. to Additional Chief Secretary (Gen), GoAJ&K.
8. P.S. to Senior Member Board of Revenue, GoAJ&K.
9. P.S. to Additional Chief Secretary (Dev), GoAJ&K.
10. P.S. to Secretary S&GAD, GoAJ&K.
11. All Administrative Secretaries, GoAJ&K.
12. P.S. to Secretary / Director General, State Disaster Management Authority (SDMA), GoAJ&K.
13. The Accountant General, AJ&K, Muzaffarabad.
14. The Controller Printing Press, Muzaffarabad.
15. Master file.

31/1/12

Section Officer (Gen.)
S&GAD

Notification for Compensation Policy Pictorial view of consultation process



AZAD GOVERNMENT OF THE STATE OF JAMMU AND KASHMIR
Law, Justice, Parliamentary Affairs and Human Rights Department
*****

"Muzaffarabad"
Dated: 22-12-2011

No. LD/Legis/1067-77/ 2011. The following Act of Assembly received the assent of the President on 16th day of December, 2011 is hereby published for general information.

[Act IX of 2011]

An
Act
further to amend the Azad Jammu and Kashmir Distressed Persons Relief Act, 1985.

Whereas, it is expedient to amend the Azad Jammu and Kashmir Distressed Persons Relief Act, 1985 (Act, XXIX of 1985) for the purposes hereinafter appearing;

It is hereby enacted as follows:-

1. Short title, Extent and Commencement.- (1) This Act may be called the Azad Jammu and Kashmir Distressed Persons Relief (Amendment) Act, 2011.
   (2) It shall extend to the whole of Azad Jammu and Kashmir.
   (3) It shall come into force at once and shall be deemed to have taken effect from 08.08.2011.
2. Substitution of the Schedule, Act XXIX 1985.- In the Azad Jammu and Kashmir Distressed Persons Relief Act, 1985 (Act XXIX of 1985), the existing Schedule shall be substituted as under:-

"Schedule

Amount of compensation payable in case of:-
1. Death: Rs. 100,000/- per person;
2. Injury (i) Rs. 75000/- per person in case of permanent disability,
   (ii) Rs. 50,000/- per person in case of grievous injury;
3. Immovable Property (House, Shop, Vehicle and Cattle etc.)

S.#	Description	Nature of Loss	Amount of Compensation
1	Pakka House	Completely damaged	100,000/-
2	Pakka House	Partially damaged	60,000/-
3	Kacha House	Completely damaged	60,000/-
4	Kacha House	Partially damaged	40,000/-
5	Pakka Shop	Completely damaged	60,000/-
6	Kacha Shop	Completely damaged	90,000/-
7	Shelter	Completely damaged	50,000/-
8	Heavy Vehicles (bus truck)	Completely damaged	100,000/- (Subject to the condition that the vehicle lost was the only source of livelihood for the affected person)
9	Light Vehicle (coaster, wagon, jeep)	Completely damaged	50,000/- (Subject to the condition that the vehicle lost was the only source of livelihood for the affected person)
10	Cattle loss (i) cow, buffalo, horse, donkey (ii) sheep, goat		Rs. 20,000/- to Rs. 30,000/- Rs. 3,000/- (Subject to the condition that the cattle lost was the only source of livelihood for the affected person)
11	Loss of household business goods due to fire or natural calamities		Rs. 40,000/-"

3. Repeal.- The Azad Jammu and Kashmir Distressed Persons Relief (Amendment) Ordinance, 2011 (Ordinance XLI of 2011) is hereby repealed.

(Sardar Rashid Kaleem)
Section Officer Law

Sample format of situation report

DAMAGE/LOSS SITUATION REPORT – AJ&K

District	Tehsil	UC	Human Losses						Houses		Livestock		Livelihood Sources			Crops			Remarks
			Death			Injured			Completely	Partially	*	*	*	*	*	*	*	*	
			M	F	C	M	F	C											

Sample Narratives of Simulation

Multi-Hazard Emergency Response Simulation - Mirpur Division
Simulation Only

Simulated Time : 1st February 2017 **Issued To**: District Syndicates
Actual Time : **13th Sep 2016**

Opening/Narrative 1

1. Due to the global climate changes, Pakistan is very high on vulnerability scale and is experiencing unpredictable rainfall, increased temperature and season's variations. These changes have caused huge and unpredictable rain fall in past 6years in Pakistan. Besides heavy rainfall, intensity of earthquake occurrence in the country especially in northern and north-western part has increase manifold. AJ&K is susceptible to a variety of disasters like earthquakes, landslides, GL6OF, floods, flash floods and sever winters other than number of human induced disasters. Very recent floods/landslides in the region have caused loss to life, property, infrastructure, and livelihood of the people.

2. The experience of previous years highlighted the underlying gaps in the capacities of government departments. Inter-department coordination during the response phase, early warning system and its time dissemination to public were also few gray areas observed.

3. As per Pakistan Meteorological Department (PMD), uncertainties in Pakistan's weather pattern will persist towards the early summer. First half of June is likely to remain drier and hotter which may accelerate glacier melting, resultantly rivers will have increase water and early filling up of dams is envisaged. This situation is likely to accentuate by the monsoon.

4. Prime Minister AJ&K has directed SDMA and all districts to ensure a high level of preparedness for upcoming monsoon season to avoid losses/damages and comprehensive and coordinated response.

5. Detailed and accurate hazard and risk assessment is a key to elaborate planning process. Major vulnerabilities of various districts of Muzaffarabad Division are as under: -

a. Floods that includes riverine and flash flooding.
b. Earthquake.
c. Landslides.
d. GLOF.
e. Epidemics.
f. Road accidents and drowning accidents

Requirement 1

6. As DDMA of respective districts carry out hazard assessment to identify hazards and vulnerable areas/points and prioritize them. The information required may be provided on the given template.

Time for consideration: 60 Min
Time for presentation & discussion: 45 Min

HAZARD ASSESSMENT - District----------

Hazard	Priority of Hazard	Tehsil	Union Council	Vulnerable Area/Point*	Estimated Population at Risk

*Also mark on district map

Simulated Time : 1st March 2016 **Issued To**: District Syndicates

Actual Time : **13th Sep 2016**

Narrative 2

1. As per advisory of Pakistan Meteorological Department (PMD), prevailing oceanic, atmospheric and surface climatic conditions suggest that uncertainties in Pakistan's weather pattern will persist towards the early summer. Following are the highlights of weather: -

- March and April are expected to be wetter than normal.
- Most part of the May and first half of June are likely to remain drier and hotter than normal. That would increase the probability of occurrence of heat waves in some areas.
- Heat wave conditions may accelerate glacier melting and trigger GLOF events.
- Due to intense heating, monsoon onset is expected to be early during second half of Jun 2016.

2. The major conclusions drawn from PMD's seasonal outlook are as under: -

- Unusual spell of rains would affect flow in rivers as well as intensify flash flooding and land sliding.
- Snow residency period is likely to be short lived. Rise in temperature and increase in melting may result into high level of discharge in rivers. Flood rehabilitation / protection works may get disrupted in such situation.
- Expected increased inflow in rivers will require careful regulation of dam operations.
- Early start of monsoon may compress the preparedness time for monsoon activities.
- Monsoon rains are expected to be 25/30 % higher than average rain fall.
- Occurrence of earthquake in the area can't be ruled out.

3. The National Monsoon Contingency Plan is prepared based on the plan formulated by the districts and subsequently jelled into provincial plan. Therefore, preparation of comprehensive and all-encompassing District Monsoon Contingency Plan is very important.

Requirement 2

4. AS DDMA, keeping in view the major conclusion drawn from PMD seasonal outlook and risk assessment carried out by your syndicate; formulate a contingency plan for your respective districts. Following aspects may be covered in detail: -

- Expected no of population to be settled in camps

- Safer camp sites for each area and requirement for food, shelter (tents), WASH and health related items.
- Mechanism for effective coordination within the district with all stakeholders and with outside agencies.
- Responsibilities of major stakeholders.
- Safer storage sites for relief store.

Time for consideration: 120 Min

Time for presentation & discussion:45 Min

Simulation Only

Simulated Time : 30th Jul 2017 **Issued To**: District Syndicates

Actual Time : 14th Sep 2016

Narrative 3

1. After an extended period of sweltering heat, which has led to increased snowmelts in the glaciated areas, rains have started in most parts of the country and in neighboring Afghanistan. These rains are continuing without interruption. Heavy rains are also being experienced in the catchment areas. Earthquake tremors have been experienced in some areas of GB, KP and AJ&K and also separately in areas near the Makran Coast.
2. A grave situation has developed whereby a combination of various disasters has been experienced across the country including earthquake, landslides, floods and flash floods. By 30 Jul at 1000 hrs the situation in your district is as follows: -

Mirpur District

- Due to heavy rains and snow melt water inflow in River Jhelum increased which led to swelling out of river. UC Afzalpur has been inundated effecting around thousand people of the area which needs evacuation and relief support.
- As per the SOPs Mangla Dam was filled to its optimum however due to heavy rains and snow melt in the upper part of the country likelihood of huge quantity of water is expected in Mangla Dam. WAPDA authorities have decided to release water through spillways. This situation is likely to effect the remarkable number of population for which early planning and execution by the DDMA is very essential.

Requirement 3

3. As DDMA of respective districts give your assessment of the situation covering following: -

- Response to the prevailing situation
- Impending challenges
- Any assistance required from PDMA.

Time for consideration: 60 Min

Time for presentation & discussion: 30 Min

Simulation Only

Simulated Time : 30th Jul 2017 **Issued To**: District Syndicates

Actual Time : 14th Sep 2016

Narrative 4

1. After an extended period of sweltering heat, which has led to increased snowmelts in the glaciated areas, rains have started in most parts of the country and in neighboring Afghanistan. These rains are continuing without interruption. Heavy rains are also being experienced in the catchment areas. Earthquake tremors have been experienced in some areas of GB, KP and AJ&K and also separately in areas near the Makran Coast.
2. A grave situation has developed whereby a combination of various disasters has been experienced across the country including earthquake, landslides, floods and flash floods. By 30 Jul at 1000 hrs the situation in your district is as follows: -

Bhimber District

- A huge landslide triggered near Jandichontra due to earthquake jolts, resultantly road Bhimber-Samanihas been blocked. No movement is possible in near future, as work assessment is still being done by C&W department.
- Due to heavy rains inflow in Bhimber Nala has increased manifold, due to which Bhimber city is under threat.
- Intense Indian firing in Khanjar Center continuing since number of days due to which population of Nihala and Chhai cannot sustain in their ears and required immediate attention.

Requirement 3

3. As DDMA of respective districts give your assessment of the situation covering following: -
    - Response to the prevailing situation
    - Impending challenges
    - Any assistance required from PDMA.

Time for consideration: 60 Min

Time for presentation & discussion: 30 Min

Simulation Only

Simulated Time : 30th Jul2016 **Issued To**: District Syndicates

Actual Time : 14th Sep, 2016

Narrative 5

1. After an extended period of sweltering heat, which has led to increased snowmelts in the glaciated areas, rains have started in most parts of the country and in neighboring Afghanistan. These rains are continuing without interruption. Heavy rains are also being experienced in the catchment areas. Earthquake tremors have been experienced in some areas of GB, KP and AJ&K and also separately in areas near the Makran Coast.
2. A grave situation has developed whereby a combination of various disasters has been experienced across the country including earthquake, landslides, floods and flash floods. By 30 Jul at 1000 hrs the situation in your district is as follows: -

Kotli District

- Due to heavy rains flash flooding in TattaPani has occurred, due to which areas of TattaPani, Sarda, Thalair and Mandi have been effected approximately 600 peoples have been effected and need evacuation and relief.
- Due to earthquake jolts considerable damages in Karjaai has been reported as per the information sizeable number of peoples are under threat awaiting government response.
- **Requirement 3**

3. As DDMA of respective districts give your assessment of the situation covering following: -

- Response to the prevailing situation
- Impending challenges
- Any assistance required from PDMA.

Time for consideration: 60 Min

Time for presentation & discussion: 30 Min

Simulation Only

Simulated Time : 15th September 2016 **Issued To**: District Syndicates

Actual Time : 14th Sep, 2016

Narrative 6

1. Various challenging situations have been managed by the local Governments fairly well. Rescue &relief operation is about to be completed. All the districts have suffered considerable losses of human lives, houses, livelihood sources, agriculture and livestock. Prime Minister has announced compensation package for all affectees.

2. Comprehensive policy and accurate damage/loss assessment by your respective districts will facilitate distribution of compensation. This will not only help to alleviate the suffering of the affectees but will also ensure transparency. Local and national media however is reporting negatively against the government response. To curb this factor effective media handling during all the phases of the response is very essential and must be given due importance.

Requirement 4

3. As DDMA of respective districts give your response on following: -

- Parameters of assessment and prepare damages and losses report as per the given template.
- Media handling plan/SOP of the district.

Time for consideration: 40 Min

Time for presentation & discussion: 30 Min

Simulation Only

Important Contact Numbers

Sr.	Designation	Contact Number
1	Secretary SDMA/Civil Defence	05822 921536
2	Secretary Planning & Development	05822 921992
3	Secretary SERRA/DG SERRA	05822 921327
4	Secretary Health	05822 921900
5	Secretary Board of Revenue	05822 921413
6	Commissioner Muzaffarabad	05822 920097
7	Commissioner Mirpur	05827 921266
8	Commissioner Poonch	05824 920050
9	Commissioner Mangla Dam	05827 921200
10	Deputy Commissioner Muzaffarabad	05822 920055
11	Deputy Commissioner Jhelum Valley	922607
12	Deputy Commissioner Neelum	05821 920001
13	Deputy Commissioner Mirpur	05827 921270
14	Deputy Commissioner Kotli	05826 920163-4
15	Deputy Commissioner Bhimber	05828 920220
16	Deputy Commissioner Poonch	05824 920052
17	Deputy Commissioner Sudhnoti	05825 920011
18	Deputy Commissioner Haveli (Kahuta)	05823 921708
19	Deputy Commissioner Bagh	05823 920046
20	Senior Superintendent Police Muzaffarabad	05822 930006
21	Superintendent Police Jhelum Valley	932603
22	Superintendent Police Neelum	05821 930001
23	Senior Superintendent Police Mirpur	05827 930000
24	Superintendent Police Kotli	05826 930208
25	Superintendent Police Bhimber	05828 930006
26	Superintendent Police Poonch	05824 930001
27	Superintendent Police Sudhnoti	05825 930000
28	Superintendent Police Haveli (Kahuta)	05823 931700
29	Superintendent Police Bagh	05823 930000

Azad Jammu & Kashmir Disaster Management Act, 2008

AZAD GOVT OF THE STATE OF JAMMU AND KASHMIR
Law, Justice, Parliamentary Affairs and Human Rights Department
****

'Muzaffarabad'
Dated: 27.06.2008

No./LD/Legis./ 437-51 /2008. The following Act of Assembly received the assent of the President on 18th day of June, 2008, is hereby published for general information.

[Act I of 2008]

An

Act

to provide for the establishment of a Disaster Management System for Azad Jammu & Kashmir

WHEREAS it is expedient to provide for an effective disaster management system and for matters connected therewith or incidental thereto;

1. **Short title, extent and commencement.-** (1) This Act may be called the Azad Jammu & Kashmir Disaster Management Act, 2008.

(2) It extends to the whole of Azad Jammu & Kashmir.

(3) It shall come into force at once.

2. **Definitions.-** In this Act, unless the context otherwise requires,-

(a) "affected area" means an area or part of the Azad Jammu & Kashmir affected by a disaster;

(b) "disaster" means a catastrophe, or a calamity in an affected area, arising from natural or man made causes, or by accident which results in a substantial loss of life or human suffering or damage to, and destruction of, property;

(c) "disaster management" means managing the complete disaster spectrum including-

(i) preparendness;
(ii) response;
(iii) recovery and rehabilitation; and
(iv) reconstruction.

(d) "District Authority" means the District Disaster Management Authority established under Section 13;

(e) "District Plan" means a Disaster Management Plan prepared for a particular district under Section 16;

(f) "Government" means the Azad Government of the State of Jammu & Kashmir;

(g) "Authority" means the Azad Jammu & Kashmir Disaster Management Authority established under Section 8;

(h) "Plan" means the plan for disaster management for the whole of the territory of Azad Jammu & Kashmir prepared under section 10;

(i) "Commission" means the Disaster Management Commission established under Section 3;

(j) "Director General" means Director General of the Authority appointed under Section 8(3) of this Act; and

(k) "Prescribed" means prescribed by rules made under this Act;

CHAPTER II

THE DISASTER MANAGEMENT COMMISSION

3. **Establishment of Disaster Management Commission.-(I)** As soon as may be after the commencement of this Act the Azad Government of the State of Jammu & Kashmir may, by a notification in the Official Gazette, establish a Commission to be known as the Disaster Management Commission.

(2) The Commission shall consist of:-

(a) The Prime Minister of Azad Jammu & Kashmir who shall be the Chairperson, ex officio;

(b) Leader of Opposition in the Legislative Assembly;

(c) Senior Minister;

(d) Minister for Communication, works, reconstruction & rehabilitation;

(e) Minister for Health;

(f) Minister for Relief & Rehabilitation;

(g)Minister for Social Welfare;

(h) Minister for Forest;

(i) Minister for Civil Defense;

(j) Minister for Planning and Development;

(k) Chief Secretary, Azad Govt. of the State of Jammu and Kashmir;

(l) Senior Member Board of Revenue;

(m) Inspector General Police, Azad Govt. of the State of Jammu & Kashmir;

(n) Secretary Finance, Azad Govt. of the State of Jammu & Kashmir; and

(o) Representatives of civil society or any other person appointed by the Prime Minister.

(p) Such other member or members as may be appointed by the Prime Minister in consultation with the Leader of opposition.

(3) The Director General, appointed under sub-section (3) of section 8 shall act as ex *officio* Secretary of the Commission.

4. **Meetings of the Commission.-** (1) The Commission shall meet as and when necessary and at such time and place as the Chairperson of the Commission may think fit.

(2) The Chairperson of the Commission shall preside over the meetings of the Commission.

5. **Appointment of officers, and other employees of the Commission.** The Government shall provide the Commission with such officers, consultants and employees, as it considers necessary for carrying out its functions.

6. **Powers and functions of Commission**.- (1) Subject to the provisions of this Act, the Commission shall have the responsibility for laying down the policies, plans and guidelines for disaster management.

(2) Without prejudice to generality of the provisions in sub-section (1), the Commission may-

(a) lay down policies on disaster management;

(b) approve the Plan for territory of Azad Jammu & Kashmir;

(c) approve plans prepared by the Departments, Divisions & Districts;

(d) lay down guidelines to be followed by the Government;

(e) arrange for, and oversee, the provision of funds for the purpose of mitigation measures, preparedness and response; and

(f) take such other measures for the prevention of disaster, or the mitigation, or for preparedness and capacity building for dealing with disaster situation as it may consider necessary.

(3) The Chairperson of the Commission shall, in the case of emergency, have power to exercise all or any of the powers of the Commission but exercise of such powers shall be subject to *ex post facto* ratification by the Commission.

7. **Constitution of advisory committees by the Commission**.-(I) The Commission may constitute an advisory committee or committees as required, of experts in the field of disaster management.

(2) The members of the advisory committees shall be paid such allowances as may be prescribed by the Government.

8. **Establishment, of the Azad Jammu &. Kashmir Disaster Management Authority**.- (1) The Government shall, immediately after issue of notification under sub-section (1) of section 3, establish an Authority to be known as Disaster Management Authority (hereinafter referred to as the Authority) for carrying out the purposes of this Act.

(2) The Authority shall consist of such number of Members as may be prescribed and shall include the Chairperson and the Director General.

(3) There shall be a Director General of the Authority, to be appointed by the Government, on such terms and conditions, as may be prescribed.

9. **Powers and functions of the Disaster Management Authority**.- The Authority shall-

(a) act as the implementing, coordinating and monitoring body for disaster management;

(b) prepare the Plan to be approved by the Commission;

(c) implement coordinate and monitor the implementation of the policy;

(d) lay down guidelines for preparing disaster management plans by different Ministries or Departments.

(e) provide necessary technical assistance to the Governments Districts Management Authorities for preparing their disaster management plans in accordance with the guidelines laid down by the Commission;

(f) coordinate response in the event of any threatening disaster situation or disaster;

(g) lay down guidelines for, or give directions to the concerned Ministries or Departments and District Management Authorities regarding measures to be taken by them in response to any threatening disaster situation or disaster;

(h) for any specific purpose or for general assistance requisition the services of any person and such person shall be a co-opted member and exercise such power as conferred upon him by the Authority in writing;

(i) promote general education and awareness in relation to disaster management; and

(j) perform such other functions as the Commission may require it to perform.

10. **Plan.-(I)** There shall be drawn up a plan for disaster management for the whole of the territory of Azad Jammu & Kashmir.

(2) The Plan shall be prepared by the Authority having regard to the policy and in consultation with the expert bodies or organizations in the field of disaster management, and approved by the Commission.

(3) The Plan shall include-

(a) measures to be taken for the prevention of disasters or the mitigation of their *effects;*

(b) measures to be taken for the integration of mitigation measures in the development plans;

(c) measures to be taken f9r preparedness and capacity building to *effectively* respond to any threatening disaster situations or disaster; and

(d) roles and responsibilities of different Ministries or Departments of the Government in respect of measures specified in clauses (a), (b) and (c).

(4) The plan shall be reviewed and updated annually.

(5) The Government shall make appropriate provisions for financing the measures to be carried out under the plan.

11. **Guidelines for minimum standards of relief.-** Subject to directions of the Commission, the Authority shall lay down guidelines for the minimum standards of relief to be provided to persons *affected* by disaster which shall include,-

(a) the minimum requirements to be provided in the relief camps and *affectees* in relation to shelter, tents, food, drinking water, medical cover and sanitation;

(b) the special provisions to be made for vulnerable groups;

(c) *ex gratia* assistance on account of loss of life as also assistance on account of damage to houses and for restoration of means of livelihood; and

(d) such other relief as may be necessary.

12. **Relief in loan repayment, etc.**-Subject to such directions as the Commission may give, the Authority may, in cases of disasters of severe magnitude give directions regarding relief in repayment of loans or for grant of fresh loans to the persons affected by disaster on such confessional terms as may be appropriate.

CHAPTER III

DISTRICT DISASTER MANAGEMENT AUTHORITY

13. **Constitution of District Disaster Management Authority.-(1)** The Government shall, as soon as may be after issue of notification under sub-section (1) of section 3, by notification in the Official Gazette, establish a District Disaster Management Authority for every district.

(2) The District Authority shall consist of such number of members, as may be prescribed by the Government, and unless the rules otherwise provide, it shall consist of the following members, namely:-

(a) Deputy Commissioner of the District who shall be Chairperson, ex *officio;*

(b) SSP/SP of the District, member, *ex offico*

(c) the District Health Officer, member, ex-officio;

(d) the Assistant Director Civil Defence member, *ex-officio;* and (e) such other district level officers, to be appointed by the Government; and

(f) Member of Legislative Assembly of Azad Jammu and Kashmir from the respective affected area.

14. **Powers of Chairperson of District Authority.-** (1) The Chairperson of the District Authority shall, in the case of an emergency, have power to exercise all or any of the powers of the District Authority but the exercise of such powers shall be subject to ex *post facto* approval of the District Authority.

15. **Powers and functions of District Authority.-** (1) The District Authority shall be the district planning, coordinating and implementing body for disaster management and take all measures for the purposes of disaster management in the district in accordance with the guidelines laid down by the Authority.

(2) Without prejudice to the generality of the foregoing provisions, the District Authority may-

(a) prepare a disaster management plan including district response plan for the district;

(b) coordinate and monitor the implementation of the Policy, and Plan;

(c) ensure that the areas in the district vulnerable to disasters are identified and measures .for the prevention of disasters and the mitigation of its effects are undertaken by the departments of the Government at the district level as well as by the local authorities;

(d) ensure that the guidelines for prevention, mitigation, preparedness and response measures as laid down by the Authority are followed by all departments of the Government at the district level and the local authorities in the district;

(e) give directions to different authorities at the district level and local authorities to take such other measures for the prevention or mitigation of disasters as may be necessary;

(f) lay down guidelines for preparation of disaster management plans by the departments of the Government at the districts level and local authorities in the district;

(g) monitor the implementation of disaster management plans prepared by the Departments of the government at the district level;

(h) lay down guidelines to be followed by the Departments of the Government at the district level;

(i) organize and coordinate specialized training programmes for different levels of officers, employees and voluntary rescue workers in the district;

(j) facilitate community training and awareness programmes for prevention of disaster or mitigation with the support of local authorities, governmental and non-governmental organizations;

(k) setup, maintain, review and upgrade the mechanism for early warnings and dissemination of proper information o public;

(l) prepare, review and update district level response plan and guidelines;

(m) coordinate with, and give guidelines to, local authorities in the district to ensure that pre-disaster and post-disaster management activities in the district are carried out promptly and effectively;

(n) review development plans prepared by the Departments of the Government at the district level, statutory authorities or local authorities with a view to make necessary provisions therein for prevention of disaster or mitigation;

(o) identify buildings and places which could, in the event of disaster situation be used as relief centres or camps and make arrangements for water supply and sanitation in such buildings or places;

(p) establish stockpiles of relief and rescue materials or ensure

preparedness to make such materials available at a short notice;

(q) provide information to the Authority relating to different aspects of disaster management;

(r) encourage the involvement of non-governmental organizations and voluntary social-welfare institutions working at the grassroots level in he district for disaster management;

(s) ensure communication systems are in order, and disaster management drills are carried out periodically; and

(t) perform such other functions as the Government may assign to it or as it deems necessary for disaster management in the District.

16. **District plan**.-(1) There shall be a plan for disaster management for every district of Azad Jammu & Kashmir.

(2) The District Plan shall be prepared by the District Authority having regard to the Plan as prescribed in Section 10.

(3) The District plan shall be reviewed and updated annually.

17. **Additional Powers of DiStrict Authority**.- For the purpose of assisting, protecting or proViding relief to the community, in response to any disaster, the District Authority may-

(a) give directions for the release and use of resources available with any department of the Government and the local authority in the district;

(b) control and restrict vehicular traffic to, from and within, the vulnerable or affected area;

(c) control and restrict the entry of any person into, his movement within and departure from, a vulnerable or affected area;

(d) remove debris, conduct search and carryout rescue;

(e) provide shelter, tent, food, drinking water and essential provisions, healthcare and services;

(f) establish emergency communicationsystems in the affected area;

(g) make arrangements for the disposal of the unclaimed dead bodies;

(h) direct any Department of the Government or any authority or body under that Government at the district level to take such measures as are necessary in its opinion;

(i) require experts and consultants in the relevant fields to advise and assist as it may deem necessary;

(j) procure exclusive or preferential use of amenities from any authority or person;

(k) construct temporary bridges or other necessary structures and demolish structures which may be hazardous to public or aggravate the effects of the disaster;

(l) ensure that the non-governmental organizations carry out their activities in an equitable and non-discriminatory manner;

(m) take such other steps as may be required or warranted to be

taken in such a situation.

CHAPTER IV

MEASURES BY THE GOVERNMENT FOR DISASTER MANAGMENT

18. **Government to take measure.-(I)** Subject to the provisions of this Act, the Government may take all such measures as it deems necessary or expedient for the purpose of disaster management.

(2) In particular and without prejudice to the generality of the foregoing provisions, the measures which the Government may take shall include measures with respect to all or any of the following matters, namely:

(a) coordination of actions of the Ministries and departments of the Government, Authority, governmental and non-governmental organizations in relation to disaster management;

(b) cooperation and assistance to Governments, as requested by them or otherwise deemed appropriate by it;

(c) requisition and deployment of armed forces, civil armed forces or any other civilian personnel or foreign contingents required for the purposes of this Act;

(d) coordination and mobilization with the United Nations agencies, international organizations and governments of foreign countries specially in disaster prone areas, for the purposes of this Act;

(e) establish institutions for research, training, and developmental programmes in the field of disaster management; and

(f) such other matters as it deems necessary or expedient for the purpose of securing effective implementation of the provisions of this Act.

(3) The Government may extend such support to other countries affected by major disaster as it may deem appropriate.

CHAPTER V

LOCAL AUTHORITIES

19 **Functions of the local authority.-(I)** Subject to the directions of the District Authority, a local authority shall -

(a) ensure that its officers and employees are trained for disaster management;

(b) ensure that resources relating to disaster management are so maintained as to be readily available for use in the event of any threatening disaster situation or disaster;

(c) ensure that all construction projects under it or within its

jurisdiction conform to the standards and specifications laid down for prevention of disasters and mitigation by the Authority and the District Authority; and

(d) carry out relief, rehabilitation and reconstruction activities in the affected area in accordance with the Plan and the District Plan.

(2) The local authority may take such other measures as may be necessary for the disaster management.

CHAPTER VI

STATE INSTITUTE OF DISASTER MANAGEMENT

20. **State Institute of Disaster Management.-** (1) With effect from such date as the Government may, by notification in the Official Gazette appoint in this behalf, there shall be established an institute to be called the State Institute of Disaster Management.

(2) Subject to the provisions of this Act, the State Institute of Disaster Management shall be responsible for planning and promoting training and research and developing core competencies in the area of disaster management, documentation and development of national level information base relating to disaster management policies, prevention mechanisms and mitigation measures.

(3) Without prejudice to the generality of the foregoing provisions, the State Institute, for the discharge of its functions, may-

(a) develop training modules, undertake research and documentation in disaster management and organize training programmes;

(b) formulate and implement a comprehensive human resource development plan covering all aspects of disaster management;

(c) provide assistance in state level policy formulation;

(d) provide required assistance to the training and research institutes for development of training and research programmes for stakeholders including Government functionaries;

(e) provide assistance to the Governments in the formulation of State level policies, strategies, disaster management framework and any other assistance as may be required by the Governments for capacity-building of stakeholders, Government including its functionaries, civil society members, corporate sector and people's elected representatives;

(f) develop educational materials for disaster management including academic and professional courses;

(g) promote awareness among stakeholders including college or school teachers and students, technical personnel and others associated with multi-hazard mitigation, preparedness and

response measures;

(i) undertake any other function as may be assigned to it by the Government.

CHAPTER VII

STATE DISASTER RESPONSE FORCE

21. **Establishment of State Disaster Response Force.-** (1) There shall be established a State Disaster Response Force for the purpose of specialist response to a threatening disaster situation or disaster.

(2) Subject to the provisions of this Act, the force shall be constituted in such manner and the conditions of service of the members of the Force shall be such as may be prescribed.

22. **Control, direction, etc.-** The general superintendence, direction and control of the State Disaster Response Force shall vest in, and exercisable by, the Authority.

CHAPTER VIII

FINANCE, ACCOUNTS AND AUDIT

23. **State Fund for Disaster Management.-** (1) The Government may, by notification in the Official Gazette, constitute a Fund to be called the State Disaster Management Fund for meeting any threatening disaster situation or disaster.

(2) The State Disaster Management Fund shall be financed from the following sources, namely:-

(a) grants made by the Federal Government;

(b) grants mad by the government;

(c)loans, aid and donations from the national or international agencies; and

(d) donation received from any other source.

(3) On commencement of this Act, the following Funds shall become part of the State Disaster Management Fund, namely:-

(a) Prime Minister's Disaster Relief Fund;

(b) any other Fund relatable to natural calamities established at State level as the Government may determine;

(4) The State Disaster Management Fund shall be kept in one or more accounts maintained by the Authority, in local or foreign currency, in any scheduled bank and shall. be operated in accordance with the directions of the Authority.

(5) The State Disaster Management Fund shall be administered by the Authority towards meeting the expenses for emergency preparedness, response, mitigation, relief and reconstruction.

24. **Allocation of funds by the Governments.-** The Government, in their annual budgets, make provisions for funds for the purposes of carrying out the activities

and programmes set out in its disaster management plan.

25. **Emergency procurement and accounting.-** (1) Where by reason of any impending disaster situation or disaster, the Authority or District Authority is satisfied that immediate procurement of provisions or materials or the immediate application of resources are necessary for rescue or relief it may authorize the concerned department or authority to make the emergency procurement and in such case, the standard procedure requiring inviting of tenders shall be deemed to be waived.

(2) A certificate about utilization of provisions or materials by the controlling officer authorized by the Authority or District Authority, as the case may be, shall be deemed to be a valid document or voucher for the purpose of accounting of emergency procurement of such provisions or materials.

CHAPTER IX

OFFENCES AND PENALTIES

26. **Punishment for obstruction. etc.-** Whoever, without reasonable cause,

(a) obstructs any officer or employee of the Government or a person authorized by the Authority or District Authority in the discharge of his functions under this Act; or

(b) refuses to comply with any direction given by or on behalf of the Government under this Act;

shall be punishable with imprisonment for a term which may extend to one year or with fine, or with both, and if such obstruction or refusal to comply with such directions results in loss of lives or imminent danger thereto, shall be punishable with imprisonment for a term which may extend to two years, or with fine, or with both.

27. **Punishment for false c1aim.-** Whoever knowingly makes a claim which he knows or has reason to believe to be false for obtaining any relief or assistance for repair, reconstruction or other benefits consequent to disaster from any officer of the Government, the Authority or District Authority, shall be punishable with imprisonment for a term which may extend to two years or with fine or with both.

28. **Punishment for false warning.-**Whoever makes or circulates a false alarm or warning as to disaster .or its severity or magnitude leading to panic shall be punishable with imprisonment which may extend to one year or with fine.

29. **Failure of officer in duty or his connivance at the contravention of the provisions of this Act.-** Any officer, on whom any duty has been imposed by or under this Act and who refuses to perform or withdraws himself from the duties of his office shall, unless he has obtained the express written permission of his official superior or has other lawful excuse for so doing, be punishable with imprisonment for a term which may extend to one year or with fine.

CHAPTER X

MISCELLANEOUS

30. **Prohibition against discrimination.-** While providing compensation and relief to the victims of disaster, there shall be no discrimination on the ground of sex, caste, community, descent or religion.

31. **Power of requisition of resources. provisions. vehicles. etc .• for rescue operations. etc.-** If it appears to the Authority, District Authority or any officer as may be authorized by it in this behalf that-

(a) any resources with any authority or person are needed for the purpose of prompt response;

(b) any premises are needed or likely to be needed for the purpose of rescue operations; or

(c) any vehicle is needed or is likely to be needed for the purposes of transport of resources from disaster affected areas or transport of resources to the affected area or transport in connection with rescue, rehabilitation or reconstruction;

such authority may, by order in writing, requisition such resources or premises or vehicle, as the case may be, and may make such further orders as may appear to it to be necessary or expedient in connection.

32. **Payment of compensation.-** Whenever any authority requisitions any premises there shall be paid to its owner compensation the amount of which shall be determined by taking into consideration the rent payable in respect of the premises, or if no rent is so payable, the rent payable for similar premises in the locality:

Provided that any owner of premises being aggrieved by the amount of compensation so determined may Within thirty days make an application to the Government.

Provided further that where there is any dispute as to the title to receive the compensation or as to the apportionment of the amount of compensation, it shall be referred to the Government.

33. **Direction to media for communication of warnings, etc.-** The Authority or a District Authority may give direction to any authority or person in control of any audio or audio-visual media or such other means of communication as may be available to carry and warnings or advisories regarding any impending disaster situation or disaster, and such authority or person shall comply with such direction.

34. **Annual report.-** (1) The Authority shall prepare once every year, in such form and at such time as ~ay be prescribed by rules, an annual report giving a true and full account of its activities during the previous year and copies thereof shall be forwarded to the Government which shall lay it before the Azad Jammu & Kashmir Legislative Assembly.

(2) The District Authority shall prepare once every year, in such form and at such time

as may be prescribed by rules, an annual report giving a true and full account of its activities during the previous year and copies thereof shall be forwarded to the Authority.

35. **Bar of jurisdiction.-** No court or tribunal shall have jurisdiction to entertain any suit or proceeding in respect of anything done, action taken, orders made, direction, instruction or guidelines issued by the Government, Authority or District Authority in pursuance of any power conferred by, or in relation to its functions, by this Act.

36. **Indemnity.-** Officers and employees of the Government, Authority or District Authority shall be immune from legal process in regard to any warning in respect of any impending disaster communicated or disseminated by them in their official capacity or any action taken or direction issued by them in pursuance of such communication or dissemination.

37. **Action taken in good faith.-** No suit or prosecution or other proceeding shall lie in any court against the Government or the Authority or the District Authority or local authority or any officer or employee of the Government or the Authority or the District Authority or Local Authority in respect of any work done or purported to have been done or intended to be, in good faith, done by such authority or Government or such officer or employee or such person under the provisions of this Act or the rules made thereunder.

38. **Delegation of powers to the Authority.-** The Commission may, for effective implementation of the policy on disaster management, by general or special order delegate to the Authority any of its powers or functions under this Act subject to such conditions as it may think fit to impose.

39. **Act not to derogate from other laws.-** The provisions of this Act shall be in addition to, and not in derogation of any other law for the time being enforce.

40. **Power to make rules.-** The Government may, by notification in the Official Gazette, make rules for carrying out the purposes of this Act.

41. **Removal of difficulties.-** If any difficulty arises in giving effect to the provisions of this Act, the Government may, by notification in the Official Gazette, make such order, not inconsistent with the provisions of this Act, as may appear to it 'to be necessary or expedient for the removal of the difficulty.

42. **Repeal.-** The Azad Jammu and Kashmir Disaster Management Ordinance, 2008 (Ordinance V of 2008) is hereby repealed.

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(Raja Zulqarnain Khan)
President
Azad Jammu & Kashmir

(Sajid Amir Suddozai)
Section Officer (Legislation)

Pictorial View of Consultation Process

Meeting with Mr. Ehsan Khalid Kiyani, SMBR / Principal Secretary to Prime Minister AJK and Ch. Liaqat Hussain, Secretary S&GAD

Meeting with Mr. Abid Hussain Gillani, Secretary C&W AJK

Meeting with Dr. Shela Waqar, Secretary Agriculture AJK

Meeting with Mr. Sharif Dar, Chief Engineer, Roads North

Meeting with Sardar M. Ishaq Khan, Chief Engineer, Building South

Meeting with Mr. Tasudaq Gardezi, Chief Engineer, Central Design Office

Meeting with Dr. Basharat, University of AJK

Meeting with Dr. Rustam, University of AJK

Meeting with Mr. Mushtaq Pirzada, Director Land Use Planning

Meeting with Mr. Basharat, Chief Engineer, Irrigation

Meeting with Mr. Zafar, Director, Electricity Department

Meeting with PRCS, AJK

Pictorial View of Consultation & Validation Workshop