



RESILIENCE

Towards A Disaster Resilient Pakistan

January-December 2015



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NDMA has developed into a world class institution: UN

OUR CORRESPONDENT
NEW YORK

The UN Office for Coordination of Humanitarian Affairs (OCHA) lauded on Wednesday efforts of Pakistan's National Disaster Management Authority (NDMA), saying it had developed into a world class institution. The NDMA has developed into a world class institution over the last decade, incorporating international best practice," said Mr. John Ging, head of operation of OCHA in a statement. He said in a world where so many crises were on a negative trajectory, Pakistan offered a rare example of positive progress.

COVER STORY

8.1 MAGNITUDE EARTHQUAKE JOLTS PAKISTAN ON 26 OCTOBER, 2015

On 26 October, 2015 at 1409 Hrs. PST an earthquake with 8.1 magnitude struck Pakistan. It had a depth of 193 kms, centered 82 km Southeast of Feyzabad, Afghanistan in the Hindu Kush Mountain Range and lasted up to one minute, mostly affecting areas of Khyber Pakhtunkhwa, Azad Jammu & Kashmir, Gilgit Baltistan and FATA. In terms of magnitude, It was the highest recorded earthquake in the history of Pakistan, however no large scale damages occurred owing to depth of Earthquake. The earthquake was also felt in other Asian Countries including Afghanistan, Iran, China and India.

Pakistan Metrological Department reported series of aftershocks ranging from 2.5 to 5.3 on Richter scale with a maximum of 23 aftershocks recorded in one day on 28 October, 2015.

NDMA responded promptly with a very well coordinated response.

• Warning was issued for aftershocks and vigilance of vulnerable, weak

infrastructure by all agencies.

• Armed Forces and all relevant stakeholders were put on alert.

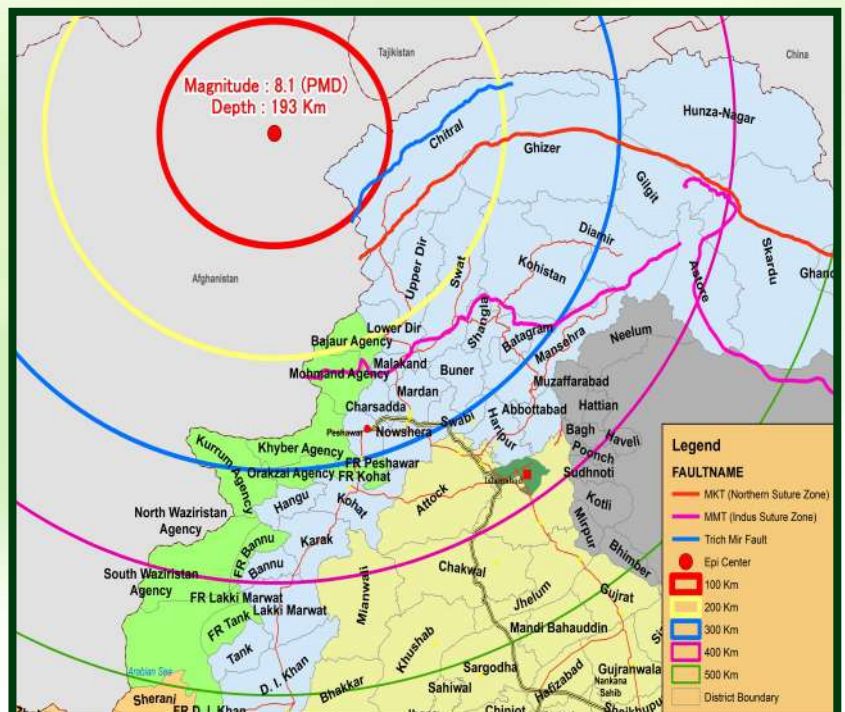
• Damage assessment was focused in contiguous regions of Epicenter through involvement of Pakistan Met Department, SUPARCO, Geological Survey of Pakistan and other departments involved in seismic hazards.

• PAF missions were flown for aerial photographs of KP and GB. Army aviation was employed in Malakand Division for aerial reconnaissance and latest satellite imageries were acquired.

• All relief warehouses were activated.

• National Emergency Operation Centre (NEOC), Provincial Emergency Operation Centre (PEOC) and District Emergency Operation Centre (DEOC) were activated.

• PM, relevant Federal Ministries and COAS were given the first assessment briefing within 18 hours on 27



CHAIRMAN'S FOREWORD

Pakistan, in year 2015 saw multiple disasters in form of mini tornado in PK, floods in KP, Punjab and Sindh, earthquake of 26th Oct hitting KP, AJ&K, GB, and FATA, unprecedented intense heat wave in Karachi and persistent drought in Tharparkar. These challenges repeatedly tested the capacity of entire Disaster Management apparatus across the country. By the grace of All Mighty, we remained well configured and orchestrated a sound response.

While we are gripped by recurrent disasters these calamities afforded, us an opportunity to forge our resilience, enhance our coordination mechanisms, refine our SOPs, record learnt lessons and enhance DRR interventions. NDMA remained in the lead role of all pursuits related to preparedness which more meaningfully included use of technology for disaster risk assessments like Multi Hazard Vulnerability Risk Assessment (MHVRA) at micro level and capacity building and raising awareness of government officials. It is actively monitoring and managing the implementation of national Disaster Management Plan (NDMP) specially Flood Mitigation Measures and enhancement of Hazard Early Warning Systems.

We are perusing an approach of aligning ourselves with Sendai Framework and Paris Agreement on Climate Change using futuristic proactive methodologies of Disaster Management. However much is required to be done.

I must complement the Federal Government Departments, Provisional and District Authorities, our Implementing Partners and all other related stakeholders for their support to our endeavors towards a "Disaster Resilient Pakistan".



CHAIRMAN NDMA
MAJOR GENERAL ASGHAR NAWAZ, HI(M)



Islamabad 27 Oct 2015: Chairman NDMA briefing PM on Earthquake

PATRON-IN-CHIEF

MAJOR GENERAL ASGHAR NAWAZ HI(M)
CHAIRMAN, NDMA

PATRON

AHMED KAMAL
MEMBER DRR, NDMA

PREPARED & DRAFTED

REEMA ZUBERI
MEDIA COORDINATOR, NDMA

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MANAGEMENT AUTHORITY
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ISLAMABAD
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October at PM House, identifying Malakand, Hazara Division and part of GB as most affected areas.

- Relief compensation package was announced by PM on 28 October within 36 hours of earthquake to regulate the direction of relief and rehabilitation activities.
- Three helicopters were provided to KP Government for relief operation.
- Community Alerts were generated through SMS by Pakistan Telecommunication Authority.

Information management was done through series of press briefings.

- Payment of compensation to the affectees commenced from 2 November, 2015. NDMA maintained active liaison with concerned DMAs during disbursement process to ensure compensation reach to genuine affectees.

The Federal Government released Rs. 5,500 million to Government of Khyber Pakhtunkhwa, Rs. 13.4 million were released to Azad Jammu & Kashmir, Rs. 245.6 million to Gilgit Baltistan and 645.35 million to Federally Administered Tribal Areas. Fortunately, this Earthquake did not bring large-scale destruction as compared to earthquakes that hit Pakistan in the past. Yet, the most critical and key lesson remains to be pursuit of an integrated strategy to mainstream disaster risk reduction in all developmental activities, build resilience at the grass root level, identification of risks, preventive measures undertaken in advance, resource management and enhance mitigation capacity across Pakistan.

DAMAGES & LOSSES OF EARTHQUAKE 26th Oct 2015

PROVINCES	Death	Injured	Damaged Houses		
			Partially	Completely	Total
Khyber Pakhtunkhwa	225	672	65,214	222,79	87,493
FATA	30	143	4,315	1464	5,779
Gilgit Baltistan	10	20	331	359	2,690
Azad Jammu & Kashmir	2	18	48	28	76
Punjab	5	Nil	6	2	8
GRAND TOTAL	272	853	71,914	24,133	96,046



PROVISION OF RELIEF DURING EARTHQUAKE 26th Oct 2015

ITEMS	KHYBER PAKHTUNKHWA	FATA	GILGIT-BALTISTAN	TOTAL
Tents	41,902	4,382	770	47,054
School Tents	1,908	70	-	1,978
Blankets	75,368	3,500	1,220	80,088
Plastic Mats	9,094	2,500	500	12,094
Food Packs	665.98 tons	281 tons	22 tons	968.98 tons
Tarpaulins	19,000	3,000	-	22,000
Bottled Water	14 tons	-	-	14 tons
Water Filter Plants	49	-	-	49
Medicines	27 tons	-	-	27 tons

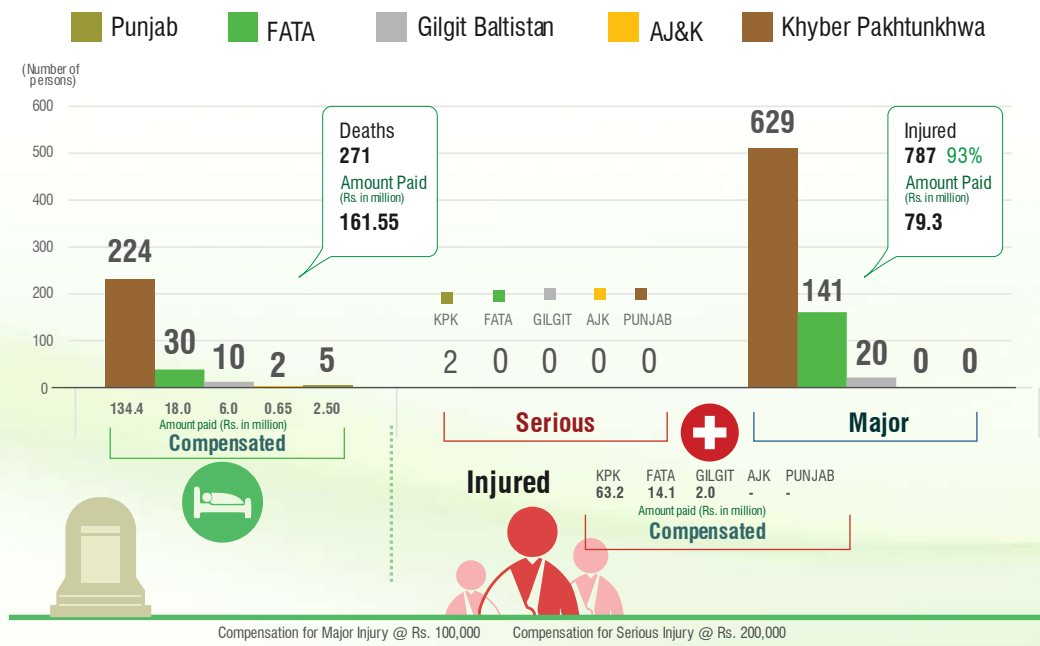
COMPENSATION PROVIDED TO EARTHQUAKE AFFECTEES

PROVINCES	Death	Rs. Amount Paid (Rs. in million)	Injured	Rs. Amount Paid (Rs. in million)	Damaged Houses			Rs. Amount Paid (Rs. in million)
	Compensated		Compensated		Fully Damaged	Partially Damaged	Total	
Khyber Pakhtunkhwa	224* 93%	134.4	629	63.2	20,852	62,115	82,967	10791.9
FATA	30 100%	18.0	141	14.1	1464	4315	5779	724.3
Gilgit Baltistan	10 100%	6.0	20	2.0	20	-	20**	4.0
Azad Jammu & Kashmir	2 100%	0.65	-	-	-	-	-	-
Punjab	5 100%	2.50	-	-	2	-	2	0.5
GRAND TOTAL	271	161.55	787 (93%)	79.3	22338 (93%)	66,430 (92%)	88,768 (92%)	11520.7

* 1 death case is under re-verification

** Government of GB has transferred funds to all DMAs for payment of compensation)

COMPENSATION PROVIDED TO OCT 2015 EARTHQUAKE AFFECTEES



SECTION-I DISASTER OUTLOOK

Mini Tornado Lashes Peshawar

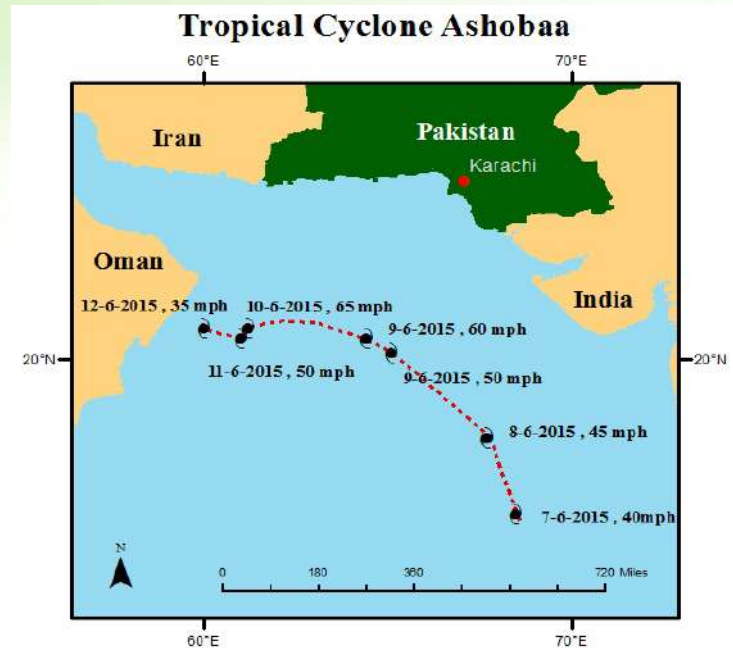
On 26 April 2015 an unusual extreme weather event of Rain, Dust & Thunderstorm generated a 'mini tornado' with a speed of 110 km/hr, rainfall of 60 mm hit Peshawar Division causing damages to life/infrastructure and disrupted communication system in districts of Peshawar, Charsadda and Nowshera of Khyber Pakhtunkhwa. 49 lives were lost and 267 persons were injured. Respective District Authorities with the help of Army and line departments promptly responded. PM promptly visited Peshawar on 1 May 2015 and disbursed compensation grant to the heirs of deceased to alleviate their grief.



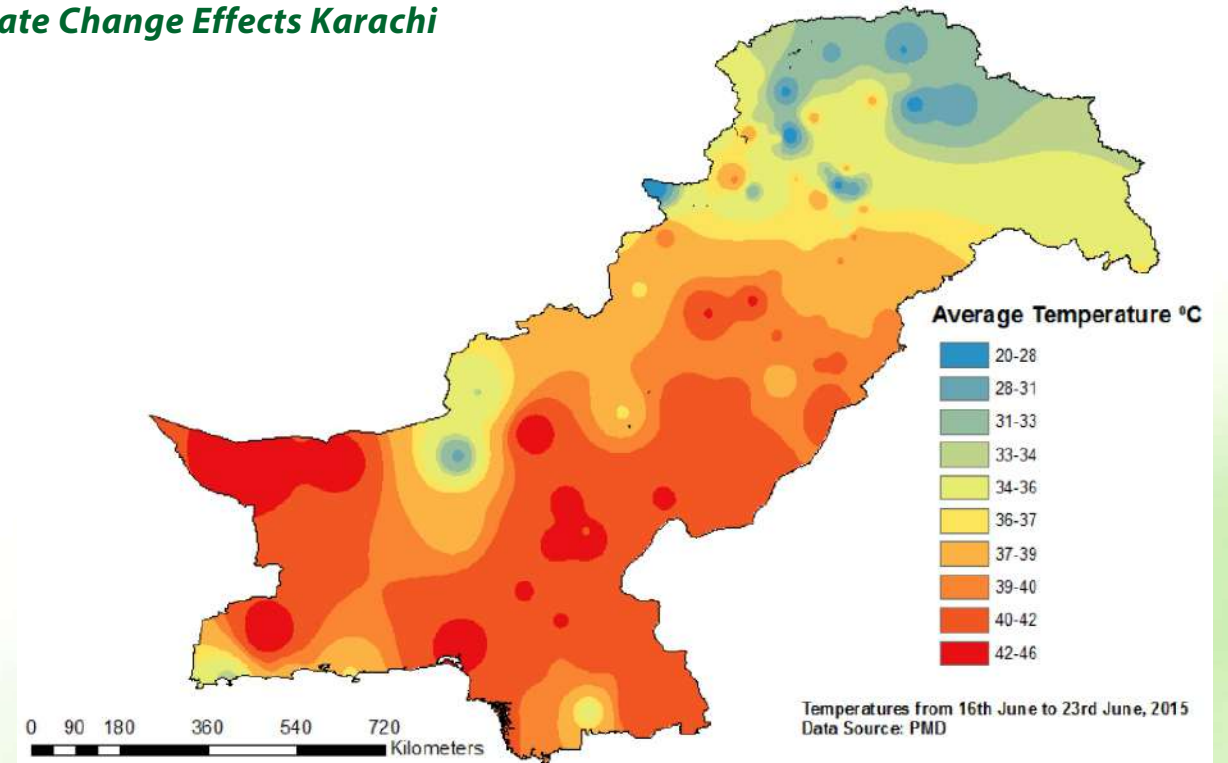
PM Addressing Peshawar Affectees at Governor House

Cyclone ASHOBAA Averted

On June 7, 2015 a cyclonic conditions developed with the formation of a deep depression over east-central Arabian Sea, centered about 750 km South of Karachi. The meteorological conditions indicated possible development of a Tropical Cyclone (01A) named 'ASHOBAA'. It was anticipated to cause serious impact on Pakistan's Sea conditions along Sindh-Makran coast. However, on June 10, Cyclone ASHOBAA slightly tracked Westward over the Arabian Sea. NDMA issued regular advisories & necessary instructions to all relevant stakeholders about the expected Cyclone to take pre-emptive response measures. The event highlights the increased tropical cyclonic activity in Karachi Arabian Sea due to Climate Change phenomenon.



Climate Change Effects Karachi



A record-breaking scorching heatwave with temperature as high as 44 °C (111 °F) struck southern part of Pakistan in June 2015. Unfortunately, 1229 people died due to dehydration and heat stroke, mostly in Sindh province and its capital, Karachi. NDMA with Provincial Disaster Management Authority (PDMA) Sindh responded immediately. In collaboration with Nestle Pakistan 77,000 tons of water in 51,000 water bottles were sent to heat stroke centers in Karachi. Chairman NDMA, visited Karachi and assessed the need for future interventions.

Floods-2015

Pakistan, during the last five years has experienced unusual and severe Monsoon rains. With the early onset of Monsoon Season with two sequential GLOF events in District Chitral on 16 July 2015 and riverine floods led to increased discharge in Indus River affected Punjab and Sindh while torrential rains in DG Khan Division caused flash floods that displaced a total of 1.562 million persons with 238 lives lost.

In order to warn the general public for taking preemptive measures, NDMA in collaboration with PTA and Cellular Companies sent SMS to over 52.2 million mobile phone users in high risk areas of Sindh, Punjab, and Azad Jammu & Kashmir. It resulted in timely warning and safe evacuations, minimizing loss of human lives and livestock. Furthermore, regular alert advisories were issued to relevant departments and PDMA's about flood conditions and heavy rains in different parts of the Country.

NDMA, PDMA's and Armed Forces ensured immediate rescue & evacuation of stranded people to safer places. NDMA monitoring teams were deployed in the Central and Southern parts of the Country. Chairman NDMA also visited Chitral, GB, Guddu & Sukkur Barrages.

NDMA arranged two helicopters for relief duties in Chitral and evacuated 774 persons, transported 47,450 kg of food items to different locations. Permanent Utility Stores were also established within two weeks to ensure provision of daily use items. NDMA's emergency stocks across the Country were placed

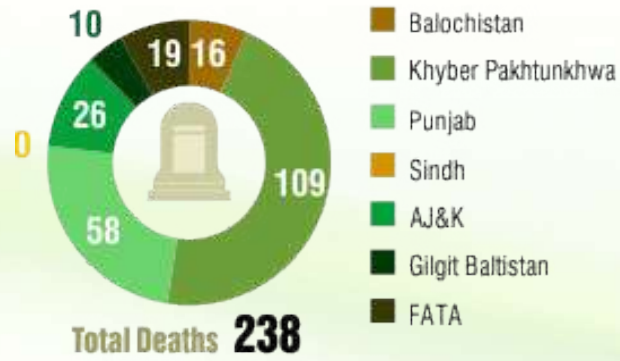
on emergency alert to be released on short notice to any PDMA. Provincial and District Administrations with the support of FWO and NHA used heavy machinery and manpower for urgent repair, rehabilitation & restoration of damaged roads, washed away bridges and opening of suspended traffic to restore communication. Chairman NDMA along with DG FWO also visited Chitral on 5th August, 2015 to monitor rehabilitation works. NDMA also assisted Radio Pakistan in installation of Radio towers in Chitral with help from Pakistan Army.

Learning from past disasters, preemptive approach was adopted by NDMA to mitigate the adverse impacts of Floods that involved close coordination with various stakeholders requiring in-depth review and joint consultations for preparation of comprehensive strategy for National Monsoon Contingency Response Directive, capacity building of PMD for timely and accurate weather forecasting, Flood Management Planning, construction / repair of flood protection dykes, bunds and other flood protection infrastructure with the contribution of FFC and Provincial Irrigation Departments.

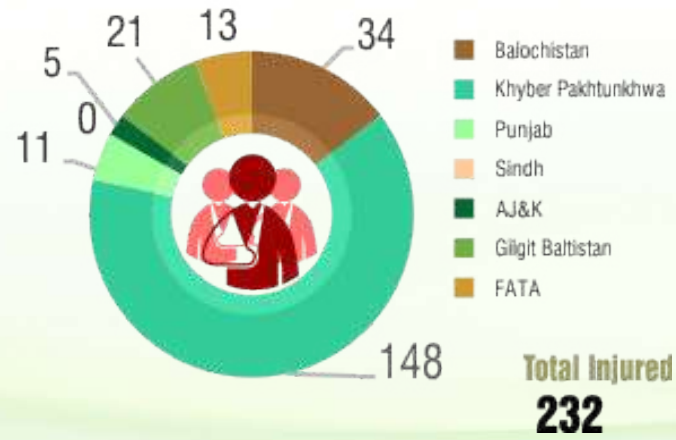
Revision of existing Standing Operating Procedures (SOP) for Regulation of Dams based on past experiences for setting new thresholds levels for water storage and timely release of surplus water by WAPDA, Strategic deployment of relief stocks across the country for timely and effective response, paved way towards well-coordinated approach, timely mitigation, optimum preparedness and effective response.

STATE OF DAMAGES OF HOUSES - FLOOD 2015

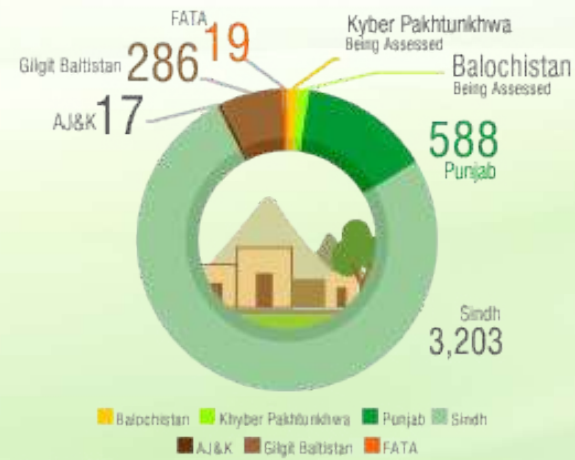
Deaths



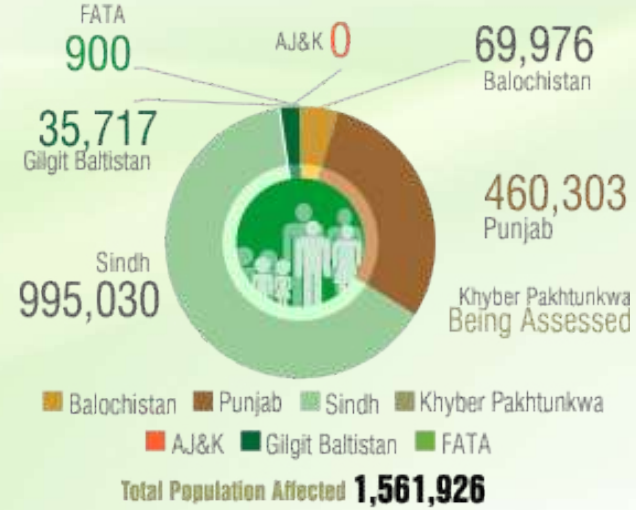
Injured



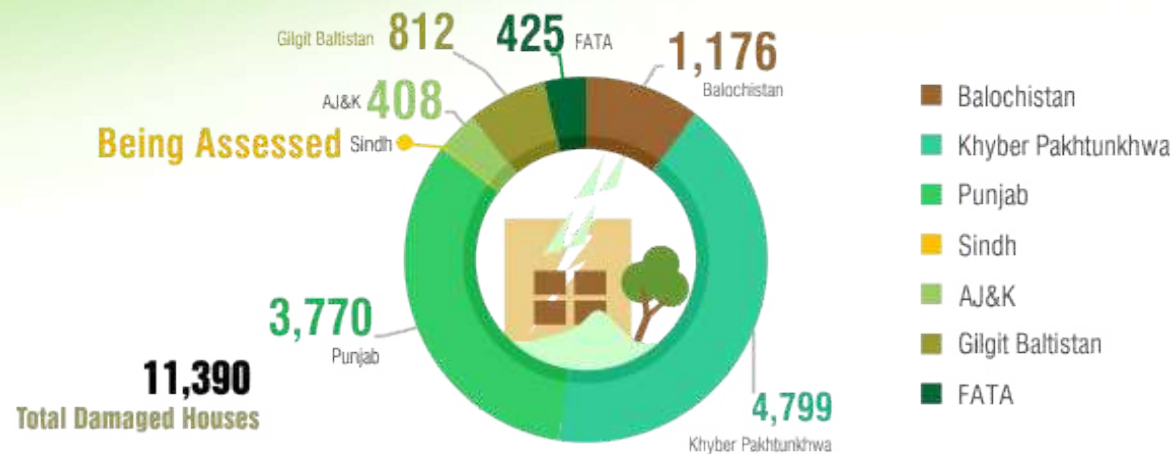
Villages Affected



Population Affected



Houses Damaged



OVERALL STATE OF RELIEF PROVIDED – FLOOD 2015

PUNJAB

ITEMS	NDMA	ARMED FORCES	PDMA
Tents	10,000	-	48,600
Ration	-	-	4,194 tons
Tarpaulins	-	-	-
Blankets	-	-	-
Plastic Mats	5,000	-	24,800
Aqua Tabs	-	-	-
Mineral Water	-	-	123 tons
Generators	-	-	-
Water Pur Plants	10	-	-

KHYBER PAKHTUNKHWA

ITEMS	NDMA	ARMED FORCES	PDMA
Tents	-	715	3,965
Ration	16.5 tons	220.1 tons	231.4 tons
Tarpaulins	-	-	-
Blankets	-	491	3,660
Plastic Mats	-	-	-
Aqua Tabs	700,000	-	-
Mineral Water	1 ton	-	-
Generators	11	-	-
Water Pur Plants	2	-	-

BALOCHISTAN

ITEMS	NDMA	ARMED FORCES	PDMA
Tents	-	-	647
Ration	-	-	20.8 tons
Tarpaulins	-	-	-
Blankets	-	-	711
Plastic Mats	-	-	107
Aqua Tabs	-	-	-
Mineral Water	-	-	-
Generators	-	-	-
Water Pur Plants	-	-	-

SINDH

ITEMS	NDMA	ARMED FORCES	PDMA
Tents	10,000	1,739	51,755
Ration	-	24.2 tons	1,084.5 tons
Tarpaulins	5,000	-	-
Blankets	-	-	-
Plastic Mats	-	-	-
Aqua Tabs	-	-	2,660,000
Mineral Water	-	-	-
Generators	-	-	-
Water Pur Plants	-	-	-

AZAD JAMMU & KASHMIR

ITEMS	NDMA	ARMED FORCES	SDMA
Tents	2,000	-	1,000
Ration	-	-	-
Tarpaulins	1,500	-	-
Blankets	2,000	-	2,000
Plastic Mats	-	-	-
Aqua Tabs	-	-	-
Mineral Water	-	-	-
Generators	-	-	-
Water Pur Plants	-	-	-

GILGIT BALTISTAN

ITEMS	NDMA	ARMED FORCES	GDMA
Tents	2,800	-	760*
Ration	9 tons	-	30.7 tons
Tarpaulins	-	-	-
Blankets	-	-	1,335
Plastic Mats	-	-	-
Aqua Tabs	-	-	-
Mineral Water	-	-	-
Generators	-	-	-
Water Pur Plants	-	-	-

FDMA

ITEMS	Quantity
Tents	200
Ration	-
Tarpaulins	-
Blankets	-
Plastic Mats	-
Aqua Tabs	-
Mineral Water	-
Generators	-
Water Pur Plants	-

	Tents	Ration	Tarpaulins	Blankets	Plastic Mats	Aqua Tabs	Mineral Water	Generators	Water Pur Plants
TOTAL	133,421**	5,854.92 Tons	6,500	10,197	29,907	3,360,000	124 Tons	11	12

Source: Provincial Disaster Management Authorities *Ex NDMA Stock | ** In Relief Camps

Developing Disaster Risk Insurance Framework for Pakistan

The Munich Climate Insurance Initiative (MCII) together with its consortium partners Climate Development Knowledge Network (CDKN) have been engaged with NDMA for development of the National Disaster Insurance Fund's operation and setting up of an insurance strategy to provide disaster insurance. A Workshop on developing a Disaster Risk Insurance Framework for Pakistan was organized by NDMA and CDKN on January 7, 2015 which was attended by representatives from BISP, PPAF, PARC, SECP, SUPARCO, PDMA's and LEAD Pakistan.



NDMA Attends UN Third World Conference on DRR

The Third UN World Conference on Disaster Risk Reduction (3WCDDRR) was held from 14 to 18 March, 2015 in Sendai City, Miyagi Prefecture, Japan. It was attended by representatives from 187 countries. The main objective was to review achievements made under Hyogo Framework for Action (HFA-I, 2005-15) and to adopt a forward-looking and action oriented Framework for continuation of HFA-I beyond year 2015. A high level Delegation led by Mr. Syed Tariq Fatemi, Special Assistant to the Prime Minister on Foreign Affairs, Chairman NDMA, senior officials of NDMA and Ambassador of Pakistan to Japan attended the Conference.



Enforcement of Building Codes

Being an earthquake prone Country, the stringent implementation of Building Codes is the need of hour. In view of very high vulnerability of the country to earthquake hazards, NDMA pursued a stance of expeditious formulation of legislation and its immediate enforcement to ensure that violation of Building Codes is treated as a criminal offence. NDMA had also moved a summary in the given regard on 31 July 2015. The Earthquake of 26 October 2015 gave fillip to

NDMA's stance. The Senate Standing Committee on Law and Justice in its meeting held on 10th December, 2015 formed a Task Force comprising PEC, Ministry of Housing & Works, CDA and NDMA to develop penalty Provisions against Violation and Mechanism for Implementation of Building Code of Pakistan (Seismic Provisions-2007). The Task Force is pursuing given assignment with speed.

Enhancement of Weather and Flood Forecasting Capability

National Multi-Hazard Early Warning Plan is identified as one of the Priority project in National Disaster Management Plan (NDMP). Japan International Coordination Agency (JICA) through its granting is installing a weather and flood forecasting radar at Karachi. The radar shall cover Karachi, Badin, Thatta and coastal belt of Balochistan. It will also forecast cyclone in the Arabian Sea. The Project is expected to be completed by 2018. The second Project is 'Establishment

Of Specialized Medium Range Weather Forecasting Center (SMRFC) and Strengthening of Weather Forecasting System. It includes centers to be established at PMD Head Quarters Islamabad, Regional Met Office Lahore, Tropical Cyclone Warning Centre Karachi, Met Office Multan & Met Office Gilgit. It will enhance the medium range forecasting capability of PMD. The Project is expected to be completed by 2018.

Extending Flood Warning & Management Capacity of Pakistan & Indus River Basin Countries

Within the framework of JICA's grant to Pakistan, UNESCO, successfully implemented Phase-I of Project, "Strategic Strengthening of Flood Warning & Management Capacity of Pakistan" leading to first ever flood forecasting model for Upper Indus catchment (Indus-Integrated Flood Analysis System-IFAS),

provision of hazard mapping system, information & data sharing platform. Phase-II of the Project 'Extending Flood Warning & Management Capacity of Pakistan & Indus River Basin Countries' has also been launched. The Project will be implemented by UNESCO within time frame of thirty months.

Flood Warning System: MoU signed by UNESCO and PMD

MoU was signed between UNESCO, JICA and PMD for the project titled as "Strategic Strengthening of Flood Warning and Management Capacity of Pakistan" on March 25, 2015 at Pakistan Meteorological Department Headquarter. This Project is aimed at enhancing the capability of PMD for Flood Early Warning System (FEWS) for Eastern Rivers (Chenab, Jhelum, Ravi etc) during monsoon season.



NDMA Organised Fourth Regional Technical Group Meeting on Disaster Management CBM under Heart of Asia (HOA), Istanbul Process

Pakistan, as a co-lead with Kazakhstan hosted the 4th Regional Technical Group Meeting on Disaster Management Confidence Building Measures under Heart of Asia (HOA), Istanbul Process, on 8 September 2015 in collaboration with UNDP, Pakistan. Mr. Sartaj Aziz, Special Advisor to Prime Minister on Foreign Affairs and representatives from Sweden, Denmark, France, Japan, Norway, UK, USA, UN, World Bank, EU, UNESCAP, ADB, ADPC also attended the Meeting. The meeting reviewed the progress achieved so far under DM- CBMs and Road Map for HoA. Based on the consolidated inputs from all HoA countries, the road map of HoA (DM-CBM) was finalized setting the Action Plan for 2016/17.



NDMA Signs MoU with Pakistan Engineering Council for Formulation of National Fire and Safety Codes

A Memorandum of Understanding (MoU) was signed between NDMA and Pakistan Engineering Council on 15th October 2015 for the formulation of first ever Fire Safety Codes of the Country. The MoU was signed by Chairman NDMA Major General Asghar Nawaz and Chairman PEC, Engineer Jawed Salim Qureshi. Fire Safety Codes will be formulated on fast track basis by June 2016 and funded through National Disaster Management Fund (NDMF). The MoU allows PEC to work on development of Fire & Safety Codes in consultation with all relevant National & Provincial experts and stakeholders. In last five years 69,447 fire incidents of building/industrial fires were recorded in which 598 human lives were lost with an economic loss of Rs. 45,269.1 million. This initiative of NDMA is foreseen as a major step to alleviate the concerns with respect to loss of lives as a result of fire incidents.



National Disaster Management Plan (NDMP)-Implementation Road Map 2016-2030



NDMA presented National Disaster Management Plan (NDMP) Implementation Road Map 2016-2030 in a Conference with all relevant federal/ provincial stakeholders and development partners on 19 October 2015. The objective of the Conference was to unveil the future plan for Implementation of NDMP, focusing on Multi Hazard Vulnerability Risk Assessments (MHVRA), Community Based Disaster Risk Management (CBDRM), Capacity Building interventions including Emergency Responses Exercises for Government officials and Volunteers, and Public awareness. NDMA also shared in detail

the Standard Guidelines for execution of all interventions to maintain uniformity in execution and quality assurances. The Road Map is envisaged to be implemented in a phased manner during 2016-2030 time frame. In Phase I, 39 most Vulnerable districts will be covered in a time span of three years (2016-2018), 55 districts will be covered in Phase II (2019-2022) while the remaining 63 districts including Agencies of FATA shall be covered in the final phase Phase-III (2023-2030) respectively.

Consultative Conference on Seismic Hazards

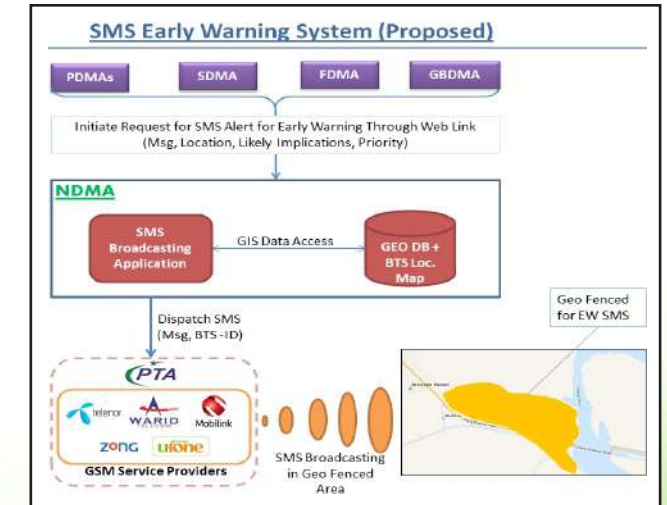


NDMA took the initiative to hold a Consultative Conference, on 23 November, 2015, to discuss Seismic situation of Pakistan particularly in the aftermath of 26 Oct, 2015 Earthquake. Pakistan's top professionals and experts from all related departments participated to discuss the long-term road map for minimizing adverse impacts of earthquakes. During the Conference, it was agreed that the

existing seismic zoning of the Country needs to be revised. It was also decided that revision of building codes is required to cover complete spectrum of buildings for both urban and rural areas so that a coherent approach is adopted for planning and to ensure synchronous efforts of all concerned stakeholders.

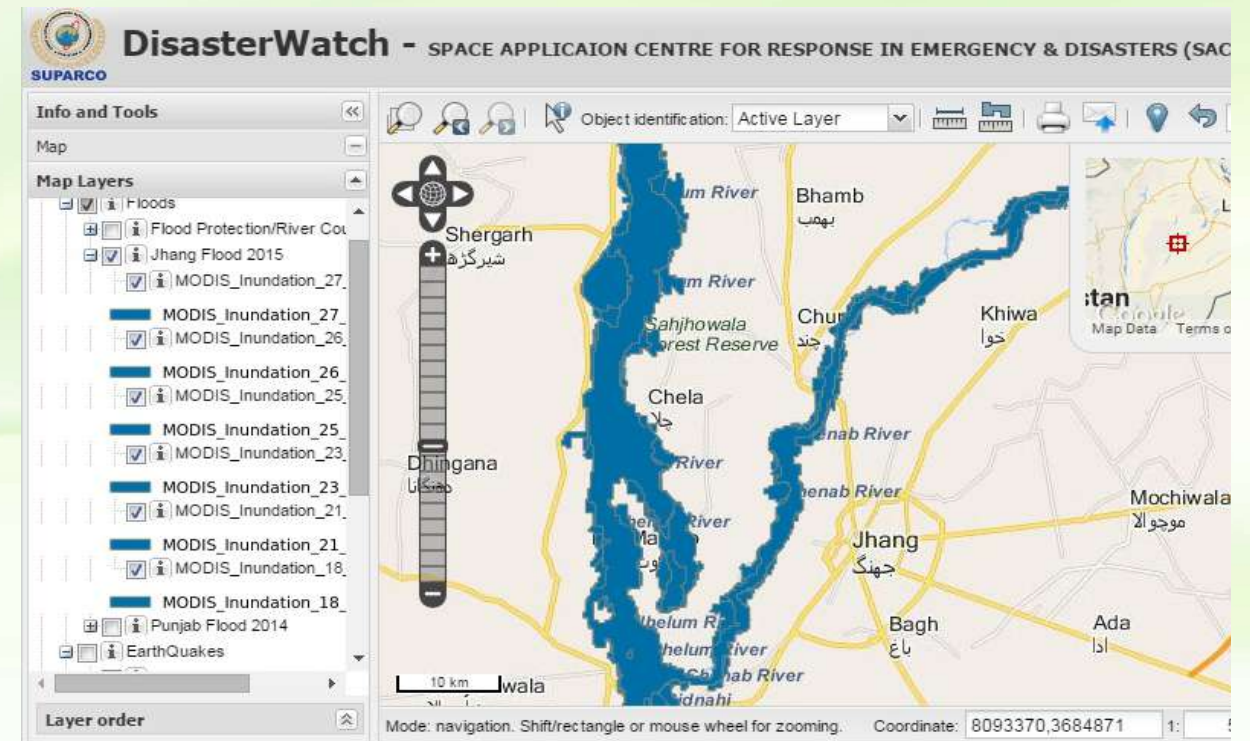
SMS Alerts- Early Warning System For Community

NDMA has introduced SMS based Early Warning System (EWS) with the help of Pakistan Telecommunication Authority (PTA) and Cellular Mobile Operators (CMOs). The system will help in bridging communication gap between authorities and disaster affectees during preparedness and mitigation phases for coordinated operations in emergency response, recovery, rehabilitation and reconstruction phases.



Disaster Rapid Assessment System

The Space and Upper Atmosphere Research Commission (SUPARCO), Pakistan has initiated real-time disaster monitoring and damage assessment system for NDMA which has been hosted on NDMA's Disaster Information Platform (DIP). It not only covers disasters in Pakistan but also covers other regions as well under UN-Spider Program. SUPARCO and the United Nations Office of Outer Space Affairs (UNOOSA) signed the cooperation Agreement on the establishment of a UN-SPIDER Regional Support Office (RSO) on the occasion of the 47th Scientific and Technical Sub-committee Session on 12 February 2010. Under the same charter, Pakistan had been providing remote sensing services during 25 April, 2015 Earthquake in Nepal. The System is designed to cater variety of disasters such as floods, earthquakes, cyclones, tsunamis etc. by displaying latest situation on GIS Maps, such as damage extent, disaster's physical intensity and other critical details for response planning and execution.



National MHVRA Guidelines

NDMA has developed National Guidelines for executing Multi-Hazard Vulnerability and Risk Assessment (MHVRA) that covers step by step execution methodology, governing Policies & SOPs, Monitoring & Evaluation Process and definition of Standard data structure. Main purpose of these guidelines is to define standard

benchmarks, procedures, datasets and tools to be used for carrying out MHVRA exercise to ensure unanimity for development of National Risk Picture. National MHVRA database will house all studies carried out till date and regularly updated for provision of a real time Risk & Vulnerability Calculator.

International Training Course on DRM Under HOA Initiative (Istanbul Process)

As an important component of the DM-CBM Implementation Plan, under the "HOA" (Istanbul) Process, NDMA in collaboration with JICA organized a five days International Training Course on DRM for the Afghan Disaster Managers, from February 10 - 14, 2015 at Islamabad. The objective of the Training was to develop necessary skills with regards to DRR mainstreaming in disaster preparedness, mitigation, response and media management in natural and human induced disasters.



PARTICIPANTS OF INTERNATIONAL TRAINING COURSE ON DRM

Workshop on Role of Broadcasters in Emergency Warning & Communication for DRR

A two-day training workshop on "Role of Broadcasters in Emergency Warnings and Communications for Disaster Risk Reduction" was organized by PTV in collaboration with Asia Pacific Broadcasting Union at Islamabad from 12-13 February 2015. The objective of the Workshop was to sensitize relevant Disaster Management stakeholders in general and media community in particular on the issues related to early warning and to build capacities on various aspects of DM system in Pakistan. Representatives from CDA, ERRA, PTCL, Radio Pakistan, PTV, NDMA and the Media attended the workshop.



NDMA & JICA Signs MoU

Japan International Cooperation Agency (JICA), NDMA and EAD signed Record of Discussion on 31 March 2015 regarding Japanese Grant Aid in Technical Cooperation project entitled "Capacity Development of Disaster Management in Pakistan". The Project will facilitate in promoting and strengthening cohesive capacity building program in Pakistan and would substantiate to upscale the capacities of National Institute of Disaster Management (NIDM).



Emergency Simulation Exercise "FAST RESPONSE 2015"

NDMA in collaboration with WFP organized three-day DM Simulation Exercise in Lahore from 28-30 April 2015 to build capacity of disaster managers of all tiers to plan practice and understand implementation of disaster response plans, strong partnership among all stakeholders including all DMAs and other relevant departments including Rescue 1122, Armed Forces and civil departments to ensure prompt response. Minister for Population and Welfare Punjab, Begum Zakia Shahnawaz was the chief guest on the final day. The Global Team of experts stationed at Rome arrived Pakistan for technical coordination and support. The Exercise was immensely appreciated by all as unique of its kind.



Facilitators' Training on Disaster Management

NDMA in collaboration with WFP organized three-day Disaster Management training workshop in Islamabad from 15-17 April 2015, to train the participants as Emergency Simulation Facilitators responsible for planning, designing and delivering the simulation exercises. The training was imparted by WFP Readiness Initiative Team (RIT).



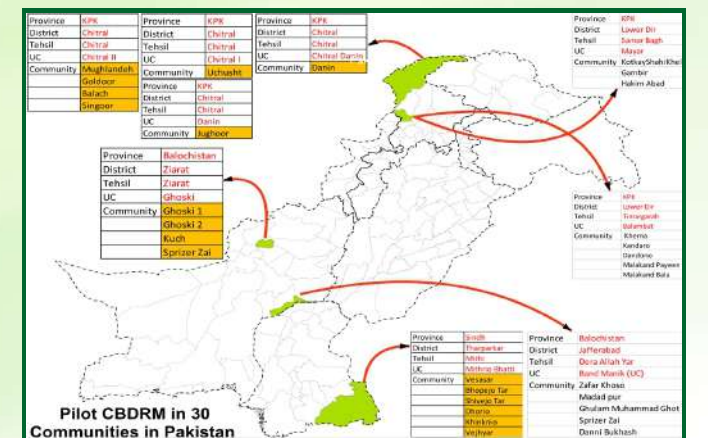
NDMA Sends Team of Rescuers in South Asian Annual Disaster Management Exercise -SAADMEX

A Ten member team of Disaster Managers headed by Senior Capacity Building Specialist (NIDM), Brigadier (Retired) Sajid Naeem of NDMA and selected members of Urban Search and Rescue Teams of RESCUE 1122 Punjab & CDA participated in South Asian Annual Disaster Management Exercise held at New Delhi, India from 23-26 November 2015. The objective of this Exercise was to provide an opportunity to the SAARC Countries to get first-hand knowledge and practical experience of best practices and strengthen existing systems of regional cooperation. This Exercise is envisaged to become an annual Event in future and will be co-hosted by other SAARC Countries. Performance of Pakistani Team remained par excellence.



DRR in Pakistan - CBDRM Activities by UNDP

UNDP started CBDRM pilot projects for 30 communities in 05 districts i.e. Chitral, Lower Dir, Ziarat, Jafferabad and Tharparkar in line with CBDRM guidelines of the NDMP. Under CBDRM training program basic trainings on First Aid and Search & Rescue were conducted in 30 community emergency response groups including orientation sessions on DRR/CBDRM for districts officials. A technical evaluation of satellite based Tsunami early warning system, installed in Gwadar, under the Joint DRM Program, was also conducted.



Bilateral MoU with Sri Lanka on Disaster Management

Federal Minister for Climate Change Mushahidullah Khan and Sri Lankan Minister for Disaster Management Mohamed Fowzie Abdul Hameed signed MoU in presence of visiting Sri Lankan President Mr. Maithripala Sirisena and PM Nawaz Sharif. Both Governments have agreed to cooperate in areas of DM namely: Community Shelter in Cyclone Affected System, Volunteer Based Early Warning System for Community DRR, Legislation regulating developments in the floods plains and wetlands in landslide soil erosion prone areas, Guidelines for Participatory Flood Management, Early Flood and Landslide Warning System and Effective Disaster Relief Services.



Collaboration with Institute of Space Technology



NDMA ICT Directorate got NIDM registered into the education domain. The existing website of the institute is moved from NDMA organization domain to education domain. The site is now accessible on <http://nidm.edu.pk/>

Knowledge Management Initiatives at NDMA

NDMA launched a portal to archive valuable work and research produced in house. This portal will help in collecting and forming institutional memory in due course. KM portal will be used for effective planning in the future.



Bilateral MoU with Kyrgyzstan on Disaster Prevention

A bilateral MoU on 'Cooperation in the Field of Disaster Prevention and Elimination' between the Ministry of Emergency Situations of Kyrgyz Republic and NDMA, Ministry of Climate Change of the Islamic Republic of Pakistan was signed on 22nd May 2015 at Bishkek, Republic of Kyrgyz. Prime Minister Muhammad Nawaz Sharif and his Kyrgyz counterpart Mr. Temir Sariyev witnessed the Agreement signing Ceremony. The main areas of cooperation include exchange of experience in disaster management, disaster risks mitigation, exchange & implementation of modern technologies, planning & arrangement for joint projects & workshops/conferences etc.



NDMA Procurement Strategy

As a part of annual preparedness and contingency planning, NDMA is proactively pursuing a comprehensive emergency rescue relief stockpiling policy for timely logistics buildup at various strategic locations across the Country to support and augment the efforts of provincial & regional DMAs. Based on almost a decade of experience in handling numerous disasters in the Country, NDMA as a regular feature undertakes a widespread analysis weighing the existing rescue- relief stocks to meet against any deficiencies and ensure an enhanced stockpiling of critical stocks at strategic locations to ensure a substantive logistic buildup thereby coping with the deficiencies at desired locations through procurement involving a fair and transparent tendering

procedure as per PPRA rules. NDMA makes procurements of certain relief items, chiefly including tents to cater for shelter needs of the projected victims of any disaster. After having passed through an exhaustive scrutiny process, NDMA ensures inspection and physical test of newly procured items through Pakistan Council of Scientific & Industrial Research (PCSIR) Laboratory Complex, Lahore. The process determines adherence to standards and quality control including efficiency of production house to produce the items within timelines. The products are also checked and thoroughly inspected during the process of manufacturing, packing and storage prior to their transportation to warehouses across the country.

Establishment of Humanitarian Response Facilities



HRF LAHORE



HRF PESHAWAR



HRF HYDERABAD

NDMA and WFP have been working together since 2013 to establish a network of state-of-the-art humanitarian hubs at eight strategic locations across Pakistan, AJ&K and GB. It is aimed to augment the response capacity at Regional and Central tier. Respective Governments have provided land to WFP to build these HRFs at Muzaffargarh, Lahore, Quetta, Peshawar, Hyderabad, Sukkur, Muzaffarabad and Gilgit. The Project is being implemented in coordination

with the provinces, AJ & K and GB with generous funding provided by Japan, Canada, Australia, Netherlands, Denmark and the United States of America. HRFs at Muzaffargarh and Quetta were completed in 2013 and 2014 respectively. During the year three additional HRFs at Lahore, Peshawar and Hyderabad were completed and officially handed over to respective PDMA.

Installation of Pre-Fabricated Storage Facilities (Flospans) in Priority Districts

NDMA in collaboration with WFP also initiated installation of Pre-Fabricated Storage Facilities called "FLOSPAN" in various priority districts of Pakistan. The purpose of the project is to enhance storage capacity of relief goods in vulnerable districts. So far 47 Flospans have been installed in the following Provinces/Regions of the Country.

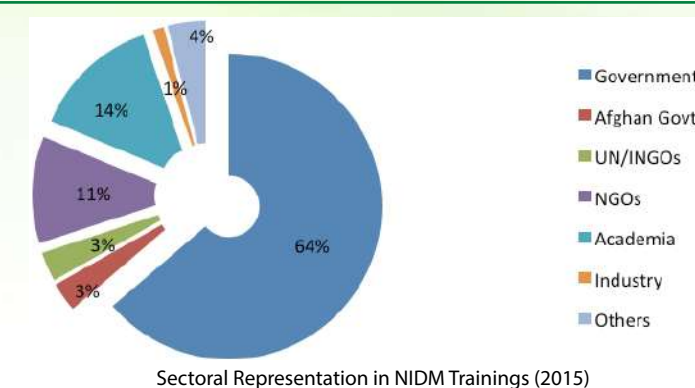


Punjab	Sindh	Balochistan	KP	GB	FATA	ICT	Total
11	11	7	5	3	2	6	47

National Institute of Disaster Management

National Institute of Disaster Management as the premier training and capacity building institution imparts trainings to national/international level delegates in different fields of DM for providing research and training services to further build capacity of government officials & related stakeholders. During the year 2015, NIDM successfully organized twenty five training courses and trained total 769 individuals.

Govt.	Afghan Govt.	UN/INGOs	NGOs	Academia	Industry	Others
490	24	24	87	104	9	31



NDMA Observes National Disaster Awareness Day

The Government of Pakistan notified 8 October as National Disaster Awareness Day to grant it a rightful importance. This was done on the recommendation of NDMA and considered as a reflection of Government's resolve towards a Disaster Resilient Pakistan. NDMA commemorated National Disaster Awareness Day on 8 October 2015 in collaboration with all Provincial/Regional Disaster Management Authorities across the Country. The objective of observing this Day is, to create awareness amongst the masses for better preparedness against disasters. NDMA organised a flag march of emergency response units of CDA's Search and Rescue Teams. An informal and somber Candle Vigil Ceremony was also held at Fatima Jinnah F-9 Park Islamabad where one minute silence was observed in memory of the victims of past disasters.



Islamabad 8 October 2015 participants offering prayers for the departed souls of 8 October 2005

Visits & NDMA Outreach Orientation Program

Trainees representing various prestigious national educational, management and training institutions /universities frequently visit NDMA. During the period, officials from Civil Services Academy and students from University of Sargodha visited NDMA. Besides, NDMA under its outreach program also addresses various forums of institutions /organizations to create awareness among the target audience to induce them about their role in the overall spectrum of DRR and DM.



DRR Awareness



Realizing the need for awareness raising among children and communities pertaining both to natural and human induced hazard, NDMA in collaboration with UNICEF undertook a project aiming at sensitizing children and communities to disaster through awareness raising. The main theme of this initiative is based on building awareness by introducing measures that need to be taken before, during and after major natural and human induced disasters to the people including Floods, Earthquakes, Displacement and general DRR awareness. Story books, short animated films, jingles and posters are developed under this initiative. Children, mainly of primary age group and beyond are the audience of these communication tools while parents and communities are the secondary audiences. Initially, over 6,000 sets of stories on each theme are being printed in Urdu and Sindhi languages. These resources have been disseminated to all PDMA's and implementing partners.

Launching of New Website



NDMA launched a new website with Urdu and multilingual viewing capability. This website has enhanced contents and improved look and feel. The website will have Information, Education and Communication (IEC) contents. A Frequently Asked Questions (FAQ) Section for readily answering general queries has also been instituted.

Launching of Heart of Asia Portal



NDMA launched Heart of Asia Portal. This portal contains country profiles of all member states. It contains information about Regional Technical Group Meetings held so far. This portal will serve as a collaboration tool and is accessible at <http://hoadm.org/>. It will also serve as a linkage and collaboration platform for the experts and people of members states.

Chairman NDMA Visits Rescue 1122

Chairman NDMA visited Emergency Services Academy at Lahore and examined the medical training, Fire and Deep Wells Rescue training areas. Chairman was briefed about 10 floors high-rise fire tower, as the rescuers demonstrated new techniques to rescue trapped victims from the upper floors of the high rise buildings. Chairman NDMA lauded the state of the art infrastructure and service standards of Punjab Emergency Service.



Fire, Safety, Security and Health Exhibition

The 11th Safe & Secure Pakistan International Fire, Safety, Security and Health Exhibition & Conference-2015 was organized by Pegasus Consultancy from 10 to 12 March-2015 at Pak- China Friendship Centre Islamabad. The purpose of the Exhibition was to bring together major international and local exhibitors to share their experiences and display latest technology relating to security, safety, fire fighting, rescue and emergency. More than 250 companies from 31 different countries displayed their products at the Safe Secure International Exhibition.



Assessment on Drought Situation in Tharparkar, Sindh

In view of the prevailing drought conditions in Sindh, NDMA organized meeting on 19th March 2015, by inviting relevant government departments, UN agencies, INGOs and NGOs to assess the drought situation in arid areas of Sindh in general and Tharparkar in particular. The special focus of the meeting was to come up with a strategy on how to conduct Multi-Sector assessment in drought affected areas of Sindh.



NDMA & Rescue 1122 Jointly Mark International Fire Fighters Day

NDMA and Rescue 1122 commemorated International Fire Fighters Day on 4 April 2015 at Governor's House Lahore to pay tribute to the valiant firefighters who lost their lives in line of duty. The Ceremony was presided over by acting Governor Punjab, Mr. Rana Iqbal and attended by Secretary Fire Safety Commission Mr. Rafay Alam, DG Rescue 1122 Dr. Rizwan Naseer and Chairman NDMA.



National Conference on Annual Preparedness and Contingency Planning - Monsoon 2015

NDMA organized a one day Coordination Conference at Islamabad on 30 June 2015 to review the state of preparedness for Monsoon Season-2015 and to harmonize the provincial & regional contingency plans. NDMA presented salient features of National Monsoon Contingency Response Directive-2015.



Prime Minister Visit Flood Affected Areas

Prime Minister Muhammad Nawaz Sharif accompanied by Ministers, senior Government officials, PDMA officials and Chairman NDMA visited flood affected areas of District Chitral, Punjab (Mianwali at Essa Khel, Rahim Yar Khan at Chachran), Sindh (Sukkur Division at Qadirpur Bund at District Ghotki), Gilgit Baltistan at District Skardu and Ghanche from 30th July till 4th August 2015 to personally monitor and oversee the ongoing rescue & relief activities. PM was briefed by Chairman NDMA and respective PDMA about the flood situation, ongoing rescue & relief activities and measures taken to cope with the situation.



Prime Minister Muhammad Nawaz Sharif inspecting a flood relief camp in Chachran, Rahimyar Khan.

Chairman NDMA Visit Flood Affected Areas

In order to assess and oversee the measures taken by the local administration to offset effects of floods and need of additional measures to raise the level of preparedness and meeting emergent situation besides relief efforts, Chairman NDMA along with respective PDMA and representatives of provincial line departments visited flood affected areas of Punjab, Sindh and Chitral. During the visits, Chairman examined the real time situation of flood and its management, camp management for the affected population, progress on repair & restoration work and measures taken to cope with the situation.



Media Briefing at Sukkur Barrage on August 2, 2015.

NDMA Provides Tents for Affected Population Displaced by Indian Army Firing

NDMA released 200 tents and 200 blankets out of its reserve stocks to State Disaster Management Authority (SDMA) AJK on 24th August 2015, to meet the emergent lodging demand of 120 affected families of Nakyal and Goi sector who were

displaced due to the unprovoked and continuous firing of Indian Army at LOC. Relief camp for displaced families was established at Kotli district by SDMA AJK.

Relief Operations- Heavy Snow in Kaghan-Naran & Northern Areas

Heavy snow blocked roads in Naran-Kaghan areas on 25 October 2015. NDMA and PDMA Khyber Pakhtunkhwa and Pakistan Army took timely measures to address the situation. National Highway Authority was requested for immediate mobilization of heavy machinery to the affected areas to clear the blocked roads and evacuated the stranded people.

PM Visit Earthquake Hit Areas

Prime Minister of Pakistan, Muhammad Nawaz Sharif accompanied by relevant Ministers, senior government officials and Chairman NDMA visited different earthquake hit areas including districts Shangla, Chitral, Peshawar, Dasso, Upper Dir, Lower Dir, Swat and Bajaur Agency from 27 October till 2nd November 2015 to review rescue and relief operation in the quake-stricken areas. He was briefed about the devastation in the districts. During his visits, PM distributed cheques among the earthquake affectees and directed relevant authorities to conclude process of compensation at the earliest. He lauded NDMA for its prompt response and sustainable support to all DMAs.



Prime Minister Muhammad Nawaz Sharif inspecting the damaged areas at Barikot, Swat on November 14, 2015.

Chairman NDMA Visit Earthquake Hit Areas

Chairman NDMA visited various earthquake affected areas of Khyber Pakhtunkhwa, Federally Administered Tribal Areas and Gilgit Baltistan to personally monitor on ground situation, oversee relief activities and expedite compensation verification. During the visits, Chairman NDMA was given detailed briefings on the relief & rehabilitation measures undertaken by the local / district administrations. Chairman NDMA also distributed cheques among affectees during his visit to district Chitral & Shangla (KPK) and tehsil Phunder in district Ghizer (GB).



Chairman NDMA monitoring the relief activities earthquake hit areas of North part of Country on October 29

Suzuki Motors Donates Ambulances to NDMA

Pakistan Suzuki Motors Company donated 20 Ambulances and 300 Tents to Pakistan in the wake of Earthquake of 26th October, 2015. Chairman NDMA on behalf of Government of Pakistan received the donation from Japanese Global Chief of Suzuki Motors Company to Pakistan, Mr. Kinji Saito and his delegation on 17 December 2015. The ambulances have been distributed amongst PDMA's of Balochistan, AJ&K and GB.



NDMA Briefs Development Partners About Earthquake

NDMA in the presence of Mr. Neil Buhne (UN Resident and Humanitarian Coordinator for Pakistan) held a detailed briefing for Heads of UN Organizations from UNDP, UNOCHA, UNHABITAT, WFP, UNICEF, FAO, IOM on 28 October 2015. The purpose of the briefing was to apprise NDMA's development partners about National response to earthquake, relief efforts and measures taken to ensure timely assistance to all affected areas. Mr. Neil Buhne appreciated efforts of Government of Pakistan, and in particular, quick response from NDMA. All UN organizations assured full assistance to NDMA in support of the earthquake affectees.



China Delivers Relief Goods to NDMA for Earthquake Affectees

As a gesture of solidarity with the Pakistani brethren, the Peoples Republic of China extended humanitarian relief assistance to the Government of Pakistan, for the 26th October 2015 earthquake affectees. On behalf of the Government of China, Ambassador Sun Weidong handed over relief consignment to Minister of Information and Broadcasting, Senator Parvez Rasheed along with Chairman NDMA, at Benazir International Airport, Islamabad on 5 November 2015. The relief consignment mainly included tents, blankets and power generators for the earthquake affected families.



JICA Presents Award of Recognition to NDMA

JICA delegation headed by Vice President of Japan International Cooperation Agency (JICA) Mr. Hidetoshi IRIGAKI visited NDMA on 11 Nov, 2015. Mr. IRIGAKI presented a Certificate of Appreciation and award of recognition on behalf of JICA President to Mr. Ahmed Kamal Member DRR, NDMA in recognition of his meritorious association with JICA, Japan in the field of disaster management.



Relief Assistance for Afghanistan Avalanche Affectees

Panjshir province of North East Afghanistan was hit by snow storm and avalanche on February 26, 2015 which caused wide spread disaster. NDMA on direction of Government of Pakistan extended humanitarian relief assistance in two C-130 aircrafts carrying 24 tons of relief goods on 28 February 2015.



Relief Assistance for Nepal Earthquake Affectees

On April 25, 7.9 magnitude earthquake hit Nepal. On the direction of Prime Minister of Pakistan, NDMA immediately rendered rescue & relief assistance in collaboration with Ministry of Foreign Affairs (MoFA), Pakistan Army and Air Force to dispatch humanitarian relief assistance. A Thirty bed hospital along with army medical team, specialist USAR team of Army were dispatched within 18 hours of the Earthquake. An Air Bridge was established, utilizing sorties of C-130 aircrafts of PAF to send a huge consignment of relief goods. Pakistan's support to Nepalese brethren in disaster was very welcomed and appreciated by government and people of Nepal.



Pakistan Army USAR Teams in Nepal



NEPAL RELIEF GOODS DISPATCHED (TILL JUNE - 2015)

TOTAL C - 130 SORTIES=20

RELIEF GOODS	QUANTITY
Tents	2546
Community Shelters	15
Tarapaulins	20000
Food Packs	3 ton
Rice	20 tons
Lentils	500 kg
MREs	3000
Blankets	1000
Medicines	12.5 ton
Field Hospitals	1
USAR Team	1



Pakistan Army Field Hospital in Nepal

Stranded Pakistani Families Facilitated to Pakistan via C-130

NDMA Relief Assistance to Afghanistan Kunduz City

In pursuance to the directives of the PM to arrange for transportation of a plane-load of wheat stock to aid the acute food shortage faced by the Afghanistan's insurgency-stricken province Kunduz, NDMA dispatched humanitarian relief assistance comprising of 13 tons of Wheat flour on PAF C-130 on 30 October 2015.



Representation at International FORA

NDMA actively participated in various International events including, Third WCDRR at Sendai, Japan 14-18 March 2015, Conference on Satellite for SAARC Region and Space Technology Applications, New Delhi, India 22nd June 2015, ISDR Asia Partnership (IAP) meeting from 3-5 June 2015 in Bangkok, Thailand and 12th Regional Consultative Committee Meeting on DM (RCC-12) 16 - 18 June 2015 at Thimphu, Bhutan.



Nepal, Khatmandu 17-18 September 2015: NDMA participation at 'High Level Policy Dialogue on Children & DRR'



Bhutan 16 - 18 June 2015" 12th Regional Consultative Committee Meeting on DM (RCC-12)

SECTION-VII

EVENT CALENDAR



Chairman NDMA in a meeting with UNRC and UNDP Resident Representative in Pakistan Jacqui Badcock



Islamabad 20 January 2015: Chairman NDMA, Major General Asghar Nawaz in a meeting with former Chairman NDMA, Major General (Retd) Muhammad Saeed Aleem.



Islamabad. 29 Jan, 2015: Country Director UNDP, Marc Andre Franche called on Chairman NDMA.



Nepal 8 May 2015: Chairman NDMA meets Foreign Minister Of Foreign Affairs Nepal.



Islamabad 12 Feb, 2015: FAO Representative to Pakistan, Mr. Patrick Evans called on Chairman NDMA.



Islamabad 2 Jan, 2015: Chairman NDMA is Addressing launching Ceremoney of World Disaster Report 2014 .



Japan, March, 2015: Bilateral meeting between Chariman NDMA and Under Secretary General on DRR, UNISDR, Ms Margareta Wahlstrom .



Islamabad 9 Feb 2015: Chairman NDMA during press briefing at International Training Course on DRM.



Lahore 29 April, 2015: Minister for Population and Welfare Punjab Begum Zakia Shahnawaz attends Emergency Simulation Exercise.



Nepal 8 May, 2015: Chairman NDMA meets COAS Nepal.



Islamabad 3 Nov, 2015: Meeting with Deputy Head Mission Japan, Mr. Junya Matsuura.



Islamabad 25 August, 2015: Chairman NDMA in meeting with Ms. Muzhat Sadiq Senator, National Girls Guide, Commissioner.



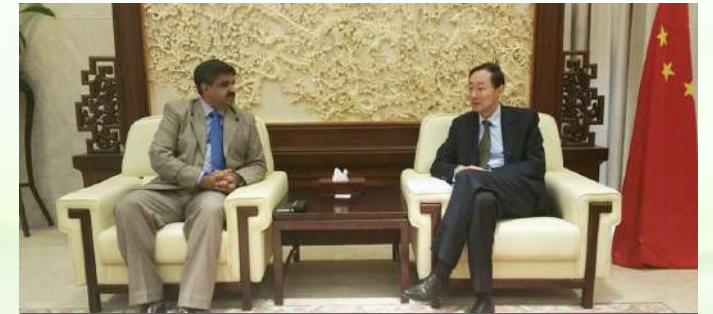
Hyderabad 15 April, 2015: CM Sindh Syed Qaim Ali Shah Inaugurated of HRF Hyderabad.



Peshawar 19 May, 2015: CM KPK Pervaz Khattak Inaugurated HRF Peshawar.



Islamabad 12 June, 2015: Meeting with DG Chemical Weapon Convention MOFA, Mr. Irfan Yousaf Shami.



Islamabad 9 Nov, 2015: Meeting with Mr. Sun Weidong, Ambassador of China.



Islamabad 19 Feb, 2015: Norwegian Ambassador Mr. Meis Larsen called on Chairman NDMA.



Islamabad 24 May, 2015: Meeting with H.E Mr. Timur Urazayev, Ambassador at Large, MOFA of the Republic of Kazakhstan.



Islamabad 21 Dec, 2015: Meeting on School Safety Program with Ms. Nishat Riaz, Director Education British Council.



Islamabad 26 Nov, 2015: Meeting with Chief Commissioner Boys Scout Ms. Rahila Hameed Khan Durrani.



Islamabad 14 May, 2015: Ambassador of Nepal meets Chairman NDMA.



Lahore 7 May, 2015: Inauguration of HRF Lahore.



Islamabad 28 Aug, 2015: Meeting with Mr. Huynh Vanolive, Cooperation Attache' Embassy of France.



Islamabad 27 Nov, 2015: Mrs. Najia Aizaz from Pakistan Foreign Office Women Association handed over relief for 26 October earthquake affectees.



Islamabad 17 Feb, 2015: Member (Ops) NDMA presented souvenir to Ambassador Faud-al-Maznaee, Advisor to Secretary General-OIC.



Sendai, Japan 17 March, 2015: Group photo with Dr. Shamshad Akhtar, Sec UNESCAP at Pakistan's Side Event.



Lahore 12 Jan, 2015: NIDM organised CBDRM training course for RESCUE 1122.



Islamabad 20 May, 2015: Meeting with Mr. David Kaatrud, WFP Regional Director for Asia.



Islamabad 8 Oct, 2015: Chairman NDMA lit candle in memory of disaster victims.



Islamabad 8 Oct, 2015: Search & Rescue teams displayed equipment during commemoration of National Disaster Awareness Day.



Islamabad 8 Oct, 2015: NDMA organised flag march of emergency response units of Search and Rescue Teams on National Disaster Awareness Day.



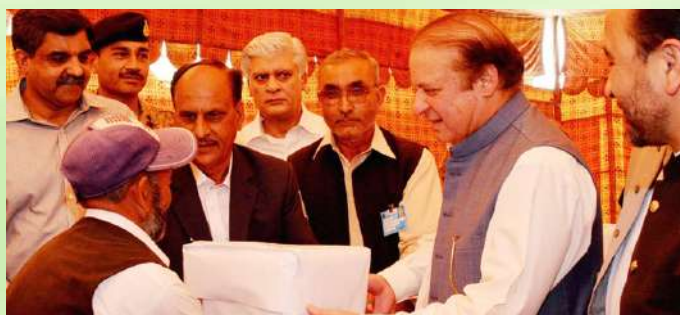
Muzaffargarh 5 Aug, 2015: NDMA team inspecting Field Medical Camp during Flood 2015.



Chitral 18 Aug, 2015: NDMA requisitioned helicopter distributing relief among flood affectees.



Chitral 18 Aug, 2015: NDMA requisitioned helicopter evacuating flood affectees.



District Ghanche, GB 30 July, 2015: PM distributing relief items among the flood affectees.



Islamabad 28 July, 2015: Relief distribution point at Reshum, district Chitral.



Lahore 17 Oct, 2015: Briefing on 'Implementation Framework of Climate Change Policy' at Climate Change Commission.



KARACHI 19 May, 2015: Chairman NDMA Visit USAR Team.



Islamabad 3 Nov, 2015: Chairman NDMA and acting rep. of UNICEF, Cris Munduate signed joint workplan to promote child centered DRR in Pakistan.



Islamabad 8 April, 2015: Chairman NDMA and WFP Country Rep. to Pakistan Ms. Lola Castro signed LOA 'Institutional Support to NDMA for Implementation of the NDMP in Pakistan' -under 2015-WFP Work Plan.



Islamabad 28 Jan, 2015: Sri Lankan High Commission H.E Air Chief Marshal (Retd) Jayalath Weerakkody handed over Ceylon tea to Member Operations NDMA, Brig Ishtiaq Ahmed at Sri Lankan High Commission, Islamabad.



Islamabad 27 July, 2015: Chairman NDMA and Country Rep. UN Women, Mr. Jamshed Kazi, signed LOA.



KP Malakand Division 31 Oct, 2015: NDMA Teams conducting damage assessment for compensation verification process at village Killa Pata, U.C Malanjaba, Tehsil Charbagh, District Swat.



KP Malakand Division 4 November 2015: NDMA teams conducting vulnerability assessment of earthquake affected areas, village Asslo, UC Raabat Tehsil Timargara, district Dir Lower



Malakand Division, 3 December 2015: Handing taking ceremony of tents for fully damaged schools of Malakand Division, Hazara Division and Bajaur Agency (FATA) at Saidu Sharif.



Gilgit Baltistan 17 November 2015: NDMA hands over relief to GBDMA for earthquake affectees



Karachi 2nd Aug, 2015: CM Sindh Syed Qaim Ali Shah & Chairman NDMA during discussion on flood situation.



6 November, 2015: Visit of Media Teams to earthquake affected areas.



Gilgit Baltistan, 17 Nov, 2015: Cheques distribution among earthquake affectees, Tehsil Phunder, District Ghizer.



Gilgit Baltistan, 17 Nov, 2015: Chairman NDMA addressing earthquake affectees, Tehsil Phunder, district Ghizer.



KP Malakand Division 13 Nov, 2015: Cheque distribution among earthquake affectees, District Shangla.



KP Malakand Division 29 Oct, 2015: Briefing at Tehsil Martoong, District Shangla.



KP Malakand Division 14 Nov, 2015: Prime Minister distributing cheques among earthquake affectees, Barikot, District Swat.



KP Malakand Division 31 Oct, 15: Pakistan Airforce medical teams providing medical assistance to earthquake affectees.



KP Malakand Division 30 July 2015: Pakistan Armed Forces sent relief for earthquake affectees.



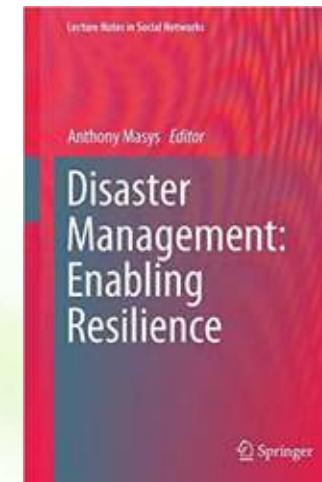
Gilgit Baltistan 18 Nov, 2015: Briefing at RESCUE 1122 Head Office.



KP 28 Oct, 2015: MI-17 helicopter provided to PDMA Khyber Pakhtunkhwa by NDMA for rescue & relief operation in earthquake affected Districts in Malakand and Hazara Division



KP Malakand Division 8 Nov, 2015: NDMA hands over winter clothing to District Swat, Commissioner Office, Tehsil Saidu Sharif



Disaster Management: Enabling Resilience

by Anthony J. Masys (Editor)

The book discuss relevant theoretical frameworks and applications pertaining to enabling resilience within the risk, crisis and disaster management domain. The contributions to this book focus on resilience thinking along 4 broad themes: Urban Domain; Cyber Domain;Organizational

Social domain; and Socioecological domain. This book would serve as a valuable reference for courses on risk, crisis and disaster management, international development, social innovation and resilience. This will be of particular interest to those working in the risk, crisis and disaster management domain as it will provide valuable insights into enabling resilience.This book will be well positioned to inform disaster management professionals, policy makers and academics on strategies and perspectives regarding disaster resilience.



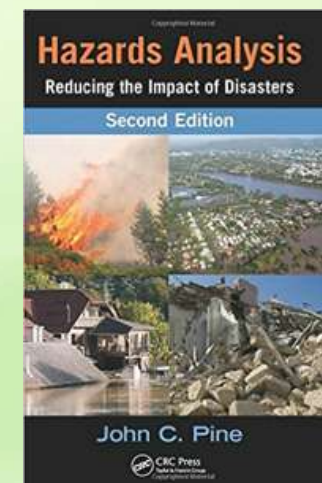
Geo-information for Disaster Management

EDITORS Professor Dr.Peter van Oosterom

Dr. Siyka Zlatanova Elfriede M. Fendel

The book provides a broad overview of the (geo-information) technology, software, systems needed,

used and to be developed for disaster management. The book provokes a wide discussion on systems and requirements for use of geo-information under time and stress constraints and unfamiliar situations, environments and circumstances.The book broadly covers various aspects of Geo-information technology in context of disaster management: industrial accidents, road collisions, complex emergencies, earthquakes, fires, floods and similar catastrophes (for example the recent huge disaster with the Tsunami in South-East Asia on 26 December 2004). Access to needed information, facilitation of the interoperability of emergency services, and provision of high-quality care to the public are a number of the key requirements.



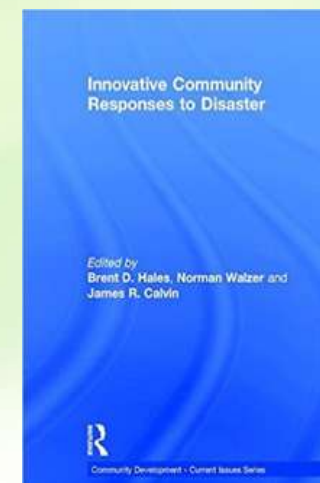
Hazards Analysis

Reducing the Impact of Disasters, Second Edition

By John C. Pine

The impacts of natural and man-made disasters have increased exponentially over the past few decades. Moreover, with our global interconnectedness and the growing scale of disasters, today's catastrophic disasters can have regional, national, and even global

economic consequences. Following in the tradition of the successful first edition, Hazards Analysis: Reducing the Impact of Disasters, Second Edition provides a structure and process for understanding the nature of natural and human-caused disasters.The book details a systematic process of hazards identification, vulnerability determination, and consequence assessment for the natural, built, and human environment. Using a cross-disciplinary approach, this book effectively demonstrates how to use the results of vulnerability assessment, spatial analysis, and community planning to reduce adverse disaster outcomes and foster social, economic, and environmental sustainability.



Innovative Community Responses to Disaster

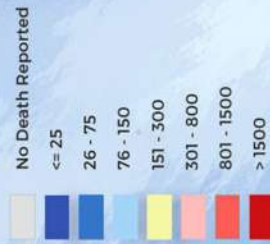
EDITORS Brent D. Hales Norman Walzer

James R. Calvin Increasingly, community leaders around the world face major natural and economic disasters that

require them to find ways to rebuild both physical infrastructure and the local economy. Doing this effectively requires an understanding of how various parts of the community are interconnected, as well as information as to which revitalization approaches have succeeded in the past. This book presents a conceptual framework based on the community capitals, and describes approaches that have succeeded in situations where local leaders have coordinated efforts to rebuild and revitalize local conditions. Contributions provide examples of successful approaches around the world, thus analyzing potential strategies for addressing disasters of many different types in various cultural settings. In this way, the book provides insights into a variety of approaches based on applications of accepted community development theory and concepts.



Legend (Total Deaths)



DISASTER RELATED DEATHS

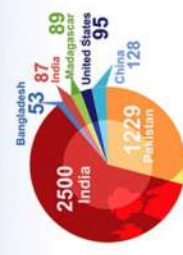


Analysis carried out by PMU, NDMA

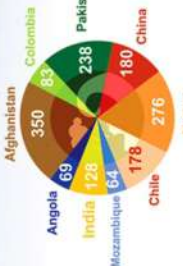
Biological Disasters (Deaths)



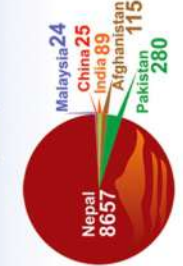
Meteorological Disasters (Deaths)



Hydrological Disasters (Deaths)



Geophysical Disasters (Deaths)



Biological Disasters

Country	Disaster Type	Total Deaths	Affected Population
Nigeria	Epidemic	97	2108
Kenya	Epidemic	72	3459
Sudan	Epidemic	42	1399
Niger	Epidemic	6	3370
Yemen	Epidemic	3	3026

Meteorological Disasters

Country	Disaster Type	Total Deaths	Affected Population
India	Extreme Temperature	2500	-
Pakistan	Extreme Temperature	1229	80000
China	Storm	128	262800
United States	Storm	95	69
Madagascar	Storm	89	174007
India	Storm	87	135100
Bangladesh	Storm	53	460300

(Disasters with > 50 Deaths)

Hydrological Disasters

Country	Disaster Type	Total Deaths	Affected Population
Afghanistan	Landslide	350	6800
Malawi	Flood	276	638645
Pakistan	Flood	238	1572191
China	Flood	180	795300
Chile	Flood	178	206436
India	Flood	128	10000
Colombia	Landslide	83	337
Angola	Flood	69	595
Mozambique	Flood	64	124381

(Disasters with > 50 Deaths)

Geophysical Disasters

Country	Disaster Type	Total Deaths	Affected Population
Nepal	Earthquake	8657	5650585
Pakistan	Earthquake	280	664738
Afghanistan	Earthquake	115	538
India	Earthquake	89	-
China	Earthquake	25	211743
Malaysia	Earthquake	24	-