

Trail of Tragedy-6 May 2014 - October 2015



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Research & Editing By

Rehmat Karim, Consultant Monitoring and Evaluation and Technical Reporting Specialist - Research Assistant: Sidra Ijaz

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Trail of Tragedy - 6

May 2014 – October 2015

Acronyms

CCHF	Congo-Crimean Haemorrhagic Fever
DPCP	Dengue Prevention and Control Program
ECHO	EU Humanitarian Aid and Civil Protection department
FAD	Food Availability Decline
FATA	Federally Administered Tribal Areas
GLOF	Glacial Lake Outburst Flooding
HANDS	Health and Nutrition Development Society
ISPR	Inter-Services Public Relations
KM	Kilometer
КМС	Karachi Metropolitan Corporation
NDMA	National Disaster Management Authority
NHN	National Humanitarian Network
NIH	National Institute of Health
PDMA	Provincial Disaster Management Authority
PMD	Pakistan Meteorological Department
PRCS	Pakistan Red Crescent Society
SPO	Strengthening Participatory Organization
USGS	United States Geological Survey
WHO	World Health Organization

Preamble

This sixth volume of the 'Trail of Tragedy' presents summary accounts of human sufferings that had resulted from rain-fed floods, famine, earthquake, and the Dengue and Congo epidemic outbreak in various parts of Pakistan. These sufferings were reported by various newspapers and online humanitarian forums on different occasions during the period May 2014 to October 2015.

This compendium of human tragedies is a portrait of the upshots of sheer short-sightedness and misplaced-priorities of the state and citizens. It is imperative that lessons are learnt to abate and prevent such eventualities in future, and, demonstration of a shared national resolve followed by sustained efforts will only make the vulnerable groups safer, adaptive and resilient in the face of the occurrence of unprecedented calamities.

Note: SPO does not assume responsibility for the accuracy of news items (including figures and estimates) cited in this volume. Web links have been provided to enable readers' access to the original sources of news items reported in this volume.

Message from the Chief Executive

Since the rain-fed floods in 2010 which unleashed the worst calamity in the history of Pakistan, the country has been embracing unceasing loss of human lives and social and physical infrastructure inflicted by the recurrence of flood disasters. Frequent incidences of flood disasters coupled with lackluster preparedness and mitigation measures by the state have been mainly responsible to further weaken the coping capacities of already vulnerable communities. Usually, the relief, recovery and rehabilitation endeavors have been snail-paced letting the subsequent flood disasters to inflict more severe and irreversible losses than ever before.

Likewise, the earthquake of 8th October 2005 that shook the entire nation and ripped through Azad Jammu and Kashmir and Mansehra regions, did not prompt an iota of change in our policies and actions to be better prepared to adapt to, and, recover from unprecedented future hazards more effectively. This was evident from the devastation caused by 24th September 2013 earthquake in Awaran region of Balochistan which unleashed massive loss of human lives and physical infrastructure. Now the recent catastrophic earthquake of 26th October 2015 that jolted the whole country has left no room to disagree that human casualties and loss of assets were more an upshot of the 'governance failure' than the severity of the earthquake itself.

While the fear of the recurrence of aforementioned hazards continues to haunt, the outbreak of Dengue and Congo epidemic has added more despair to a complex set of issues the country is already grappled with. Our miseries do not stop here, as the arid region of Thar has been frequently experiencing drought like conditions triggered by the absence of rain. Over past few consecutive years, owing to malnutrition resulting from lack of access to food, water and healthcare, Thar region has witnessed an ever-increasing loss of human lives, of which children aged five and below have been the worst hit.

We are witnessing a never-ending upsurge in the recurrence of, and the resultant losses impinged by above-motioned hazards; however, a promising action by the state to curb these is invisible.

Continuing its endeavors to present a 'trail of tragedies' resulting from aforesaid hazards; in this volume (sixth), SPO has brought to you summary accounts of the human sufferings reported on different occasions by various newspapers and humanitarian websites.

I believe that this small contribution together with the valuable work done by many others will create much-desired ripples of change, i.e. a beginning of meaningful action nationwide to form conditions required to minimize loss of social and physical capital resulting from multiple hazards.

Naseer Memon, Chief Executive

Summary Accounts of the Hazards Reported by Newspapers and Humanitarian Websites

Expert Views on 'Why' and 'Who' Aspects of the Human Tragedies 9 Dead in North West Pakistan Floods

MAY 19, 2014 (http://floodlist.com/asia/9-dead-north-west-pakistanfloods)

After several days of torrential rain, floods struck in the troubled region of North Waziristan in the northwest of Pakistan. The disaster came just a few days after a bomb exploded on a roadside, killing at least nine



Pakistan soldiers. Since then the region had been under curfew for eight days until Friday May 16, 2014, when the heavy rain first began to fall. Media reports claimed that the rainfall caused the River Tochi to burst its banks. Farmland and local villages suffered. Eight people who were believed to be the members of the same family died in the town of Datta Khel after flood waters caused their house to collapse. One other person was also reported as killed in the flooding. Many homes were left without electricity.

North Waziristan is a mountainous region of Pakistan which borders Afghanistan. The floods in the area followed several weeks of flooding and landslides in Afghanistan, the worst of which struck on May 2, 2014 in Abe Bareek village in Argo District, Badakhshan Province.

Congo Virus Hits Pakistan

AUGUST 18, 2014 (http://www.medicalnewspk.com/congo-virus-hitspakistan/)

The two men who were infected with the Congo virus passed away, while a woman, who also contracted the fatal virus, was under treatment. An official at the district hospital said that the thirty-yearold Abdullah Jan died at the Combined Military Hospital Zhob, while 60-year-old Taween Khan passed away in Multan. He further added that Abdur Razzaq, 25, was admitted at Jilani Hospital Quetta earlier but had been discharged after treatment. He also said that a woman was also admitted at Fatima Jinnah TB Sanatorium Quetta.

Other patients who contracted the virus were reported to be receiving treatment from different hospitals at Multan and Quetta. It is pertinent to highlight that in the absence of a surveillance system many cases went without reported. It was also feared that in the far flung areas deaths caused by Congo virus could not even be diagnosed.

Sindh keeps silence as Thar drought goes severe

AUGUST 19, 2014

(http://nation.com.pk/karachi/19-Aug-2014/sindh-keeps-silence-as-thar-drought-goes-severe)

During the consecutive drought conditions over the past two and half years in Thar, a total of 1,175 deaths were recorded which included 610 children. In 2014, 20 percent of the geographic area of Tharparkar received sporadic rainfall (160 mm) which was not adequate to plow fields. A total of 33 suicides were recorded in 2014 which indicated the severity of the situation that left people with no option but to embrace death. 'Thar faces severe drought conditions for the third consecutive year but no measures are taken by the provincial government to control the situation', said the participants of a provincial dialogue

on 'Thar Droughts and Effects' organized by National Humanitarian Network (NHN).

The situation required timely measures by the government, said researcher and social activist Ali Akbar Rahimoo. He said the Sindh Drought Mitigation and Management Policy 2014 was in final process of legislation but due to the third consecutive year of drought in Thar, the situation was turning from bad to worst. Rahimoo said, 'there were 33 suicide cases recorded in first seven months of 2014, whereas in 2013 the figure was 29, in 2012 it was 35 and in 2011 the total suicide cases reported from Tharparkar district were 24.' Dr Sono Khagharani said, owing to the unceasing drought conditions indigenous poor communities were badly affected as there was a dire need to save human lives and the major source of nutrition, livelihood and the asset of locals i.e., livestock. He emphasized that food, medicines and fodder must be provided immediately. Dr Wali Muhammad from World Health Organization insisted on mapping and mobilization of the existing resources on war footing to prevent lives of infants, lactating mothers and elderly people. Sartaj Abbasi, NHN's Sindh chapter's Provincial Coordinator said the situation in Thar and other arid areas was worsening further; therefore, Sindh government should take measures to curb human sufferings. Shah Jahan Baloch of ActionAid Pakistan said Sindh government should initiate emergency assistance to the affected people immediately instead of awaiting finalization of legislation in this regard. Dr Salman Safdar from UNOCHA said the UN had not played any major role during the last spell of drought because the government did not appeal to the UN for assistance.

18 Killed in Flash Floods Khyber Pakhtunkhwa, Pakistan

AUGUST 19, 2014

(http://floodlist.com/asia/18-killed-flash-floods-khyberpakhtunkhwa-pakistan)

As many as 18 people were killed in flash floods in the Pakistan province of Khyber Pakhtunkhwa. The deaths occurred in the capital

Peshawar and the surrounding suburbs on Friday August 15, 2015. A further 80 people were injured. The province saw heavy rainfall between 14th and 17th August, causing damage to houses and roads. Other provinces including Punjab, Gilgit-Baltistan and Kashmir were also affected.

Massive Rainfall Brings Deadly Floods to Pakistan

SEPTEMBER 5, 2014 (http://floodlist.com/asia/massive-rainfall-deadly-floodspakistan)

The monsoonal low across northern India and Pakistan produced extreme amounts of rainfall, causing deadly floods in both countries. Pakistan's Meteorological department said that parts of Azad Kashmir and Punjab saw over 30



cm (1 foot) of rainfall in 24 hours. Further heavy rains were forecasted at least for the following 24 hours which posed the threat to affect wide areas of Punjab province but also the parts of Azad Kashmir, Khyber Pakhtunkhwa and south east of Sindh province.

Deadly Floods and Landslides

The heavy rain brought deadly floods and landslides to the parts of northern Pakistan, in particular Punjab province. Local media reports cited as many as 53 people dead in Punjab in flood related incidents, most of them in the provincial capital Lahore. The districts of Sialkot and Gujranwala were also badly affected. Around 30 people were injured there. Many of the fatalities were a result of collapsing roofs and buildings. At least 17 people died in the flash floods in Azad Kashmir.

Death Toll in Pakistan Floods Rises to 193

SEPTEMBER 8, 2014 (http://floodlist.com/asia/death-toll-pakistan-floods-rises)

According to NDMA, 193 people were killed in the flood related incidents. After several days of heavy rain, massive flooding first struck on September 05, 2014 which was described as the worst to hit the region in the last 20



years. On September 07, 2014 the Punjab government declared flood emergency across the province. 22 districts of Punjab and 10 districts of Azad Kashmir were worst affected, which claimed total of 193 lives including 119 in Punjab, 63 in Azad Kashmir and 11 in Gilgit Baltistan, and, over 360 were injured. 1,838 houses were completely destroyed and almost 5,000 houses were partially damaged.

Over 55,000 flood victims moved to safety: ISPR

SEPTEMBER 18, 2014 (HTTP://WWW.PAKISTANTODAY.COM.PK/2014/09/18/ NATIONAL/OVER-55000-FLOOD-VICTIMS-MOVED-TO-SAFETY-ISPR/)

According to Inter-Services Public Relations (ISPR), 24 medical camps were established where army doctors treated 17,182 patients. Besides, 24 relief camps were also established in major cities including Rawalpindi, Gujranwala, Lahore, Multan and Karachi.

Flood emergency declared in Thatta, Sujawal

SEPTEMBER 20, 2014 (HTTP://NATION.COM.PK/NATIONAL/20-SEP-2014/ SINDH-FLOOD-EMERGENCY-DECLARED-IN-THATTA-AND-SUJAWAL?)

The district administration of Thatta and Sujawal declared emergency on all protective embankments of Indus River in both districts and advised the residents of Kutcha areas (river bed) to shift to safer places.



All protective bunds were being strengthened and were under strict vigilance round the clock while the irrigation, revenue and other staff had been directed to remain on duty round the clock. However, irrigation authorities declared that there was no imminent danger to the bunds. According to them, vulnerable points at Soorjani and Monarki bunds in Sujawal district were strengthened.

Pakistan Floods – High Risk of Dengue, Malaria and Cholera

OCTOBER 10, 2014 (http://floodlist.com/asia/pakistan-floods-high-riskdengue-malaria-cholera)

As waters continued to recede following the floods that had affected more than 2.5 million Pakistanis, health experts warned a further crisis owing to thousands of communities being at the risk of vector and water-borne disease. World Health Organization (WHO) highlighted a high risk of dengue, malaria, and even cholera outbreaks among the many thousands of families surrounded by large areas of stagnant water. A lack of clean water, sanitation and hygiene systems as well food insecurity and a



shortage of accessible medicines intensified the threat. The floods, which began in the first week of September 2014, were the worst the country saw since 2011, and was believed to have affected Punjab, the country's 'bread basket', worse than any floods in 40 years. Some 2.4 million acres (971,000 hectares) of standing crops were lost. More than 350 people were killed, according to official statistics, but some observers feared the number to be even higher. Access to only few remote areas was possible, with many roads inundated by the flood water. WHO report cited increase in acute respiratory infections, diarrhea and skin diseases borne out by villagers across two of the worst-affected districts in Punjab – Hafizabad and Jhang. Emergency assessment teams from the Pakistan Red Crescent Society (PRCS) encountered children with diarrhea, eye infections and the early signs of skin disease.

Pakistan Floods, September 2014 – Facts and Figures

OCTOBER 13, 2014 (http://floodlist.com/asia/pakistan-floods-september-2014-facts-figures)

In early September 2014, heavy rainfall in northern India and Pakistan resulted in widespread flooding in Indian Jammu and Kashmir, and in the Pakistani areas of Azad Kashmir, Punjab, Gilgit-Baltistan and Khyber Pakhtunkhwa, and later in the Sindh province. This was the

fourth consecutive year of high-impact monsoon rains in Pakistan. In 2013, flooding killed 178 people and affected 1.5 million. 2010 saw some of the worst floods in Pakistan's history, killing 1,800 and affecting 21 million.

Fatalities and Affected Population Figures 2014

367 people died in the flooding. Over 2.5 million people from over 4,000 villages were affected. Nearly 700,000 people were evacuated and the floods left over 100,000 homes damaged. Livelihoods were also damaged, in particular agriculture. In Punjab, Azad Kashmir and Gilgit-Baltistan, more than 2.4 million acres of crops was lost and 9,000 cattle perished.

Province	Deaths	Injured	Houses Damaged	Villages Affected	Population Affected	Persons Evacuated
Khyber Pakhtunkhwa	12	15	42	0	0	0
Punjab	286	512	100000 (approx.)	3484	2470000	618347
Azad Kashmir	56	111	5768	187	46979	0
Gilgit-Baltistan	13	35	1292	127	13266	0
Sindh	0	0	0	267	0	65583
Totals	367	673	107102	4065	2530245	683930

Source: Pakistan National Disaster Management Authority (NDMA), 08 October 2014

29 more dengue cases across Punjab

OCTOBER 19, 2014 (http://www.dawn.com/news/1138925)

Some 29 more patients were tested positive for the dengue fever during the last 24 hours all over the province. After emergence of new cases, the total number of dengue cases in Punjab reached 455, according to an official. He said Rawalpindi was at the top among other districts where the number of dengue patients was alarmingly increasing followed by Sheikhupura and Lahore.

Thar famine: 15 children die in less than a month

October 22, 2014 (HTTP://ARYNEWS.TV/EN/TAG/FAMINE/PAGE/2/)

After the recess of few months, in a latest spasm of deaths, the famine-like situation in Thar claimed lives of 15 more children over past 23 days.

Inquiry commission's report: 'Starvation not the cause of Thar deaths'

OCTOBER 31, 2014 (HTTP://TRIBUNE.COM.PK/STORY/783903/INQUIRY-COMMISSIONS-REPORT-STARVATION-NOT-THE-CAUSE-OF-THAR-DEATHS/)

An inquiry commission formed on April 14 to probe negligence in handling the drought that led to deaths of 234 people, mostly children, in Tharparkar placed the onus of blame on the Sindh Health Department and elected representatives of the area. The commission's report, available with The Express Tribune, also criticized the PDMA's role in dealing with the drought.

Members of the commission, retired judges Syed Aley Maqbool Rizvi and Syed Jamil Raza Zaidi, led by Justice Zahid Kurban Alavi, visited Tharparkar several times and interviewed families of victims, doctors,

health experts, elected representatives and civil servants.

The report said that the Thar region has historically been neglected by those in power. Talking to The



Express Tribune, Justice Alavi said 'the commission wanted to suggest a possible structure for development but that went beyond their mandate'. He said it was unfortunate that two former chief ministers and a prime minister hailed from the region yet the development indicators for the area remained abysmal. 'Millions of rupees were given to the parliamentarians of the region, I don't know where the money goes or when they will spend it on development, especially in health and education sectors,' Justice Alavi said.

'If we can take natural gas from Sui to Quetta through mountainous terrain, surely we can transport potable water to the residents of Thar?' The inquiry report said that district health officers were supposed to be aware of what was going on in their districts. The report said that one



hospital in Mithi cannot take care of residents of the entire district and the death toll would not have been so high if residents were provided sufficient medical facilities in their areas of residence. Similarly, the drought could have been averted if the government had a comprehensive strategy to tackle it. The report quoted local residents as saying that many people die each year and the official death toll takes count of those only who die at the Mithi Hospital, Tharparkar. As many as 439 people died in 2011, 588 in 2013, and 234 in 2014.

When asked about the lack of health facilities, Health Secretary Iqbal Durrani said that they had appointed 53 doctors to Mithi Hospital, of which only 20 had joined. He said most of the mothers gave birth to children on sand as a result of which the newborns developed infections of all sorts.

The report does not mention starvation as a cause of death: Jamal Raza, the Director of National Institute of Child and Health Care

Hospital, who visited Tharparkar to set up camps, told the commission that while many among the children he had checked suffered from dysentery and skin infections, chronic malnutrition was the most common ailment – even the mothers were malnourished.

The commission recommended incentivized mandatory service of three years for doctors in the area without political interference. 'Doctors who refuse to work in Thar should be asked to leave.' The report calls for basic health centers and hospitals with doctors, safe water and adequate equipment.

Another child loses life in Mithi, death toll hits 35

NOVEMBER 2, 2014 (http://arynews.tv/en/tag/famine/page/2/)

The deaths in drought-hit Tharparkar due to famine-like situation reached 20 over past 30 days, with another death of a child reported on Sunday.

Famine claims two more lives in Mithi; toll reaches 39

NOVEMBER 7, 2014 (http://arynews.tv/en/tag/famine/page/2/)

Two more children perished in the drought-hit Tharparkar due to famine-like situation haunting the district for months. Death toll of children reached 39.

Dengue mosquitoes undeterred by cold weather

NOVEMBER 19, 2014 (http://www.dawn.com/news/1145491)

Despite the arrival of winter in the garrison city, 14 more residents got diagnosed with mosquito-borne dengue virus. The fresh cases took the city's total dengue tally from September to November 18, to 1,363. Most dengue patients were reported to the Holy Family Hospital, while Benazir Bhutto Hospital and District Headquarters Hospital admitted five and three cases, respectively. Since the beginning of the dengue season in early September, 731 dengue patients arrived at Holy Family Hospital, 420 at Benazir Bhutto Hospital and 212 at District Headquarters Hospital. Most of these cases were reported in the city areas, especially Gawalmandi, Mohanpura, Khayaban-i-Sir Syed and Dhoke Ratta located near Leh Nullah.

Karachi: Congo fever records 15-year high with 16 cases in city

DECEMBER 15, 2014 (http://www.dawn.com/news/1150900)

The confirmation of two more cases of Congo-Crimean hemorrhagic fever (CCHF) in the Jinnah Postgraduate Medical Centre brought the annual tally to 16 in the city, 15-year high, officials said. Official figures obtained from the provincial health department showed that it had documented 14 CCHF cases, including two women, one of whom was among the six who died of the disease, by the end of November. Two more cases were reported at the Jinnah Postgraduate Medical Centre in December, taking the total number of CCHF victims to 16. Official figures showed a 55-year-old woman as the oldest and a four-year-old boy as the youngest victims of the disease. Barring five, all the victims were young, aged between four and 27 years. A young meat-seller from Azizabad was the first CCHF victim, who died of the disease in August. Since then five more victims, including a young woman, have died.

Dengue claimed 15 lives in city in 2014

DECEMBER 30, 2014 (HTTP://WWW.PAKISTANTODAY.COM.PK/2014/12/30/ CITY/KARACHI/DENGUE-CLAIMED-15-LIVES-IN-CITY-IN-2014/)

Sindh Dengue Prevention and Control Program (DPCP) disclosed that 15 people died from deadly dengue viral fever in 2014 and all these deaths were reported in Karachi. 15 people died of dengue viral fever during January to December 28, 2014; however, the ratio of dengue deaths in 2014 was low as compared to 2013. 1286 dengue fever cases were reported in various public and private hospitals of Sindh, 1250 in Karachi, 36 cases in rest of Sindh. 5,750 dengue viral fever cases were reported across the Sindh province in 2013. Out of them 5,058 cases were detected in Karachi and 692 in rest of the province. As many as 32 dengue fever patients died across the province last year, 26 in Karachi, three in Hyderabad and one each in Mirpurkhas, Thatta and Larkana.

Children Starving to Death in Pakistan's Drought-Struck Tharparkar District

JANUARY 03, 2015

(http://reliefweb.int/report/pakistan/children-starvingdeath-pakistan-s-drought-struck-tharparkar-district)

The death toll hit 650 at the close of 2014, but continued to rise in the New Year as scant food stocks wither away and cattle belonging to herding communities perish under the blistering sun. Among the dead are three-week-old Ramesh; four-month-old twin girls named Resham and Razia; and the yet-unnamed sons of a couple who are inconsolable after the passing of their newborn children.

Recurring drought meets bad management

Despite ample evidence that additional food stocks are needed between the months of July and September, typically the monsoon season, in the event of inadequate rainfall, the Pakistan People's Party (PPP)-led Sindh government failed to develop and execute contingency plans for the vulnerable residents. "The poor government response multiplied the intensity of the disaster. Underfed children are dying in large numbers, and so are the cattle, due to unavailability of fodder," Amar a local journalist said. Anything below 200-300 mm of rainfall during the monsoon months signals a "bad year", locals here told IPS. In such cases, the government is tasked with providing 50-kg bags of wheat to the 250,000 households who are not able to feed themselves without assistance. But poor management of food aid, together with corruption along the supply chain and hoarding by contractors has disrupted the entire system. Amar alleged that a large number of wheat bags were in fact filled with sand. It is only one such anomaly that is plaguing the entire population of some 1.5 million people.

NGOs struggle to keep up

Independent efforts to intervene in the crisis have been unable to combat the spiraling death toll. Dominic Stephen, chairman of the Sindh-based relief organization Future in Our Hands Pakistan (FIOHP), said that the government supplied wheat at the start of the drought, but later slowed its efforts. FIOH is performing some relief work at the local level, but cannot single-handedly cover the entire district, whose population is spread out over 2,300 villages in an area spanning 22,000 square km. Stephen also told IPS that the government is relying on 16-year-old data, gathered during the 1998 census, to determine who is in need of aid. 'This is why many victims did not receive emergency supplies," he added. Long-standing structural inequalities in the region are now exacerbating the impacts of the drought. Research indicates that Tharparkar has the lowest Human Development Index of all 25 districts in the Sindh province.

Dr. Sono Khangrani, CEO of Hisaar Foundation, an NGO working in Tharparkar, told IPS that other socio-economic conditions must

be taken into consideration, such as the stubborn practice of early marriages, which result in high infant and maternal mortality rates. A lack of livelihood opportunities in the region has pushed locals to look for work elsewhere; those who commute for work are sometimes unavailable to receive food supplies when they are delivered, he explained. Those who have found permanent employment in cities, as casual laborers on infrastructure projects, exchange their surplus food stocks for cash, resulting in reduced wheat supplies in times of hardship.

Willful neglect

Meanwhile, a judicial inquiry into the situation in Tharparkar conducted in November last year found that over 20 percent of health professionals and officers in the provincial government, who originally hailed from the drought-struck district, had not been posted there. The report concluded that these public servants should return to the district, to apply their knowledge of the area and for the betterment of their own people. Some claim that the government's neglectful attitude towards the region, which has resulted in rampant underdevelopment, is due to the large Hindu population in the area. A resident of Tharparkar who did not want to be named alleged that the government was less concerned about the people since 35.6 percent of the population was Hindu, while 64.4 percent were Muslim. The government, for its part, has refuted such allegations. Senator Taj Haider, coordinator of the Tharparkar Relief Committee (TRC) formed by the Sindh government, denied that hunger and malnutrition were behind the number of deaths, claiming instead that pre-mature births and poor maternal health were the biggest culprits. Taj added that the Sindh government was vigilant of the drought and was pursuing a long-term strategy involving development of the entire district, rather than simply providing emergency aid. 'We plan to install 750 Reverse Osmosis plants in the Thar Desert by July 2015,' he told IPS. 'This will provide Tharis sufficient water for drinking and irrigation and help avoid droughts in the future.'

Thar-famine claims four more lives, death toll escalates to 361

FEBRUARY 08, 2015

(http://dunyanews.tv/en/Pakistan/260211-Tharfamineclaims-four-more-lives-death-toll-esc)

At least four more children lost their lives due to the dearth of food and water in Tharparkar. Three-month old Geeta, eight-day old Subhagi, five-day old Babu and fifteen-day old Ahmed died falling prey to the Thar famine at the Civil Hospital in Mithi. Despite more casualties reported from the famine as the death toll rose to 361 in 130 days, the Sindh government suspended the relief activities to the victims of Thar.

5 Dead as Floods hit Northern Pakistan

FEBRUARY 26, 2015 (http://floodlist.com/asia/5-dead-flash-floods-hitnorthern-pakistan)

Torrential rains and flash floods hit northern and northwestern Pakistan causing landslides and washing away several shops and bridges. At least five people were killed and several injured in rain-related accidents in parts of Khyber Pakhtunkhwa province. The roof of a house collapsed on the



outskirts of Peshawar due to the heavy rains, killing three women and injuring two others. Two people were killed in the Mohmand Agency

tribal region in another roof collapsing incident. At least 10 shops and 55 boats were washed away in Charsadda district, located some 30 Kilometers (KMs) from Peshawar, due to swirling waters in Kabul River. A bridge on Kurram River, which connects North Waziristan and the adjoining Bannu district, was also washed away. Khyber Agency was also hard-hit but residents of the town of Jamrud managed to rescue the passengers of four vehicles swept by the flash floods. Moreover, hundreds of passengers were trapped due to the massive landslides in various areas of the silk route, which connects Pakistan with China. Several parts of northern Pakistan were cut off from the rest of the country. Heavy rains also forced aviation authorities to suspend flight operations at Islamabad airport for at least four hours. The Reshian and Lipa areas of Pakistani-administered Kashmir were cut off from the rest of the country as all roads were blanketed with thick layers of snow. The meteorological department had forecasted more rains and snowfall over the next four days in the northern and northwestern Pakistan.

25 Killed in Severe Weather in Pakistan – 161 mm of Rain in Islamabad

MARCH 3, 2015 (http://floodlist.com/asia/25-killed-severe-weatherpakistan)

A total of 25 deaths were reported in Pakistan as a result of severe

weather. At least 15 of the deaths came after houses and buildings collapsed after torrential rainfall. At least eight people were killed in Wah Cantonment in the province of Punjab after houses collapsed there. According to EU



Humanitarian Aid and Civil Protection department (ECHO), in similar circumstances, seven people died in Mohmand Agency in the Federally Administered Tribal Areas (FATA). The country experienced heavy rainfall after 25th February, when five people died in the North West of Pakistan. Islamabad saw 161 mm of rain fall in a 24 hour period. The town of Dir in Khyber Pakhtunkhwa province saw 66 mm of rain.

Ahead of season: 22 dengue cases reported in one week in Karachi

APRIL 20, 2015 (HTTP://TRIBUNE.COM.PK/STORY/873095/AHEAD-OF-SEASON-22-DENGUE-CASES-REPORTED-IN-ONE-WEEK-IN-KARACHI/)

A total of 22 patients suffering from dengue were reported from various parts of the city in the past week, bringing the total number of reported cases in Karachi to 204 since January. The provincial DPCP revealed these stats. According to the data, 11



of these patients were admitted in various hospitals in the last week, including one from Umerkot, which brought the provincial total to 205. Moreover, 12 patients were diagnosed but were not hospitalized. 'This is not dengue season,' pointed out Dr Shakeel Aamir Mullick, the DPCP program manager. 'We may have more patients in August,' he feared.

Deadly Storm and Flash Floods Hit Peshawar, Pakistan

APRIL 27, 2015

(http://floodlist.com/asia/deadly-storm-floods-peshawar-pakistan)

A devastating storm struck Peshawar and the other areas of the province of Khyber Pakhtunkhwa in the north-west of Pakistan, claiming at least 38 lives. Areas were bombarded with heavy rainfall and strong winds, leading to flash floods and



damage to property. Mushtag Ali Shah, director of the provincial meteorological department, described the storm as a 'mini cyclone'. According to Khyber Pakhtunkhwa's Provincial Disaster Management Authority (PDMA), at least 38 people were killed and over 200 were injured. However, other latest reports from the Reuters and AFP said that the death toll stood at 44. The deaths were caused mostly due to collapse of houses and other buildings. Local authorities said that six of the deaths occurred in Charsadda district, four in Nowshera district, and the remainder in the provincial capital, Peshawar. Flood water was said to be at least one meter deep in some areas of the city. 69 mm of rain fell in 24 hours, between 26th and 27th of April 2015. The severe weather caused power outages and disrupted transport, including at Peshawar airport, where flights were suspended. Officials from Khyber Pakhtunkhwa's PDMA said that efforts were underway to provide food, shelter and emergency medical services to those affected. In February 2015, around five people died in flash floods in Peshawar after torrential rains and flash floods hit northern and northwestern Pakistan causing landslides and washing away several shops and bridges.

Dengue claims year's first life in city

MAY 27, 2015 (HTTP://WWW.DAWN.COM/NEWS/1184359)

Provincial health authorities confirmed the year's first death caused by dengue virus, and identified a boy of Orangi Town as the victim. Officials in the provincial DPCP said that the 10-year-old boy was admitted to a private hospital on May 22 in precarious condition and couple of days later he died. According to Dr. Shakeel Aamir Mullick, manager DPCP, the doctors told the provincial authorities that they received the boy when the infection had attained serious complications, causing his death after a couple of days of medication. 'This is the first death [of 2015] because of dengue infection,' said Dr Mullick.

According to the data compiled by the provincial program, 370 dengue cases were reported in Sindh this year. Of them, 360 cases were reported in Karachi, three cases came from Hub district of Balochistan and the remaining seven cases were reported from the rest of the province, including two from Hyderabad. Last year, more than 1,295 cases of Dengue fever were reported in Sindh, of which 1,277 belonged to Karachi. Some 17 dengue patients died of the disease.

In 2013, more than 6,000 dengue patients were reported, of whom 32 died. Officials identified North Nazimabad, SITE, Clifton, Saddar Town, North Karachi and New Karachi as the "vulnerable areas" for dengue meriting "special attention".



Official figures show that dengue fever's first incidence in Karachi was

reported in 1994 when 145 confirmed cases were recorded, of whom one victim had died. The disease hibernated since then till 2005, when the authorities recorded 258 cases, of which 16 had died. The deadliest year was 2006 in which 49 of the 1,500 patients died. The authorities then turned to an efficient mode in the next two years, during which 20 people died out of the 931 confirmed cases. Since 2009 when the city had last seen a local government, 92 people of the around 12,000 confirmed cases died. Officials said of the 190 people who died because of the deadly tropical disease in Sindh, more than 60 per cent were aged between 20 and 34 years. Some 20 per cent of them were aged 35 years or more while the rest were children or teens.

Transmitted by the bite of a female mosquito, the disease is occurring more widely due to increased movement of people and goods including carrier objects such as bamboo plants and used tyres as well as floods linked to climate change, the United Nations agency said.

Pakistan – Flash Floods Kill At Least 13 in Khuzdar, Balochistan Province

JUNE 4, 2015 (http://floodlist.com/asia/pakistan-flash-floods-khuzdarbalochistan)

At least 13 people died after flash-floods and torrential rains hit Khuzdar district in Balochistan province, Pakistan. There were reports that the death toll could be much higher, as at least seven people were reported missing. Heavy rains and flash-floods swept away several houses near to a river. It was not clear if the victims were in the houses at the time. Some local media reports claimed that the victims were travelling in a vehicle when the floods struck. Other parts of southern Pakistan including Nawabshah witnessed heavy rain where 73.9 mm fell in 24 hours on June 03, 2015.

Dengue claims 3rd Victim of the year in Karachi

JUNE 16, 2015 (HTTP://WWW.GEO.TV/ARTICLE-188197-DENGUE-CLAIMS-3RD-VICTIM-OF-THE-YEAR-IN-KARACHI)

One more patient lost the battle of life against Dengue in Karachi on Tuesday raising the death toll of lives lost due to the virus this year in the city to three. A Sindh Health department report revealed that 95% of the dengue cases were from Karachi. The report confirmed that 51 cases of dengue were reported in the first 10 days of June alone. According to the report, out of 457 cases reported in Pakistan this year, 451 were reported from Sindh, of which 438 were reported from Karachi. On an average 20 new cases were reported each week from Karachi, therefore, sharp rise in the number of affected persons was feared.

Two more dengue deaths confirmed

JUNE 17, 2015 (http://www.dawn.com/news/1188657)

Officials of the provincial DPCP confirmed two more dengue related deaths in the city, taking the year's death toll from the deadly disease to three in Sindh. The death of a 28-year-old man named Yawar was recorded on Thursday



(June 11), but the cause of his death due to the dengue virus was confirmed on Tuesday, said an official of DPCP. The victim was a resident of Qayyumabad and was admitted to a private hospital in a precarious condition a week ago, added the official. The report citing

dengue as the cause of his death was sent to the health authorities on Tuesday. Similarly, 30-year-old Hina Faisal was admitted to the same hospital two weeks ago and died due to the same reason on June 7. However, her death due to the virus was confirmed to the health authorities after several days, claimed the officials. In a span of three weeks there were three dengue-related deaths.

10 Years Heat Record Break

JUNE 20, 2015 (HTTP://WWW.THENEWS.COM.PK/ARTICLE-188661-KARACHI-BREAKS-10-YEAR-RECORD-WITH-45-DEGREES-SCORCHING-HEAT)

Karachi faced its hottest day in a decade with the temperature touching a 10-year record of 45 degrees Celsius, the meteorological department said. A spokesman for the meteorological department said that the heat-wave was likely to continue on June 21, the longest day of the year.

Heatwave devastates Karachi, other parts of Sindh; at least 136 dead

JUNE 22, 2015 (HTTP://WWW.DAWN.COM/NEWS/1189590)

The devastating heatwave gripping Sindh for several days took a toll of at least 136 people in the province, 132 only in the metropolis. 85 of the people who had suffered heatstroke were either brought dead or died



at the Jinnah Postgraduate Medical Centre. Thirty people died in the Abbasi Shaheed Hospital on Saturday night and Sunday, nine in Lyari General Hospital and six in the Civil Hospital Karachi. 'Some 85 people have died since late Saturday night,' Dr Seemin Jamali, joint executive director of Jinnah Postgraduate Medical Centre, told Dawn. Most of them were men aged 50 or more. 'Thirty people were brought dead while another 55, who were in critical condition, died in the hospital during treatment,' Dr Jamali said. Officials at the Jinnah Postgraduate Medical Centre said that the first patient of heatstroke was brought at around 10 pm on Saturday and by the filing of this report the number of such patients almost touched 100.

Dr Salma Kauser, senior director medical and health at the Karachi Metropolitan Corporation (KMC), which oversees all KMC hospitals, said 20 people died in Abbasi Shaheed Hospital on Sunday. Seven people were brought dead on late Saturday late and the cause of death was ascertained hours later. Of the 20 people, 13 were brought dead to the Abbasi Shaheed Hospital and seven died during treatment, said Dr Kauser. Six women and five children were among the dead. She said that more than 100 people were under treatment in various hospitals run by the KMC. Nine people died because of sunstroke in Lyari General Hospital, six in Civil Hospital and two in KPT Hospital. Sindh health secretary Saeed Ahmed Mangnejo said two deaths each were reported from Jacobabad and Larkana.

Saturday was the hottest day of the summer in Karachi when the mercury shot to 45 degree Celsius. The maximum temperature of 48 degree Celsius was recorded in three districts of Sindh - Jacobabad, Larkana and Sukkur on Saturday, which slid down to 41 on Sunday. The officials said that the city would not see any let-up on Monday when the temperatures was expected to go up to 44 degree Celsius. The highest temperature Karachi ever experienced was 48 degree Celsius on May 9, 1938. Early this month, 17 people died because of heatstroke in Sehwan during the Urs of Lal Shahbaz Qalandar.

Fatal Heat Wave

JUNE 23, 2015 (HTTP://TRIBUNE.COM.PK/STORY/908627/FATAL-HEATWAVE-KARACHI-RUNNING-OUT-OF-SPACE-FOR-THE-DEAD/)

Nature's wrath, it seems, isn't sparing the deceased either

A foul stench surrounded the Edhi morgue. Bodies, some uncovered, others in a white shroud, laid scattered on the floor. Among them was a man with a white beard and shabby brown clothes, a fly sitting on his chest. Ambulances parked outside were also housing the dead until there was space available for them inside the morgue. The fatal heatwave was making it difficult for the morgues to function, and the largest one in the city – the Edhi morgue at Sohrab Goth was running out of space. By the scorching Tuesday afternoon, the morgue that had a capacity of 200 bodies had over 250 lying in and around it. Every few minutes, ambulances arrived at the entrance, bringing with them more deceased, mostly victims of the deadly heatwave. In the last four days, more than 500 bodies were brought to this morgue, said Ghulam Hussain, one of the officials. 'It is becoming difficult but we are trying to manage.'

Out on the streets

Umair Syed, an ambulance driver at the Edhi Foundation, parked his vehicle and hurried to shift the body into the cramped morgue. 'Make space, make space,' he screamed. He had brought a rickshaw driver from Basheer Chowk, who had even poured water over himself to beat the heat but could not make it. 'He splashed water on himself but that didn't help him against the heat. People are dying on the streets,' lamented Syed. The Baldia factory incident was the only other time that Syed saw the morgue so full. Standing next to him, another driver, Afaq Ahmed, had brought a man who died in front of his eyes. The

Strengthening Participatory Organization (SPO)

man was travelling on the roof of a W-11 bus when he started shaking and trembling violently. Ahmed had rushed him to the Civil Hospital, Karachi. 'He died in front of me.' The morgues, from the largest run by the Edhi Welfare Organization at Sohrab Goth to smaller ones run by other charity organizations, such as the Khidmat-e-Khalq Foundation, Chhipa, Al-Khidmat and Thanvi Trust, were all out of capacity. There was no place for the dead. Meanwhile, these welfare organizations, who alone bore the mantle of running ambulance services in the country's largest metropolis, were reeling under the pressure as the number of victims rose with each passing hour.

Families

A man who had come for the ghusl of his sister-in-law, Kishwar Aftab, said that the K-Electric was also to be blamed for the deaths. 'People don't have electricity in their homes. We didn't have power for many hours in Moosa Colony. My sister-in-law had a high fever and she died.'

The smell emanating from the bodies made him and others cover their nose with their hands or clothes. To stay away from the blistering sun, people tried to huddle under the small shade. Fareed, a shopkeeper, said he had been called from his shop to be given the unfortunate news that his wife had died. She was fasting and had died because of the heat, he said with teary eyes.

Bodies being buried

To accommodate more bodies, the Edhi foundation was burying the unidentified bodies within a day. They had buried 50 bodies in their graveyard. The graveyards, too, were overbooked. The grave-diggers were taking full advantage of the opportunity and demanding double the standard rates. 'Each grave was being sold for at least double the money,' said Shahzad, whose friend died in Gulshan-e-Maymar. 'You are lucky for not being refused a grave at this time,' said another person sitting next to him.

Death toll from killer Karachi heat wave

JUNE 25, 2015 (HTTP://TRIBUNE.COM.PK/STORY/909596/DEATH-TOLL-FROM-KILLER-KARACHI-HEATWAVE-TOPS-1000/)

The death toll from the worst heatwave to hit Karachi for nearly 35 years surpassed 1,000 people, as experts warned of another similar heatwave in the metropolis during the next week. The heatwave in the city of 20 million people coincided with severe



electricity cuts, leaving many without fans, water or light, and the beginning of the holy month of Ramadan, when many Muslims do not eat or drink during daylight hours. Some shops refused to sell ice or water during the day, citing religious laws that mean they can be fined. Temperatures shot up to 44 degrees Celsius. The meteorological department said the weekend was the hottest since 1981. There were lots of unreported deaths at small private hospitals. Many hospitals issued urgent appeals overnight for bed sheets, cold water and other basic items.
48 more dengue fever cases surface in city

JUNE 25, 2015 (HTTP://WWW.PAKISTANTODAY.COM.PK/2015/06/25/ CITY/KARACHI/48-MORE-DENGUE-FEVER-CASES-SURFACE-IN-CITY/)

According to a weekly report issued by the DPCP Sindh, 48 more dengue fever patients were reported from city in a week and total number of cases had now reached 573 in Karachi. A report stated that total 593 dengue fever cases were reported in Sindh province since January 2015, out of which 573 were from Karachi, whereas the rest were reported from other parts of Sindh. Three people, including a child, died of dengue fever in the city. Some 19 other dengue fever cases were reported from Balochistan.

Sindh Heat Wave

JUNE 27, 2015 (HTTP://WWW.DAWN.COM/NEWS/1190809)

In the devastating heatwave that struck Sindh, the death toll climbed to 1,242. Various governmentrun hospitals in Karachi confirmed that at least 32 people died of heatstroke on Saturday. At least 13 people died



in Jinnah Postgraduate Medical Centre, 11 in Abbasi Shaheed Hospital, two in Qatar Hospital, three in hospitals owned by KMC and three in other hospitals in the city. The crisis center in Karachi was worsened by poor service delivery, including a faulty power grid and shortage of potable water. After peaking at around 45 degrees Celsius last weekend, the heat subsided and the city's customary cooling sea breeze started up, bringing relief to its 20 million inhabitants. At times the city's morgues struggled to cope with the influx of the dead, many of whom were elderly, destitute or drug addicts. Edhi Foundation's representative Faisal Edhi said that their morgue received close to 200 unclaimed bodies since Saturday and 140 of them were buried at Edhi's graveyard in Muwachh Goth after no one came to claim them. Karachi's hospitals treated nearly 80,000 people for the effects of heatstroke and dehydration during the week, according to medical officials. Many of those who died were outdoor manual laborers, who are paid by the day and may be reluctant to stop work as it would mean losing income.

Karachi Heatwave

JUNE 28, 2015 (http://tribune.com.pk/story/911335/heatwave-death-tollin-karachi-crosses-1200-health-department/)

The Sindh Health Department confirmed that the death toll of the continuing heatwave in Karachi crossed 1,200. 'We have gathered details about the number of total deaths registered by the hospitals,' disclosed DG Health



Hasan Murad Shah. Contrary to the earlier reports of health officials that cited 80 deaths, in the new report only 10 deaths were cited to have resulted from the heatwave in the rest of the province.

May 2014 – October 2015

At Least 10 Dead after Flash Floods in Northwest Pakistan

JUNE 28, 2015 (http://floodlist.com/asia/at-least-10-dead-after-flash-floods-in-northwest-pakistan)

Flash floods raged through the market area of a remote community in Upper Dir district, a mountainous region of Khyber Pakhtunkhwa Province in the northwest of Pakistan. Local media reported that the floods struck in Kalkot, Upper Dir. Police confirmed that at least 10 bodies were recovered in the wake of the floods. As of Friday 26 June, more people were still missing. Several houses were completely destroyed and police reported that the floods swept away a local seminary or madrasa. Some students were feared missing. A stretch of the main Dir- Kohistan road was also damaged, making access difficult for rescue and relief operations.

Rain-induced flash floods kill at least 8 in Rawalpindi

JULY 7, 2015 (HTTP://WWW.DAWN.COM/NEWS/1192943)

Flash floods caused by heavy monsoon rains killed at least eight people in different areas of Rawalpindi. The flash flood swept away five people, of whom four drowned. There were reports of other deaths due to structural collapse and electrocution.



'Four people drowned when raging water from an overflowing drain entered residential areas in the garrison city of Rawalpindi. Another

person died when the wall of a home collapsed,' said Waqas Rehman, a spokesperson for the government run emergency service. Rehman added that rescuers managed to save 16 people after floodwaters swept them away, and at least one person was missing. Terrified residents were seen sitting on roofs as floodwaters surged through the streets in localities of Rawalpindi.

Avalanche on Broad Peak

JULY 20, 2015 (http://tribune.com.pk/story/923446/pakistani-guidemissing-after-avalanche-on-broad-peak/)

A Pakistani high altitude porter was reported missing whereas Japanese and a Chinese climber along with a Nepali Sherpa suffered injuries after encountering an avalanche on Broad Peak in the Karakoram Range. An avalanche ripped through the camp of seven climbers which apparently claimed the life of Pakistani porter and injured other climbers.

Pakistan – Two Killed in Floods in Chitral, Khyber Pakhtunkhwa Province

JULY 21, 2015 (HTTP://FLOODLIST.COM/ASIA/PAKISTAN-TWO-KILLED-IN-FLOODS-IN-CHITRAL-KHYBER-PAKHTUNKHWA-PROVINCE)

Heavy rain caused flash floods and triggered rivers and lakes to overflow in Khyber Pakhtunkhwa and Punjab provinces of Pakistan. The worst hit area was the district of Chitral in northern Khyber Pakhtunkhwa, where the PDMA reported two deaths caused by the floods. Pakistani media claimed that around 200,000 people were affected.

300,000 Stranded by Floods in Chitral, Pakistan

JULY 22, 2015 (http://floodlist.com/asia/floods-chitral-khyberpakhtunkhwa-pakistan)

According to PDMA, the torrential rain-fed floods rendered 300,000 people of Chitral living in small and fragmented villages across various landlocked valleys inaccessible to each other, and to the rest of the country. An official update from July 21, 2015 read that the floods claimed three more lives. However, the actual number of fatalities was not known owing to the issue of inaccessibility. According to the available data, 50 houses were severely damaged and 100 houses, 10 bridges and numerous roads were completely destroyed. Water supply was interrupted and/or completely cut off in Broze, Orghuch, Ushusht, Nisur Gol and Mastuj villages.

Glacial Lake Outburst Floods

Officials stated that after unusually heavy rain fell on 15th, 16th and 19th of July, 2015, the situation was further aggravated by Glacial Lake Outburst Flooding (GLOF). According to PDMA, the GLOF caused massive torrents and flash floods, washing away villages, access roads, bridges, drinking water supply systems, buildings and agricultural crops. They further added that 'the climatic change has rendered districts in the north of Khyber Pakhtunkhwa prone to more frequent and unprecedented occurrences of hazards than any other parts of the country'.



May 2014 – October 2015

Thousands Cut Off for 7 Days

PDMA stated that around 25,000 people living in the Kalash Valley, 60,000 in Garam Chashma and 200,000 in Upper Chitral including Booni, Mastuj, Mulkow, Torkow and Yarkhoon, were cut off from the rest of Chitral.

Landslides in Kashmir

JULY 23, 2015 (HTTP://RELIEFWEB.INT/REPORT/PAKISTAN/RAINS-LANDSLIDES-KILL-9-PAKISTANI-KASHMIR-OFFICIALS)

At least nine people were killed during five days of torrential rain and landslides in Pakistan-administrated Kashmir, emergency officials said Thursday. The deaths came as water channels swelled and people were left trapped in landslides in four mountainous districts of Kashmir in Pakistan's northeast. These casualties brought the overall death toll from this year's monsoon floods to at least 22, with over 200 buildings washed away in the worst-affected north. Officials said that the death toll and losses could increase because communication from the remote areas had been hampered due to heavy rains. 'According to available collective figures, nine people were killed and seven others were injured,' Zaheer Qureshi, director general of the disaster management authority, told AFP. 'Up to 47 houses were damaged whereas the information' from the cut-off remote mountainous villages were due to be received,' he said. On Wednesday, four people were killed when their pick-up truck was swept away by a seasonal stream in southwest Pakistan.

Over 60 villages flooded in Gilgit-Baltistan

JULY 23, 2015 (HTTP://WWW.ONLINEINDUS.COM/OVER-60-VILLAGES-FLOODED-IN-GILGIT-BALTISTAN/)

More than 60 villages were flooded and hundreds of people were affected in Gilgit-Baltistan by the heavy downpour. The situation was further exacerbated by the melting of glaciers. More than 75 villages were



vacated following the flood warning issued by the local government authorities. The floods damaged 110 houses, 16 mosques, nine hydroelectric plants, 17 schools, 30 KMs of roads, 45 KMs of water channels, standing crops, 45 small to large size bridges and hundreds of orchards (plants and trees).

Pakistan – At Least 9 Dead as Floods Affect 5 Provinces

JULY 23, 2015 (http://floodlist.com/asia/pakistan9-dead-floods-5provinces-july-2015)

Punjab, Sindh, Khyber Pakhtunkhwa, Balochistan and Gilgit Baltistan provinces experienced flooding. The province wise detail of the damages caused by the floods is as under:

Punjab

In Punjab, 244 villages were affected across the districts of Mianwali, D.G. Khan, Muzaffargarh, Rajanpur and Rahim Yar Khan. PDMA reported that 39 houses were damaged and 120 relief camps were set up



to house 10,255 people displaced by the floods. 96 mm of rain was recorded in 24 hours in Shahdara area of Lahore on 22nd July 2015.

Khyber Pakhtunkhwa

Chitral was the worst affected district in Khyber Pakhtunkhwa where the number of reported deaths was three and destroyed houses was over 150, and PDMA Khyber Pakhtunkhwa reported that 11 villages remained inaccessible. 96 mm of rain fell in Balakot and 68 mm in Kakul.

Balochistan

Heavy rain on July 19, 2015 resulted in flooding in the districts of Kohlu, Dera Bugti and Zhob. Local authorities reported that three children died and six persons received injuries when a house collapsed in Kohlu district. Four more people were killed after a vehicle was washed away by a seasonal stream in Khuzdar.

Gilgit Baltistan

According to NDMA floods were reported in the district of Skardu in Gilgit Baltistan, however, full damage assessments were not carried out at the time. Tents and food packs were provided to those affected, and work was being carried out on clearing roads and irrigation channels.

Sindh

Pakistan Meteorological Department (PMD) reported that an active Monsoon weather system was likely to affect Sindh province that may cause fairly widespread thunderstorm/rain of moderate intensity with heavy falls at isolated places and very heavy falls at some places during the following 4-5 days. According to PMD's Flood Forecasting Division, the River Indus at Guddu, Sindh, was likely to reach 'high flood level' between 24th and 26th of July 2015. The River Indus at Sukkur, Sindh, was also likely to reach high flood level between 25th and 27th of July 2015.

37 more dengue cases surface in city

JULY 23, 2015 (HTTP://WWW.PAKISTANTODAY.COM.PK/2015/07/23/ CITY/KARACHI/37-MORE-DENGUE-CASES-SURFACE-IN-CITY/)

As many as 37 more dengue viral fever cases were reported from the city in a week increasing the patients' toll to 701 in 2015. According to a report issued by DPCP Sindh, at least 37 more dengue fever cases surfaced in the city in the last week and total number of cases reached 701 since January 1, 2015. The report stated that a total 727 dengue fever cases were reported in Sindh province since January 2015 and 701 were detected in Karachi only, while rest of the cases were reported from other parts of Sindh. Around 30 dengue fever cases were reported from Balochistan province, increasing the patients' toll to 757 in 2015.

20 found dead in flood-hit Chitral

JULY 26, 2015 (http://reliefweb.int/report/pakistan/20-found-dead-flood-hit-chitral)

At least 20 bodies were retrieved from the water channels in five villages of Chitral district devastated by flash floods. Eight of the victims were members of one family of Uthool, a village near Mulkhow. The raging floodwaters swept away about 200 houses and an identical number of shops across the district. The sudden deluge caught the villagers unprepared and they had no time to escape the gushing waters. The area had been cut off from the rest of the district for the past fortnight after its only road link was washed away at Kuragh.

Landslides in Muzafarabad

JULY 26, 2015 (HTTP://WWW.THENEWSTRIBE.COM/2015/07/26/13-PEOPLE-KILLED-IN-MUZAFARABAD-LANDSLIDING/)

13 people were killed in the landslides that resulted from heavy rain fall in Muzafarabad area of Azad Jammu and Kashmir. Earlier, PMD predicted that heavy rains may generate urban flooding in various parts of the country including in Gilgit Baltistan and some other cities of Punjab.

After Chitral, flash floods and rain devastate vast areas across KP

27 JUL 2015

(http://reliefweb.int/report/pakistan/after-chitral-flash-floods-and-rain-devastate-vast-areas-across-kp)

Fifteen people were killed, hundreds of houses inundated or washed away and standing crops in large areas were destroyed as flash floods caused by widespread monsoon rain wreaked havoc across Khyber Pakhtunkhwa.

The flash floods which started two days before Eidul Fitr devastated another four villages in upper Chitral, leaving four people dead and inundating more than 300 homes and washing away vast tracts of agricultural land. Eleven



people were killed when nullahs were flooded and houses collapsed in Peshawar and other districts of the province. The torrential rain in Peshawar caused high flood in Budhni nullah which inundated several residential colonies along its banks. A girl lost her life when she slipped into the nullah while playing along its bank. One Dilawar Khan was killed when his house collapsed while Irfan drowned in a flooded area in Peshawar. Personnel of Rescue 1122 and relief organizations evacuated about 300 people after the high flood in the nullah that passes through thickly populated localities of the provincial capital. Four tourists, a woman among them, were killed when their car plunged into the 100-foot deep Khan Khwar River in Shangla district. They were going to Bisham from Swat. As they reached near Khan Khwar Dam a sudden surge in a nullah swept away their car and it plunged into the river. A youth drowned in the River Indus near May 2014 – October 2015

Bisham. A woman was swept away by floodwater in Ichrian locality of Mansehra. In Oghi, the entire bazaar was inundated by a surge in Nullah Saror, inflicting huge losses on traders. Six houses were also damaged. Torrential rain destroyed dozens of houses in Kohistan district. The villages of Suo, Dirgutto and Chardong were severely affected. Floodwater swept away a child in Dag Ismailkhel area of Pabbi tehsil after heavy rainfall hit Nowshera district. A girl was killed and three children were injured when the roof of their house collapsed in an area in Kohat district. Reshun was the worst-hit village on Chitral-Booni road where two persons, identified as Badan Khan and Mehak, died when their houses collapsed. The flood destroyed the 4.2 MW Reshun hydropower station supplying electricity to Mastuj tehsil. The flood washed away a government girls' school, a petrol pump and 22 shops, and partially damaged a high school. The floods swept away at least 30 homes in Rech Torkhow village. Two persons, identified as Daulat Turab and Dinar Muazzam Shah, died. The floods also washed away two pedestrian bridges, a community-run hydropower house and livestock in the village. A bridge, a link road and 11 homes were washed away in Balim village of Laspur Valley. The village was cut off from the rest of the district after the collapse of the bridge. Agricultural fields in Torkhow's Raeen village were inundated.

July 2015

Skardu Flood

JULY 28, 2015 HTTP://DUNYANEWS.TV/EN/PAKISTAN/290733-SKARDU-FLOOD-MORE-THAN-500-FAMILIES-STRANDED-DUE-

District government cleared the main road connecting Skardu with Gilgit which was blocked owing to the landslides induced by the torrential rains. In Rondo, the



destruction of two bridges caused by the surging flood water trapped communities on either sides preventing their access to food and safer places outside. The floods also inundated the agricultural fields and ruined the standing crops.

Pakistan Floods – Death Toll Rises To 69

JULY 28, 2015 (http://floodlist.com/asia/pakistan-floods-death-toll-risesto-69)

According to NDMA, 69 people died in the flooding that affected Khyber Pakhtunkhwa, Punjab, Balochistan, Azad Jammu and Kashmir, Gilgit Baltistan and Sindh. Assessments suggested that a total of 1,855 houses were damaged and 294,844 people were affected. The



reported 69 deaths occurred in Balochistan (7), Khyber Pakhtunkhwa (34), Punjab (8), Azad Jammu and Kashmir (15) and Gilgit Baltistan (5). No deaths were reported in Sindh province. Districts in different regions listed as affected by UNOCHA, are as under:

Gilgit Baltistan	Punjab	Khyber Pakhtunkhwa	Azad Jammu and Kashmir	Sindh
Astore, Diamer, Ghizer, Ghnache, Gilgit,	Layyah, Mianwali, Dera Ghazi Khan, Rahim Yar Khan and	Chitral	Haveli Kahota, Muzafarabad, Neelum, Rawlakot,	Ghotki and Kashmore
Hunza and Skardu	Muzaffargarh		Sudnohti, Bhimber and Bagh	

Rains cause widespread devastation in Sindh

JULY 29, 2015 (http://reliefweb.int/report/pakistan/rains-causewidespread-devastation-sindh)

Torrential rains caused widespread devastation in Hyderabad, Matiari, Tando Allahyar, Tando Mohammad Khan, Jamshoro, Mirpurkhas, Badin and Tharparkar districts of Sindh. A large number of structures and houses collapsed and standing crops



over thousands of acres were destroyed. Most urban and rural areas in the districts came under one to two feet of water, as the drainage systems collapsed. The rains badly hit the power distribution network across the region, rendering many areas without electricity for five to 12 hours. At least nine people were killed in rain-related incidents, including collapse of houses and electrocution. A man and a woman were electrocuted while 19 people were injured when their houses

collapsed in Hyderabad. Two children were killed in Tando Mohammad Khan. Seventeen people including women and children were injured when their houses collapsed in Bulri Shah Kareem and Tando Ghulam Haider tehsils.



The drought-hit Tharparkar region received long spells of heavy rain for the fourth consecutive day, leaving most of its towns and farmlands flooded.

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Tharparkar's DC Khuda Dino Shoro appealed to the authorities to send boats to rescue people stranded in low-lying areas of Mithi town, including its Siran locality. Most of the roads connecting Mithi and other towns of Thar with Badin, Mirpurkhas and Umerkot were



washed away. According to officials. Mithi and some other areas of the district received about 370 mm of rain. Torrential rains continued to play havoc in almost all parts of Badin district. Two people, including a minor boy, lost their lives after walls of their mud-houses collapsed. An eight-year-old boy, Vikiyo Bohar, was killed in Mour Khan Village, near Talhar town, after lightning struck him. Drains built for carrying rainwater into the Arabian Sea developed big breaches at 10 points, inundating more than 300 villages in Pangrio, Seerani, Tando Bago, Kario Ghanwar and some other places. The Left Bank Outfall Drain was flowing at a danger level at several points because of weak dykes. A man, Mohammad Hassan Shoro, and his son, Zohaib Shoro, lost their lives and seven other members of their family were injured when the roof of their house caved in during the intermittent rain spells in Wahid Dino Shoro village of Thatta. Heavy and moderate rain in Jungshahi and Jhimpir areas of the Khirthar range flooded the National Highway and disrupted inter-city traffic. Heavy rain also lashed Sujawal district. Six villages near Jhuddo town in Mirpurkhas district, namely, Shaman Leghari, Manjhi Khan Leghari, Ghulam Mohammad Leghari, Bachal Shah, Ramzan Rind and Mushtague Memon were submerged under two to three feet of water. The villagers were shifted to safe places and a relief camp was set up in Sagheer Colony. About 35 mud-houses collapsed in Ashigue Colony, Abid Colony and Riaz Colony.

Over 0.5m people affected by floods, says NDMA

JULY 31, 2015 (HTTP://WWW.PAKISTANTODAY.COM.PK/2015/07/31/ NATIONAL/OVER-0-5M-PEOPLE-AFFECTED-BY-FLOODS-SAYS-NDMA/)

Over 500,000 people were affected by the floods across the country with the casualty figure surging to 86, and 56 people sustaining injuries. The NDMA reported that over 517,000 people were affected by the rains and flood in Punjab, Sindh and Gilgit-Baltistan. In total, 801 villages were affected and 2,058 houses were damaged.

Floods across Pakistan

AUGUST 1, 2015 (HTTP://TRIBUNE.COM.PK/STORY/930516/ARMY-REQUESTED-TO-REMAIN-ON-STANDBY-AS-FLOODS-GAIN-PACE-IN-SINDH/)

At least 109 people were killed and 46 others were injured as floods ravaged different parts of the country, NDMA reported. Giving breakdown of damage caused by the floods, the NDMA said that as many as 50 people were killed in Khyber-Pakhtunkhwa, where Chitral was the worst hit region. As many as 14 people died from the hill torrents and rain related incidents in Balochistan. Flooding in Punjab left at least 21 dead where 298,185 people were affected. As many as 550 houses were damaged while 397 villages were affected. Rain related incidents saw at least 19 people dead and five others injured in Azad Jammu and Kashmir. As many as 189 houses were damaged while seven villages were affected. In Gilgit-Baltistan, the NDMA issued a GLOF warning. Floods have affected as many as 136,000 people in the region with 653 houses damaged and 175 villages affected.

Indus River 'High flood levels likely to continue for next week

AUGUST 2, 2015 (HTTP://WWW.BRECORDER.COM/TOP-STORIES/0/1213479/)

According to NDMA, the devastating floods triggered by monsoon rains killed 109 and affected 699,039 individuals countrywide. Around 46 were injured and over 348,903 were forced to abandon their homes with over 46,807 taking shelter in relief camps established by local authorities. The floods damaged 2,705 houses in 1,834 villages of the four provinces, and, Gilgit-Baltistan and Azad Jammu and Kashmir. According to NDMA, 14 people were killed in Balochistan, 50 in Khyber Pakhtunkhwa, 21 in Punjab, 19 in Azad Jammu and Kashmir and five deaths were reported in Gilgit-Baltistan. Floods injured a total 46 people across the country of which 24 are in Balochistan, 15 in Khyber Pakhtunkhwa, five in Azad Jammu and Kashmir, and, two in Gilgit-Baltistan'. Out of total 2,705 houses damaged, 604 were in Balochistan, 708 in Khyber Pakhtunkhwa, 551 in Punjab, 189 in Azad Jammu and Kashmir and 653 in Gilgit-Baltistan.

Death toll reaches 118 as rain claims 12 more lives

AUGUST 4, 2015

(HTTP://WWW.PAKISTANTODAY.COM.PK/2015/08/04/ NATIONAL/DEATH-TOLL-REACHES-118-AS-RAIN-CLAIMS-12-MORE-LIVES/)

With the torrential rains claiming 12 more lives across the country and hundreds of villages inundated following breach in protection dyke in Rajanpur and flood in River Indus near Sukkur, authorities said that the death toll in various parts of the country rose to 118. At

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least six members of a family died in Mamund Tehsil of Bajaur Agency after roof of a house collapsed, leaving five wounded. In Bhalwal, roof of a seminary collapsed in Ashraf Colony, claiming life of a man. In



Dhangana area of Kundian, roof collapse claimed a life and left four injured. Moreover, a father and daughter lost their lives in Talagang in a rain-related incident. As many as four people were reported injured in a roof collapse in Gujranwala's Maralawala area. NDMA said that the floods affected more than 800,000 people in 2,275 villages. About 2,900 houses collapsed or were partially damaged. Khyber Pakhtunkhwa province was the worst affected with 59 reported deaths. The Pakistani part of Kashmir reported 22 deaths. According to PDMA Khyber Pakhtunkhwa, 73 people died from flooding, 31 were injured and 11 were missing. The highest number of deaths was reported in Chitral which stood at 34, nine people were killed in Karak, eight in Dir Bala, five in Shangla, four in Peshawar, four in Abbottabad and three in Kohat. Of the over 1,118 homes damaged from floods, 437 were completely destroyed.

Pakistan – 151 People Have Died in 3 Weeks of Flooding

AUGUST 5, 2015 (http://floodlist.com/asia/pakistan-floods-july-august-2015-update)

Heavy rain continued to fall in northern and eastern Pakistan causing

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floods and deaths. PMD forecasted thunderstorms for some areas

of northern Punjab, southern Khyber Pakhtunkhwa and Gilgit Baltistan. According to NDMA, since the floods first began in the late July 2015 when the district of Chitral in Khyber Pakhtunkhwa was badly hit, as many



as 151 flood-related deaths were reported; 32 in Punjab, 77 in Khyber Pakhtunkhwa, 13 in Balochistan, 22 in Azad Jammu and Kashmir, and seven in Gilgit Baltistan. NDMA reported that floods affected over 800,000 people across 2,200 villages in the five affected provinces.

Around 1.2m people affected by recent floods, 170 killed: NDMA

AUGUST 7, 2015 (HTTP://WWW.PAKISTANTODAY.COM.PK/2015/08/07/ NATIONAL/AROUND-1-2M-PEOPLE-AFFECTED-BY-RECENT-FLOODS-170-KILLED-NDMA/)

More than 1.2 million people were affected, while some 3,093 villages and 8,658 houses were damaged by the floods in various areas of the country, According to NDMA, the floods killed 170 people while 122 sustained injuries. As many as 3,093 villages were



affected in floods, of which 2,278 were in Sindh, 512 in Punjab, 17 in Azad Jammu and Kashmir and 286 in Gilgit-Baltistan. About 449,460 persons were affected by the floods in Punjab, 625,641 in Sindh and 136,000 in Gilgit-Baltistan. Out of 8,658 flood damaged houses, 3,439 houses were destroyed in Khyber Pakhtunkhwa, 3,153 in Punjab 798 in Balochistan, 321 in Azad Jammu and Kashmir, 812 in Gilgit-Baltistan, and 162 in FATA.

Earthquake Hit Pakistan

AUGUST 10, 2015 (http://tribune.com.pk/story/935502/6-6-magnitudeearthquake-hits-pakistan-tremors-felt-across-country/)

Director General PMD, Dr. Ghulam Rasul told Express Tribune that the earthquake was initially recorded at 6.7 on the Richter scale but after collecting data from affected cities across the country, it was calculated at 6.4. He said that the



epicenter of the earthquake was at the Afghanistan-Tajikistan Border measuring at the depth of 212 KMs. Explaining the phenomena, Rasul said that such earthquakes occur when an Indian Plate and Eurasian plate interact with each other and release energy causing seismic waves. 'Such kind of moderate earthquakes are common in Hindu Kush Range and an earthquake of magnitude five and above measuring at the depth of more than 100 km is not devastating,' Rasul added. The vicinity of the epicenter was not populated and, therefore, no loss of life was reported in the area.

'A 6.0 magnitude earthquake jolted different parts of Khyber-Pakhtunkhwa. The epicenter of the earthquake was the Hindu Kush Mountains range in Afghanistan,' a spokesperson at the PDMA confirmed earlier. However, according to the United States Geological Survey, the earthquake measured 5.7 at the epicenter. Met department said tremors were felt in Islamabad, Rawalpindi, Lahore, Faisalabad, Shangla, Buner, Lower Dir, Mardan, Charsada, Peshawar, Swat, Muzaffarabad, Attock, Wazirabad, Daska, Sheikhpura, Gujrat, Khushab, Murree, Khyber Agency, Malakand, Sargodha, Nowshera, Bhalwal, Bagh, Rawlakot, Skardu, Gilgit, Chitral and other areas.

Desperation rises as Kalash suffers post floods

AUGUST 13, 2015 (HTTP://WWW.PAKISTANTODAY.COM.PK/2015/08/13/ NATIONAL/DESPERATION-RISES-AS-KALASHA-SUFFERS-POST-FLOODS/)

Flash floods that began mid-July 2015 left much of Chitral battered, and created an unbearable crisis for the Kalash people. Around 100 families lost their homes. homes of 70 others were partially damaged, and, many others were not sure what will become of their standing crops.



The drinking water supply system had collapsed completely and a large chunk of trees were washed away by the flood. Roads were blocked owing to the landslides, and around 30 pedestrian bridges and 10 Jeepable suspension bridges were damaged.

August 2015

Floods claim 207 lives to date: NDMA

AUGUST 15, 2015 (HTTP://TRIBUNE.COM.PK/STORY/938452/DEATH-TOLL-RISING-FLOODS-CLAIM-207-LIVES-TO-DATE-SAYS-NDMA/)

The floods claimed five more lives, taking the death toll to 207. Of these, 49 were children and 63 women. According to the preliminary report compiled by the NDMA, 33 children were reportedly killed in Punjab and 16 in Khyber-Pakhtunkhwa. An estimated 1,378,082



people across the country were affected by the floods. According to PMD, 500 millimeter rain was recorded in Tharparkar and more was expected in September. 'There was an increase in the incidents of snake bite in Tharparkar as their number increased after heavy rain in the area. There were 325 snake bite incidents reported in one month of which 105 were reported in the Mithi local hospital,' said the district health department officials.

Over 80,000 evacuated from flood-hit areas of lower Punjab, while Sindh's Kotri drowns

AUGUST 17, 2015

(http://tribune.com.pk/story/939786/over-80000evacuated-from-flood-hit-areas-of-lower-punjab-whilesindhs-kotri-drowns/)

As the water levels rose in River Sutlej, Punjab Emergency Service 'Rescue 1122' said that 'they had evacuated more than 81,000 people from the low lying areas in lower Punjab,' Radio Pakistan reported. According to the details, around 25,000 people were evacuated



from Layyah district, 9,000 from Rahim Yar Khan, 10,000 from Muzaffargarh, 13,000 from Rajanpur and 792 people from Khushab. In Punjab, 197,421 people were evacuated, with 7,626 of those in 309 camps. In total, 1.18 million people were evacuated owing to floods, the majority in Sindh (886,461 people – with 296,572 in 512 camps.). NDMA said that the River Indus was still in high flood at Kotri, in medium flood at Guddu and Sukkur, with lower Sindh firmly caught in the floods. Some 208 people were killed in floods. The floods also affected some 3,791 villages and 1.4 million people across the country, according to NDMA.

Losses aplenty: 72% of flood affected people have left their homes

AUGUST 27, 2015 (HTTP://TRIBUNE.COM.PK/STORY/945525/LOSSES-APLENTY-72-OF-FLOOD-AFFECTED-PEOPLE-HAVE-LEFT-THEIR-HOMES/)

Around 72 per cent of the population affected by the floods in six districts of Sindh and Punjab left their homes, while eight per cent of the population will leave their native villages due to stagnant water, disclosed a report issued by the Health and Nutrition Development



Society (Hands). The survey was conducted in six districts including Khairpur, Ghotki and Kashmore in Sindh and Layyah, Muzaffargarh and Rananpur in Punjab. The random survey showed that a majority of the people had lost their homes and were living in makeshift shelters, using tents, tarpaulins and bamboos. According to Hands chief executive Dr. Shaikh Tanveer Ahmed, 30 union councils of 10 talukas were surveyed. Around 87 per cent of the losses incurred were reported for agriculture-based sources, followed by daily labor at 46 per cent, he added. Losses were also reported in livestock, regular jobs, entrepreneurship and home-based livelihood activities. He said that villagers were facing a number of issues, including those related to health and hygiene.

Death to dengue: Health authorities vow to eradicate disease from Swat

AUGUST 31, 2015 (HTTP://TRIBUNE.COM.PK/STORY/947839/DEATH-TO-DENGUE-HEALTH-AUTHORITIES-VOW-TO-ERADICATE-DISEASE-FROM-SWAT/)

An unlucky 13 people were suspected to have contracted dengue in the northern districts of Khyber-Pakhtunkhwa. Two of the cases were confirmed. However, the provincial government was adamant, they said, 'they would not let the disease surface.' Around 13,000 dengue cases were reported in 2013 and many of them proved fatal. Most of them were reported from Malakand and around 5,000 were admitted to the Saidu Teaching Hospital. Since a majority of the cases were confirmed from Swat and adjacent districts, the area was termed a breeding ground for the deadly virus. 'If you compare the current situation to that of 2013, there is a sharp decline in the number of patients which fell from 13,000 to just two,' Khyber Pakhtunkhwa Health Secretary, Mushtag Jadoon told The Express Tribune, A health department report available with The Express Tribune, dating August 28 said that the dengue larvae were still present in around 1,246 places of Swat Valley. Swat Health Spokesperson Syed Mohiuddin said. 'the fourth round of the dengue campaign was completed throughout the district and officials visited 56,093 places in various union councils to check for larvae.'

Health department treated over 250,000 people during floods

AUGUST 31, 2015 (HTTP://TRIBUNE.COM.PK/STORY/947764/WORKING-HARD-HEALTH-DEPT-TREATED-OVER-250000-PEOPLE-DURING-FLOODS/)

Over 250,000 people were treated in the flood-affected areas by the provincial health department's medical teams, said Sindh health minister Jam Mehtab Hussain Dahar. Dr Solangi informed the minister that due to dengue,



10-year-old Hamas died on May 23, 30-year-old Hina died on June 7 and 26-year-old Yawar died on June 11 in the provincial capital.

First dengue death reported in Haripur

SEPTEMBER 05, 2015 (HTTP://WWW.THENEWS.COM.PK/TODAYS-NEWS-7-338320-FIRST-DENGUE-DEATH-REPORTED-IN-HARIPUR)

First dengue-related death was reported from Haripur district, official sources said. However, the Health Department denied that there was any death or dengue suspect registered with it. Sources at the Ayub Medical Complex Abbottabad said that between August 30 and September 3, two patients including a woman carrying dengue symptoms' died at the hospital. The sources said the second patient was identified as Toor Khan, son of Rehmat Khan, from Haripur district. The cases indicate the prevalence of viral disease in the

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district. Dr Shahid, coordinator dengue program in Abbottabad, also confirmed the two deaths at the Ayub Medical Complex. He said that initial blood tests of Toor Khan from Haripur and Sadaf Bibi hailing from Mansehra were carrying dengue virus but final report from National Institute of Health (NIH) Islamabad had not been received by the health authorities in Abbottabad. When contacted, the head of medical department at Haripur Teaching Hospital, Dr. Ejaz Masood said that unprecedented rise in the high grade fever was witnessed in the district over the last two weeks. However, he claimed that none of them with the symptoms of reducing platelets and high grade fever was diagnosed as dengue positive. He said that he got their blood samples tested locally first and later at the private laboratories but more than 30 of them were found dengue negative. He said that about 10 patients were still under treatment for fever.

Two Congo virus cases surface in Peshawar

SEPTEMBER 12, 2015 (HTTP://WWW.PAKISTANTODAY.COM.PK/2015/09/12/ NEWS/TWO-CONGO-VIRUS-CASES-SURFACE-IN-PESHAWAR/)

Two persons were diagnosed with the CCHF virus in Peshawar. The patients were shifted to Hayatabad Medical Complex. Twelve-year old Tabish hails from Peshawar while Manzoor Khan is a resident of Kohat. Both patients were kept in isolation rooms. A spokesperson of the hospital said, 'Tabish is reported to be out of danger while Manzoor Khan is still in critical condition.'

Government issues alert against Congo Virus

SEPTEMBER 16, 2015 (HTTP://ARYNEWS.TV/EN/GOVERNMENT-ISSUES-ALERT-AGAINST-CONGO-VIRUS/)

Federal government declared red alert in view of the fears of spreading of CCHF virus in the country, ARY News reported. This year five persons died of the infection of the deadly virus. Moreover, 18 people were infected



by the virus, health experts confirmed. Experts fear the CCHF will be transported along with cattle across the country during Eidul Azha. The free movement of sacrificial animals in populated areas can spread the CCHF virus, health officials said. Five persons infected by the virus lost their lives. There were 18 confirmed and 87 suspected cases of CCHF across the country, according to the experts. The doctors and hospitals were advised to take precautionary measures and gather comprehensive details while taking blood samples of the suspected CCHF patients. The government officials warned that the virus could transfer to people with touching the animals and during their slaughter. The doctors have been directed to send the blood samples of the suspected patients of CCHF to NIH immediately. The government and private laboratories could not conduct CCHF related tests without proper precautionary measures, health experts said.

Lahore Tornado

SEPTEMBER 22, 2015 http://www.pakweather.com/2015/09/tornado-hitsraiwind-lahore-one-killed.html

A rainstorm, however, not as intense as was the one in Peshawar that claimed 35 lives in April 2015, hit Rai Wind, killing one person and damaging public and private properties besides hindering public mobility. This event was coincided with heavy rain showers in Islamabad, Rawalpindi, Faisalabad, Multan, Gujranwala, Multan, Murree, Toba Tek Singh, Peshawar, Swat, Skardu, Kalam, Para channar and other areas of Punjab, Khyber Pakhtunkhwa, and Gilgit Baltistan in particular where hilly areas received first snowfall of the season.

Woman dies of dengue in Rawalpindi

SEPTEMBER 28, 2015 (HTTP://WWW.DAILYTIMES.COM.PK/ISLAMABAD/28-SEP-2015/WOMAN-DIES-OF-DENGUE-IN-RAWALPINDI)

A 60-year-old woman named Tasleem Bibi died of dengue virus in Holy Family Hospital on Saturday. It was the first death by the virus in Rawalpindi this year, while the total number of patients rose to 450 who were earlier diagnosed with dengue virus. Meanwhile, roof of a house caved in after the heavy rain in the metropolis, killing a woman and her 32-year-old son, and injuring her second son.

Deadly virus: Fourth Congo virus case detected in city

SEPTEMBER 30, 2015 (HTTP://WWW.LIVENEWSPAK.COM/DEADLY-VIRUS-FOURTH-CONGO-VIRUS-CASE-DETECTED-IN-CITY/)

The fourth case of Congo virus surfaced in the city on the fifth day of Eidul Azha. The patient was shifted to the isolation ward at the Civil Hospital, Karachi. The victim, 60-year-old Sardar Khan, is a resident of Landhi and a butcher by profession. Earlier, doctors had diagnosed him with dengue virus but laboratory tests confirmed he was affected by the Congo virus. Sindh Health Minister Jam Mahtab Hussain Dahar, confirming the case, said that the elderly patient was in stable condition and had been shifted to the isolation ward.

Dengue virus outpacing control efforts

SEPTEMBER 30, 2015 (HTTP://TRIBUNE.COM.PK/STORY/964635/RENEWED-FEARS-DENGUE-VIRUS-OUTPACING-CONTROL-EFFORTS/)

As many as 18 people were tested positive for dengue fever in Rawalpindi, taking the total number of citizens affected by the virus this year to 636. A senior Rawalpindi health department official, who asked not to be named, said that in the last week, 15 to 18 people would test positive for dengue every day. There had been an outbreak of the disease in Rawal Town, from where 370 cases were reported this year. A senior NIH official, who asked not to be named, told the The Express Tribune that there were already outbreaks of the disease in many cities.

Eight dengue cases confirmed in Sindh Umerkot

SEPTEMBER 30, 2015 (HTTP://WWW.PAKISTANHERALD.COM/NEWS/7854/30-SEPTEMBER-2015/EIGHT-DENGUE-CASES-CONFIRMED-IN-SINDH-UMERKOT)

At least eight cases of the deadly dengue fever were reported in Umerkot district of Sindh province raising fears of an uncontrollable dengue outbreak. The medical laboratory at the Umerkot Civil Hospital confirmed the deadly virus in a 28-year-old woman while seven other cases were confirmed from private laboratories. All the cases were reported within 24 hours while residents of the area complained about lack of facilities and refusal by the hospitals to treat patients in isolation. Sardaro father of Indra, while talking to Dawn, said that his daughter was tested positive with the virus at the Umerkot hospital and added that other family members also complained about high fever. Jalal Bajeer, a dengue victim was of the view that despite the alarming spread of dengue, health department failed to even carryout a fumigation drive to kill the larvae.

Two dengue cases surface in Faisalabad

OCTOBER 01, 2015 (HTTP://CHANNEL24.PK/PUNJAB/TWO-DENGUE-CASES-SURFACE-IN-FAISALABAD/)

Two persons were admitted in isolation ward of the Allied Hospital after they were confirmed affected with dengue virus. 40-year-old Rubina from Chiniot and 30-year-old Muhammad Ilyas from Neelum Valley were transferred to the hospital in high fever. The medics confirmed dengue virus in their blood after conducting tests. Earlier, Chief Minister, Shahbaz Sharif had formed a committee to probe growth of dengue in Rawalpindi. Trail of Tragedy - 6 May 2014 – October 2015

Dengue rings alarm bells in Rawalpindi

OCTOBER 02, 2015 (HTTP://WWW.DAILYTIMES.COM.PK/ISLAMABAD/02-OCT-2015/DENGUE-RINGS-ALARM-BELLS-IN-RAWALPINDI)

At least 137 fresh cases of dengue fever were registered in three government-run hospitals of Rawalpindi, taking the reported tally of the mosquito-borne viral disease reported within one month to 934. Out of the 137 cases, 76 were registered at Holy Family Hospital, 55 at Benazir Bhutto Hospital and six at District Headquarters Hospital. No data was available from the private medical facilities in the city. All the patients at the government-run hospitals arrived from 70 city union councils and 20 wards of Rawalpindi and Chaklala Cantonment Board. Benazir Bhutto Hospital's Medical Superintendent, Dr. Asif Qadir Mir told media that 55 dengue patients arrived on Thursday while at least 35 arrived on Wednesday night. 'A total of 90 patients arrived, however 76 patients were tested dengue positive and the report of dengue serology of the remaining patients was awaited,' said Dr Tahir Sharif of Holy Family Hospital. He said that the hospital had sufficient beds to accommodate more patients in the evening, while 26 dengue patients were discharged on Thursday after provision of treatment. 'Six new dengue patients were brought to the hospital which increased the total number of patients admitted at the hospital to 25,' said a doctor at DHQ hospital's dengue ward. Meanwhile, the local administration declared 22 union councils of the garrison city as sensitive and initiated a fumigation drive there. Sources said that rapid increase in the incidences of dengue fever among population in town is on the rise, and the situation is guite alarming. It is important to highlight that last year; the total number of confirmed patients of dengue fever was five till September 5, 2014.

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Another Congo virus patient dies in Quetta, death toll reaches 15

OCTOBER 07, 2015 (HTTP://DUNYANEWS.TV/EN/PAKISTAN/302463-ANOTHER-CONGO-VIRUS-PATIENT-DIES-IN-QUETTA-DEATH-)

Another patient of CCHF virus died in Quetta, taking the death toll to 15 in the country. The patient identified as Hayat Ullah was pronounced dead at Fatima Jinnah Chest and General Hospital, taking toll to three in three days, whereas, as many as 15 patients reportedly died due to lethal Congo virus across the country this year. As per the details, nine Congo virus patients were still under treatment at different hospitals.

Congo virus updates: 23 suspected carriers reported at HMC in 2015

OCTOBER 08, 2015 (HTTP://TRIBUNE.COM.PK/STORY/969233/CONGO-VIRUS-UPDATES-23-SUSPECTED-CARRIERS-REPORTED-AT-HMC-IN-2015/)

Between January and October 2015, at least 23 patients were suspected to have contracted the CCHF. An official of Hayatabad Medical Complex told *The Express Tribune* that 18 of these patients were from Afghanistan and arrived in the country between January 1 and October 6. The remaining patients belonged to various parts of Khyber-Pakhtunkhwa. 'Three belonged to Swabi, Kohat and Dir, respectively, while two others hailed from Peshawar,' he said. According to him, at least 11 of these patients died. Earlier this week, Habib, one of the Afghan nationals, who died at the facility, was admitted with high fever. He was shifted to the isolation ward and his blood samples were sent to the laboratory for testing, however, he succumbed to the deadly disease before his report was received.

Outbreak

Officials said that 17 suspected dengue cases were reported at the Hayatabad Medical Complex between January 1 and October 6. Around 16 patients were discharged after laboratory tests proved the patients were not carrying the virus. Only one patient was still at the hospital and his report was awaited. Over 800 suspected dengue cases surfaced at various health facilities across the province. However, none of them were tested positive for the virus.

Down with the virus

The Khyber-Pakhtunkhwa health department decided to conduct a polio drive after samples of sewage water collected from Larama were tested positive for the virus. Officials' privy to the development told *The Express Tribune* that the campaign will be carried out in Peshawar district, Frontier Region, Peshawar and Khyber Agency. They added another drive will be conducted shortly after Muharram while a third one will be conducted in November. Preparations were being made for the upcoming drives. 'Sewage samples were obtained after two cases were reported from the area,' an official told *The Express Tribune*, requesting anonymity as he was not authorized to speak to the media.

Dengue claims life in Rawalpindi

OCTOBER 08, 2015 (HTTP://WWW.DAILYTIMES.COM.PK/NATIONAL/08-OCT-2015/DENGUE-CLAIMS-LIFE-IN-RAWALPINDI)

An elderly man affected of dengue virus died during his treatment at the hospital. Hospital sources said that the patient identified as Allah Ditta, 65-year-old, hailing from Mansehra District was under treatment at the Holy Family Hospital Rawalpindi for last few days, where he breathed his last on Wednesday.

Deadliest Karachi Heat Wave

(http://www.unitednews.com.pk/2015/06/28/deadliestweek-long-pakistan-heatwave-kills-1233-in-karachi/)

Tens of thousands of people were treated for heatstroke in Pakistan's southern port of Karachi. The heatwave, the worst on record, killed 1,233 people, local authorities said.

About 65,000 heatstroke patients were treated by doctors at Karachi's hospitals since June 20, according to the PDMA. Temperatures reached 45 degrees Celsius (113 degree Fahrenheit). Operations director



Nazar Mohammad Bozdar said that 1,923 patients with heat-related ailments were still being treated. There were power outages and many people spent nights outdoors,' he said. Pakistan's deadliest heatwave on record took place at the same time as the holy month of Ramadan, when the Muslims fast from dawn to the dusk.

Data shows Congo virus in some parts of Punjab, Sindh, Pakhtunkhwa

OCTOBER 18, 2015

(http://www.dailytimes.com.pk/national/18-Oct-2015/ data-shows-congo-virus-in-some-parts-of-punjab-sindhpakhtunkhwa)

Vice Chancellor of the University of Veterinary and Animal Sciences, Talat Naseer Pasha said that awareness about Congo virus in animals should be spread to save lives of the farmers, as nearly 100 cases were reported in Islamabad and Rawalpindi. He said that major May 2014 – October 2015

cases of animal diseases such as Congo virus were found in Punjab, Pakhtunkhwa and Sindh simultaneously

Congo virus diagnosed in 13 patients, 11 killed

OCTOBER 22, 2015 (http://92newshd.tv/congo-virus-diagnosed-in-13patients-11-killed/)

Congo virus killed at least 11 patients in Khyber Pakhtunkhwa province. The number of patients tested positive for Congo virus rose to 27 of which 22 were from Afghanistan, three from Peshawar, one from Lakki Marwat and one from Kohat. Drastic lack of medical facilities was the major reason for spreading of virus and loss of human lives.

Earthquake Hazard Map - Pakistan (October 26, 2015 Time 2:09:32 pm)

OCTOBER 26, 2015 (HTTP://RELIEFWEB.INT/MAP/PAKISTAN/EARTHQUAKE-HAZARD-MAP-PAKISTAN-OCTOBER-26-2015-TIME-20932-PM)

The October 26, 2015 magnitude 7.5 earthquake near the Hindukush region of Afghanistan (southwest of Jarm) occurred as a result of reverse faulting at intermediate depths, approximately 210 KM below the Hindukush Range in north-eastern Afghanistan. Focal mechanisms indicate rupture occurred on either a near-vertical reverse fault or a shallowly dipping thrust fault. Seven other magnitude seven or greater earthquakes have occurred within 250 KMs of this event over the preceding century, the most recent being a magnitude 7.4 earthquake in March 2002 just 20 KM to the west of the October 26, 2015 event and with a similar depth and thrust fault orientation. The 2002 event caused over 150 fatalities and the damage or destruction of over 400 houses in relation to an associated landslide.
Pakistan Earthquake 2015 Update # 1 - 26th October 2015

OCTOBER 26, 2015 (HTTP://RELIEFWEB.INT/MAP/PAKISTAN/PAKISTAN-EARTHQUAKE-2015-UPDATE-1-26TH-OCTOBER-2015)



Highlights:

An earthquake of the magnitude of 7.5 struck Pakistan and Afghanistan. 221 deaths were reported through different media groups in Pakistan. Highest number of deaths was reported from the province of Khyber Pakhtunkhwa (around 208) and tribal area of Bajaur (around 100). Over 1,000 people were reported injured and hospitalized across the country.

Hundreds feared dead as earthquake jolts Pakistan, Afghanistan

OCTOBER 26, 2015 (HTTP://TRIBUNE.COM.PK/STORY/979286/STRONG-EARTHQUAKE-JOLTS-PARTS-OF-PUNJAB-K-P/)

An earthquake of magnitude 7.5 struck Pakistan and northeastern Afghanistan on Monday, the U.S. Geological Survey said, sending tremors that were felt in India. The quake was 196 km deep and centered 82 KM southeast of Feyzabad in a remote area of Afghanistan in the Hindu Kush mountain range.

Over 200 deaths reported from Pakistan with Bajaur being worst hit. The United States Geological Survey (USGS) initially measured the quake's intensity at 7.7 then revised it down to 7.6 and later to 7.5. Pakistan Met Dept reported the earthquake



as 8.1 on the Richter scale. Tremors were felt as far as New Delhi, sending office workers scurrying onto the streets. Phone and electricity lines were disrupted following the earthquake.

Pakistan's 'biggest ever' earthquake jolts the country

OCTOBER 26, 2015 (HTTP://NATION.COM.PK/NATIONAL/26-OCT-2015/8-1-MAGNITUDE-EARTHQUAKE-HITS-PAKISTAN)

The biggest ever earthquake of 8.1 magnitude hit the country at 14:11:40 Pakistan Standard Time. The tremors were felt in most regions of Khyber Pakhtunkhwa, Punjab and Gilgit-Baltistan. People were seen exiting their buildings while reciting religious invocations. The telecommunication structure was also disturbed which doubled the panic among masses. 'The epicenter was believed to be in Hindukush mountain range. The quake was 193 km underground. It was the most severe earthquake in the history of Pakistan. On October 8, 2005 quake to hit upcountry in Kashmir and Khyber Pakhtunkhwa was of 7.6 magnitude'. It caused huge devastation and about 100,000 lost their lives,' Sahibdad Khan a MET official told The Nation.

100 injured individuals were brought to the Lady Reading Hospital in Peshawar. Khyber Pakhtunkhwa government declared emergency in all hospitals of the province. Meanwhile 10 people got injured in Sargodha after the school wall fell down along with 200 around Pakistan. Media reported that two people in Swat, four children in Jandol Summer Bagh, Lower Dir and one child in Rawalpindi died in the incident. There were reports about cracks in the metro bus track in Rawalpindi and Islamabad. The railway service was also suspended, as in Peshawar division in particular cracks on various railway buildings was reported. The jolts were also felt in India, Dubai and Afghanistan. Trail of Tragedy - 6 May 2014 – October 2015

Over 200 dead as 7.5 magnitude earthquake jolts Pakistan

OCTOBER 27, 2015 (http://www.dawn.com/news/1215519)

The 7.5 magnitude earthquake left at least 200 dead and more than 1,000 injured due to building collapses, landslides, stampedes and other quake related incidents. Forty minutes after the first earthquake, an aftershock of 4.8 magnitude was also reported. 'While the magnitude of this earthquake was close to the devastating quake of 2005, the epicenter of the 2005 guake was shallow, causing more destruction,' said analyst Faheem Zaman. The earthquake in 2005 was at a depth of 26 KM, while this earthquake was at a depth of 196 KM. Commissioner Malakand Division Usman told Dawn News that 137 people were killed in Malakand which comprises Swat, Upper and Lower Dir, Chitral, Shangla and Buner areas. Around 1,076 people were injured in incidents of roof and wall collapses, mostly in the remote mountainous areas. At least 194 injured were brought to Swat's Saidu Sharif Teaching Hospital. More than 100 wounded were admitted to Peshawar's Lady Reading Hospital. Tremors were felt in major cities, including Karachi, Lahore, Islamabad, Rawalpindi, Peshawar, Quetta, Kohat and Malakand. Rescue 1122 was put on high alert in Punjab. Rescue 1122 Spokesman Jam Sajjad said there were no reports of deaths in Lahore. Communication services were disrupted in Islamabad, where walls swayed back and forth and people poured out of office buildings in a panic, reciting verses from the Holy Quran. A building had reportedly collapsed in Peshawar. Several mud huts collapsed in Balochistan's Zhob district. Tremors were also felt in Kabul and New Delhi. The full extent of the damage and the number of possible casualties was not known.

Earthquake toll reaches 248, relief efforts continue

OCTOBER 28, 2015 (http://www.dawn.com/news/1215703)

In Pakistan, at least 248 people were confirmed dead in the aftermath of a massive 7.5 magnitude earthquake which hit northern Afghanistan and Pakistan. The NDMA said that at least 1,665 people were injured across Pakistan. The earthquake killed at least 311 people in the Pak-Afghan region over a wide swathe of mountainous terrain.

EARTHQUAKE 2015							
	INJURED	DEATHS	HOUSES DAMAGED				
Khyber Pakhtunkhwa	1,486 (89.4%)	202 (81.4%)	3,952 (89.9%)				
Gilgit Baltistan	30 (1.4%)	9 (3.5%)	90 (3.6%)				
Punjab	78 (4.6%)	5 (2.2%)	44 (1.7%)				
Azad Jammu & Kashmir	12 (0.7%)	2 (0.8%)	6 (0.2%)				
EATA	59 (3.6%)	30 (13.2%)	300 (11.9%)				
Sindh	0	0					
Balochistan	0	0					
	1,665	248	4,392				

Region wise break-up of casualties in Pakistan as compiled by NDMA. —Courtesy: NDMA website

The initial quake — which struck the country at 2:09pm Monday — was followed by seven aftershocks, measuring as high as magnitude 4.8, according to the USGS. The latest aftershock came just before dawn on Tuesday. 'Many houses and buildings have collapsed in the city,' said Arbab Muhammad Asim, district mayor for the northwestern city of Peshawar. Many people were trapped under piles of rubble, with officials warning that the toll was set to rise. 'The building was

swinging like a pendulum, it felt as if the heavens would fall,' Peshawar shop owner Tufail Ahmed told AFP. Thousands spent the night outdoors in near-freezing temperatures reluctant to go back inside for fear of aftershocks, Pakistani media reported.

Earthquake aftermath: Debris, death and destruction

OCTOBER 28, 2015 (http://www.dawn.com/news/1216179)

Four days after the massive 7.5 magnitude earthquake shook parts of Pakistan and Afghanistan, victims still waited to be rescued as temperatures dropped in the mountainous areas and the overall death toll from the temblor exceeded 380. The earthquake triggered landslides and stampedes as it toppled buildings and severed communication lines. In the town of Chitral, one of the closest to the quake's epicenter, people waited for the help from the Government having no resources of their own to fend for themselves.



Preliminary Losses/Damages: Earthquake 2015, 30 October 2015

OCTOBER 30, 2015

(http://reliefweb.int/report/pakistan/preliminary-lossesdamages-earthquake-2015-30-october-2015)



PRELIMINARY LOSSES / DAMAGES EARTHQUAKE 2015



SER	PROVINCES	DEATHS	INJURED	HOUSES DAMAGED
1.	Khyber Pakhtunkhwa	225 (82.72%)	1,802 (83.73%)	15,692 (61.85%)
2.	FATA	30 (11.02%)	211 (9.80%)	9,038* (35.62%)
3.	Gilgit Baltistan	10 (3.67%)	39 (1.81%)	570 (2.24%)
4.	Punjab	(1.83%)	88 (4.08%)	61 (0.24%)
5.	Azad Jammu & Kashmir	2 (0.73%)	12 (0.55%)	6 (0.02%)
6.	Balochistan			
7.	Sindh			
GF	AND TOTAL	272	2,152	25,367

Source: PDMAs NOTE:- Data is preliminary and being updated through-out the day *Figures being reconciled by FDMA

Another 131 patients fall prey to dengue in Rawalpindi

OCTOBER 31, 2015

(http://www.dailytimes.com.pk/national/31-Oct-2015/ another-131-patients-fall-prey-to-dengue-in-rawalpindi)

Another 131 patients fell prey to the dengue disease in Rawalpindi taking the toll to 3,000. According to the reports, dengue situation in the metropolis was worsening day-by-day which nullified the claims of the district administration regarding spray crackdown twice a day. Due to the rising number of patients, beds in hospitals also fell short. This year, at least 10 people died from dengue fever in Rawalpindi, while in Multan toll of dengue patients reached 314. Larva has been found at more than 1,700 places.

Expert Views on 'Why' and 'Who' Aspects of the Human Tragedies

Thar Desert famine tragedy - Food, water and health policy options for tackling devastating famine – By Omer Majeed

DECEMBER 2014 (http://www.policyforum.net/thar-desert-famine-tragedy/)

Terrorism and extremism are substantial problems for Pakistan, but there's another significant problem facing the country – poverty – and it's a problem that is causing famine, death and hunger in the Thar Desert region.

The situation in the Thar Desert is grave. Several hundred people have already died this year as a result of famine and a report from UNICEF estimates that about three million people are at risk of starvation while hundreds of thousands have fled their homes.

The famine is showing no signs of letting up, and the government and its policies are struggling to get on top of what is quickly becoming a humanitarian disaster. With millions of lives at stake, it is important to understand what the problem is and how to fix it.

Economists will tell you there are two main contending theories of the causes of famine. One is the Food Availability Decline (FAD) theory and the other is Amartya Sen's 'entitlement approach'. The FAD theory argues that famine occurs if there is a natural disaster that causes crop failure and subsequent food decline. This food decline then causes starvation. However, if there is food decline in a local area, then famine can be stopped through transporting food into the disaster area. So for food decline to be a reason for famine there needs to be either a widespread food availability decline and/or disruption in the transport mechanism, which prevents food from being transported into the famine hit areas.

However, as there has been no starvation or shortage of food in Pakistan other than in the Thar Desert, the theory of FAD can be ruled out. Moreover, there has not been any disruption to transport infrastructure, so food could easily be moved in to aid the starving people. This evidence shows that lack of availability of food is not the cause of the famine in Thar.

This brings us to our second theory – the entitlement approach. This theory argues that it is not food availability that is the problem, but wealth distribution. According to this theory, starvation happens because people are too poor to buy food.

In the Thar Desert area no rich people have died, but hundreds living at or below the poverty line have lost their lives. This suggests that it is poverty itself that is causing the famine in the Thar Desert. Indeed, the lack of economic growth in the Thar Desert, coupled with rising inflation, has directly affected people's ability to buy food. A lack of proper health care infrastructure has made the situation worse.

When famine strikes, some people die from starvation itself, but many more deaths occur from disease. As a person becomes malnourished, their immune system weakens, leaving them more vulnerable to disease. Especially dangerous are diseases such as cholera that cause further malnourishment and dehydration.

The ramifications of a famine can be profound. They include a stark increase in mortality rates, disruption in social life, a decrease in the current and future workforce, and an escalation in poverty rates. In addition, famines can cause permanent health damage to the survivors and a decrease in the cognitive abilities of the malnourished children.

To save lives and prevent future catastrophes, the Pakistani government needs to act quickly and systematically. It could do this through boosting the food intake of the people in the Thar region by providing food supplements and by offering vaccinations to shield the poor from the consequences of immune suppression due to malnourishment. Also important are the provision of clean drinking water in the area to prevent diseases such as cholera and provision of better health infrastructure in the region.

Another important step the government could take is a census of the local population to track the health of these people. This data gathering would be crucial in monitoring the effectiveness of the policies implemented by the government and may provide important feedback for improving future policies. This may also lead to a culture of evidence-based policy-making in Pakistan.

In the medium to long term, more work needs to be done to bring in economic growth and development policies to provide jobs and education to the people in the area, so that they can escape poverty. Additionally, given the recent pattern of monsoons and floods in Sindh, a program of building dams in the area and developing irrigation canals would bring water into the Thar Desert. This will not only provide water for the population and their livestock, but may also open up opportunities for agriculture and employment for the local people.

Every single life is important and the continued increase in casualties from this avoidable famine is tragic. Effective and well thought-out public policy is the key to making sure people in the region have the food, water and healthcare they need to survive.

Climate Change in Karachi - By Rina Saeed Khan

JUNE 24, 2015 (<u>HTTP://WWW.DAWN.COM/NEWS/1189979</u>)

Is Karachi experiencing climate change? Where is all this heat coming from? How can the heat kill people in hundreds? Baffled Karachiites are wondering what is happening to the weather patterns in their city but the recent heat wave may not have come as unannounced as some of us think. Scientists have warned for some time now that heat waves will become more frequent and intense due to climate change, yet the government is yet to recognize this impending threat. Death toll from the ongoing heat wave across Karachi, which was amplified by high humidity, load-shedding and low water consumption as people are fasting, has now risen to above 700. Currently, hundreds of patients suffering from heat stroke and heat exhaustion are being treated by government and private hospitals in Karachi. And, it is a fact that many of these deaths could have been avoided if the government had given early warnings in relation to the heat wave and had provided people with increased access to clean drinking water.

What caused the heat wave in Karachi?

The weeks leading to the start of monsoon season are usually the warmest of the year throughout Pakistan. Karachi, being on the Arabian Sea coast is blessed by sea breeze which moderates the city's weather. During the past week, due to a low-pressure system out at sea, the sea breeze has not flown towards the city leading to a spike in temperatures, Dr Ghulam Rasul, Director General of PMD says. 'A low pressure system developed over the Arabian Sea, and the winds blew towards the low pressure area, from the coast to the sea. The wind flow pattern reversed, as winds blew to fill up the low pressure area developing over the sea.' Sea breeze moderates temperatures in Karachi, which would rise to between 45 and 50 degrees Celsius in May and June, says Dr Rasul, adding that 'a low pressure system over the Arabian Sea is a normal feature for the months of May and June, and it will not last more than four days.' The pre-monsoon season was slated to arrive on the night of June 23 with approaching winds and it is likely that Karachi and the rest of the country will receive rainfall in the coming days. Dr Rasul moreover suggests that 'the monsoon incursion entering from the south of the country will run across Sindh and Balochistan, while another monsoon current will enter from the north of the country through Azad Kashmir, bringing rainfall to northeastern Punjab, Rawalpindi, Malakand, Nowshera and will continue southwards to Sargodha and Lahore.'

Is Karachi experiencing climate change?

The PMD's Director General however does not see a link between the current heat wave battering Karachi and climate change. This is in contrast with the views of Dr Qamaruz Zaman Chaudhry, a former head of the PMD and now a climate change expert in Pakistan, who says that the heat wave is 'unusual' and is 'one of the manifestations of climate change'. Dr Chaudhry authored Pakistan's first National Climate Change Policy. He stresses upon the fact that 'rising temperatures resulting in enhanced heat and water-stressed conditions, particularly in arid and semi-arid regions, will lead to reduced agricultural productivity'. Climate change contributes to major survival concerns for Pakistan, particularly in relation to the country's water, food and energy security, but how much of these challenges are manageable and up to which degrees are some questions that need exploring. As for the ongoing heat wave in Karachi and the casualties that it has resulted in, Dr Chaudhry says that the government should have been on alert beforehand and should have provided timely advice to citizens on how to deal with the extreme weather conditions. 'Outdoor activities should have been restricted, particularly all labor activities until the heat wave had subsided,' the former PMD chief says.

Warmer summers, milder winters

Another expert, Dr Mohsin Igbal from the Global Change Impact Study Centre in Islamabad, has pointed out that the rise in temperature in Pakistan is higher than the average global temperature increase. 'There has also been an increase in climate induced extreme events an increase in heat waves, droughts, floods, cyclones and wildfires. In Pakistan, the frequency and intensity of extreme events has increased; there were super floods in 2010 and 2011 and back-to-back floods in 2011, 2012, 2013 and 2014. There have been droughts, intense heat waves and severe cyclonic storms in the country,' explains Dr Igbal, adding that all aspects of food security are potentially affected by climate change. He is the only scientist from Pakistan to contribute to the latest scientific report of the Intergovernmental Panel on Climate Change (IPCC) that was released in 2014. The IPCC report says that 'global climate change is likely to be accompanied by an increase in the frequency and intensity of heat waves, as well as warmer summers and milder winters'.

Impact of extreme heat on human health

With hundreds of Karachiites becoming casualty to the ongoing heat wave, understanding weather patterns and how they may be affecting our health and quality of life is becoming increasingly important, particularly as the latest IPCC report says that 'the impact of extreme summer heat on human health may be exacerbated by increases in

humidity'. The report says that 'excess mortality during heat waves is greatest in the elderly and people with pre-existing illnesses. 'Much of this excess mortality from heat waves is related to cardiovascular, cerebrovascular and respiratory disease. The mortality impact of a heat wave is uncertain in terms of the amount of life lost; a proportion of deaths occur in susceptible persons who were likely to have died in the near future. Nevertheless, there is a high level of certainty that an increase in the frequency and intensity of heat waves would increase the numbers of additional deaths from hot weather. Heat waves are also associated with nonfatal impacts such as heat stroke and heat exhaustion.' the report explains in detail. Heat waves also have a much greater health impact in urban areas than in surrounding suburban and rural areas. This is because urban areas typically experience higher temperatures because of the 'heat island' effect. Given the rising average global temperature, it is expected that extreme heat waves will become more common worldwide. The past year, 2014, has been ranked the warmest year on record, driven by the accumulation of heat-trapping greenhouse gases in the atmosphere. However, 2015 is not too far behind. Nine of the 10 hottest years on record have all occurred in the 21st century.

How Ahmedabad prepares for heat waves and what Karachi can learn

Certainly, mortality during a heat wave can be prevented. After a heat wave in 2010 killed an estimated 3,000 people in the Indian city of Ahmedabad, the administration established a 'Heat Health Action Plan' that raised awareness of health risks from extreme heat among citizens and trained healthcare workers to recognize signs of heat stress. City officials there realized that coordinated action was needed to prepare for the rising threat of extreme heat and scientists worked to develop a forecast system that could alert the administration to impending heat waves several days out. Perhaps officials in Karachi can learn from the example of Ahmedabad in order to prepare for future heat waves, which scientists say are all too likely.

Let the floods flow – By Naseer Memon

AUGUST 23, 2015 (<u>HTTP://TNS.THENEWS.COM.PK/LET-FLOODS-FLOW/#.</u> <u>VIUTJN4RLZ7</u>)

The media remained preoccupied with frantic news coverage and discussion programs on floods during recent weeks. The government took flak for its inability to take appropriate measures to mitigate the impact of the 2015 flood.

Peak flow in the Indus was around 700,000 cusecs yet more than 3,500 villages were affected in Sindh and Punjab afflicting a population of more than 1.3 million. Considering the design discharges of various barrages, the quantum of flow was much less than the critical threshold, yet large areas were inundated.

While customary criticism of the government is not completely unfounded, the causative factors did not come under discussion. The phenomenon merits a deeper dissection rather than a superficial mourning and condemnation.

With all due empathy for the affectees, the flow was technically not a flood and it should not have caused devastation of such proportions. The flood was confined within the river embankments and no breach or over topping of bunds occurred. In other words, a normal flow has now become a source of disaster. The simple reason is massive encroachment of flood plain popularly called katcho area.

Demanding new dams to control floods while glossing over the culpable factors is completely uncalled for. Treating knee for an injured arm would proffer no relief. In the past years, people in Katcho area would rejoice such floods but now poignant stories are televised depicting massive displacement, hectic evacuation, damaged houses and long queues of relief camps with photo sessions by the ruling elite. Denuded watershed of Indus, encroached natural waterways, sprawling human settlements in flood plains, massive deforestation, burgeoning agriculture amid katcho area and construction of a series of vehicular bridges that contracts throat of the river are key factors that have drastically altered the river regime and converted normal flows into ravaging floods.

Between Kashmore and Indus, the katcho area of Sindh is spread over more than two million acres. It is roughly divided into the present and the abandoned river channels (600,000 acres), forest lands (450,000 acres), roads, settlements and government structures (50,000 acres) and agriculture land (one million acres).

Reliable estimates of the population in Katcho are not available; however a conservative count puts it close to one million. A report of Pakistan Institute of Labor and Research (PILER) mentions Katcho population in Sindh as 3.5 million. This explains a sizeable number of villages and people getting affected almost every year.

Long ignored land use planning and faulty development plans forced the marginalized rural communities to settle along the river course. Dwellers of katcho were noticeably resistant to evacuation during floods as their asset-base was tied to the flood plains.

Traditionally people in Katcho area would abandon their abodes during monsoon season and return after recession of flood. Leaving tons of nutrient rich silt and recharged aquifer, the floods used to be a boon for katcho community. People would just strew seed to have bumper harvests in the post-flood season. Katcho area had been a breadbasket of Sindh and South Punjab. Seasonal inundation of katcho would be heralded as a sign of rich seasonal harvest. Profusion of organic grain, pulses, dairy' and forest products would guarantee prosperous livelihood for the katcho community.

However, rampant damming and diversions of Indus during the recent decades have changed the flood regime entirely. Before Tarbela dam, the katcho area of Sindh received a flood of 300,000 cusecs, almost every year and a flood of 500,000 cusecs for three out of four years i.e. for 77 per cent of years.

Tarbela dam and other barrages completely altered the flood pattern. Vast tracts of the land, previously part of the flood plain, were exposed as parched land that enticed people to create new settlements. Local influential people in connivance of sordid bureaucracy replaced natural forests with agriculture fields fenced by illegal bunds.

The network of illegally erected dykes inside the floodplains is not a result of mere administrative negligence, it is rather a criminal act patronized by influential people in power corridors. Successive governments brazenly leased out forest land by tweaking rules and regulations with complete impunity. Unscrupulous elements seized this heaven sent opportunity and katcho area gradually morphed into pacco (regular) area.

According a report some 1.8 million acres of katcho land is occupied by various influential elements. Makeshift hamlets were supplanted by properly constructed villages networked through metaled roads and equipped with modern facilities like electricity, schools etc. With a massive influx of population, the whole landscape of katcho went through an irrevocable sea change.

According to a PILER's report, a satellite imagery of 2010 validated this shift. The satellite data showed that since 1980 forest in katcho area of Sindh has shrunk from 9.52 per cent to only 0.72 per cent whereas agriculture land has sprawled from 23.41 to 58.23 per cent. Vast parcels of the occupied katcho land locally called Keti are controlled by local feudal elements. Keti Khuhro, Keti Mumtaz, Keti Jatoi, Keti Bughya and Keti Kharal are few such examples.

These Ketis are virtually personal fiefdoms of local feudal lords where no law has any access. They conscript the marginalized local communities to plough their land and minister their local interests. However, when floods displace these landless farmers, feudal lords abandon them at the mercy of official aid and philanthropic charity. They generate fortunes through virtually enslaved farmers and evade taxes as well, yet abdicate their subjects when their rickety huts are inundated. Misdirected forestry policies also wiped out natural forests and augmented illegal agriculture in the floodplains. During one unit

period, forest land of Sindh was mercilessly colonized in the garb of agriculture development.

Another deleterious development is reckless construction of new vehicular bridges on Indus to mesh cities on both sides of the river. While bridges fulfill vital communication needs, their location and design have serious implications for river flows. Sites for these bridges are not selected on technical grounds but to bribe influential political leaders.

For example, alignment of the bridge connecting Larkano and Khairpur district was changed several times to appease local political and feudal oligarchy. Span of these bridges is much less than the width of riverbed. For example the length of Larkano-Khairpur Bridge is 1.22 KMs whereas the riverbed between the two embankments is 13 KMs wide at the location. Similarly, the Kazi Ahmed-Amri Bridge is 1.32 KMs long against 9 KMs wide belly of Indus at the same location.

This contracted trachea of Indus impedes the flow and creates local pond that shoves bunds and make them vulnerable. National Highways Authority, Irrigation Department and provincial government are directly responsible for this mess. The enigmatic dimension of the 2010 flood was the abnormally long travel durations of peak flows between barrages in Sindh. The flow that normally required 24 hours from Guddu to Sukkur barrage took 33 hours. Likewise the time-lag between Sukkur and Kotri was an astounding 408 hours as against the normal time-lag of 72 hours. This was partially because of the sustained inflows from upstream yet the impact of narrowed sections at bridges may also have been a contributing factor.

Therefore, the role of newly-built bridges needed to be examined. These bridges are built without beforehand Environmental Impact Assessment (EIA) and proper study of their impact on flood flows.

Supreme Court of Pakistan constituted a commission to probe into the factors that caused 2010 floods and recommend remedies. The commission amply underlined the aforementioned aspects. The commission report reads "unfortunately, the local and provincial governments have themselves indulged in encouraging illegal acts promoting encroachments. Unauthorized and technically unsound public works have been executed by local authorities. Construction of roads and gas pipelines has been allowed to pass through bunds in contravention of legal provisions. All such encroachments have contributed to obstructions in the flow of water resulting in flooding of many areas. A matter of grave concern which came to the notice of the Commission was that some of the governments are selling acquired lands in pond areas to raise revenues. Under the law, no construction of any infrastructure is allowed to be erected within a distance of 200 feet from banks of the rivers/streams. The governments must correct that and ensure that no encroachments are permitted and no acquired lands are sold or leased out. Actions should be initiated by governments to remove all encroachments with a firm hand."

The experience of recent floods provide ample evidences that floods can be managed through non-structural measures such as properly maintaining watershed areas, stamping out all kinds of encroachments from the floodplain and natural waterways, purging unscrupulous elements from the irrigation and revenue departments, developing and executing a comprehensive land use plan, rejuvenating riverine forests and imposing strict regulation of river regime. These measures can considerably mitigate the impact of flood and should precede the demand for controversial and politically incendiary structures like dams.

Floods still swamp Pakistan despite improved warnings - By Reuters

AUGUST 6, 2015 (<u>HTTP://TRIBUNE.COM.PK/STORY/933337/FLOODS-</u> <u>STILL-SWAMP-PAKISTAN-DESPITE-IMPROVED-</u> <u>WARNINGS/</u>)

Pakistan has reinforced its weather forecasting services since massive

floods struck five years ago, but government agencies are struggling to act on the information, with extreme weather continuing to bring new disasters. Recent flash floods, triggered by heavy monsoon rains in July, were forecast weeks in advance by the PMD. Glacier melt and overflowing glacial lakes, triggered by a sharp rise in temperatures last month, worsened the floods, which have left a trail of destruction. Around 170 people have been killed and 126 injured. Nearly 5,800 homes have been damaged in around 2,500 villages, and some 920,000 people are displaced by the floods, according to the NDMA.

'Massive losses and damages from the recent devastating summer monsoon floods indicate the brazen unpreparedness of district, provincial and federal government agencies to respond to forecasts,' said Arif Mahmood, former PMD director general. Despite warning of torrential



rains and flash floods this summer, provincial governments only woke up to the threat when large swathes of the country were already under water, he noted.

On May 19, forecasts of extreme rainfall exceeding 100 mm per day in the northeast and northwest, and a flash flood warning, were shared with government offices and disaster management agencies so they could take measures to protect people and



property, said PMD Director General Ghulam Rasul. 'Loss of lives in flood-hit areas could have been staved off successfully this time had the provincial government and relevant (local) disaster management authorities heeded the PMD's warnings,' he told the Thomson Reuters Foundation.

WWF Pakistan seeks better flood management plan

'We are now able to forecast extreme weather events like torrential rains, floods, glacial lake outburst floods and droughts some three to four weeks in advance, with over 60 percent accuracy,' he added.

New Technology

From 2005 to 2011, Pakistan expanded its glacier monitoring network into the higher Hindu Kush, Karakoram and Himalayan mountain ranges to track changing precipitation patterns, the pace of glacial melt and spin-off floods, Rasul noted. Foreign



donors supported the installation of five glacier monitoring stations in northern mountain regions, each costing around \$20,000, to better assess climate impacts in the upper Indus basin and related flood hazards. And in December 2013, the Finnish government provided 10 automatic weather stations for the north of the country. Rapid developments in weather radar technology have also helped improve predictions, said Muhammad Aleem ul Hassan, a weather forecasting expert with the PMD. The Japanese government has agreed to install two modern Doppler weather radars in Islamabad and Karachi in two years' time to monitor weather phenomena, including storms and tsunamis in the Arabian Sea. Meanwhile, negotiations are progressing with the World Bank on installing four cutting-edge radars at Mangla, Sialkot, Lahore and Gwadar, Aleem ul Hasan added. The PMD's flood forecasting division provides information on the size and flow of floods using data from an extensive network of weather radars along the Indus River, as well as a forecasting system that uses computer modelling. 'Much of this information has not been put to good use by the relevant government agencies, such as provincial irrigation departments,' said Pervaiz Amir, who heads the Pakistan chapter of the Global Water Partnership. A major effort to collect and analyze flood data has been undermined by weak strategies for managing disasters and disseminating information, he noted.

Lack of local funds

Ahmad Kamal of the NDMA blamed a lack of sound flood control policies at the provincial level, adding that information was not reaching climate-vulnerable communities. Kamran Sharrif, a disaster risk expert at the National University of Sciences and Technology in Islamabad, said early warnings would be wasted until local authorities strengthened their disaster response and risk reduction capabilities.

When nature falls apart: What really happened in Chitral?

Aminul Haq, deputy commissioner for the district of Chitral, said weather forecasts are communicated to his office in a timely manner compared with the past, thanks to modern equipment in the area. But the cash-strapped authority cannot act



on them, he said. 'How can we respond to the flood warnings as long as we do not get enough money from our provincial government to relocate vulnerable mountain communities to safer grounds?' he told the Thomson Reuters Foundation. 'We have repeatedly conveyed the message to the provincial government about (the need for) investment in disaster prevention efforts but in vain.' Almost all districts in

Khyber-Pakhtunkhwa – now hit by its worst summer flash floods in more than 20 years – face the same situation, Haq added. Experts also urged better coordination among government bodies. In addition to the NDMA, the PMD and the Space and Upper Atmosphere Research Commission, there are almost a dozen central and provincial agencies working on flood response.

Dengue Threat Looming Large – Editorial

AUGUST 15, 2015 (<u>HTTP://WWW.PSTIMES.COM/2015/08/15/DENGUE-</u> <u>THREAT-LOOMING-LARGE-3/</u>)

Though the dengue fever cases are also being reported in other provinces, but the number of cases is high in Karachi as compared to other cities of Pakistan. Dengue Surveillance Cell Sindh on Wednesday revealed that the recent rise in dengue viral fever cases would continue till start of winter season and it is also responsibility of citizens to adopt preventative measures to save them from this disease. Dengue viral fever has entered the dangerous phase which had started from 15th August and will continue till 15 October. Strict precautionary measures are necessary to prevent one from dengue fever.

10 dengue patients have already died in Karachi this year, while 810 cases reported so far in the city, while 31 cases detected in the rest of Sindh province. Over 100 dengue fever cases were reported in the city and four patients also died in Karachi in last few days. One would urge the citizens to keep their food items and water properly covered at homes and workplace. Stagnant water must not be allowed to accumulate in any part of the city and citizens should adopt preventative measures also at their homes in this regard, especially after monsoon rains.

Provincial health authorities are not discharging the duties honestly and now it is upon the citizens to realize their duties to save them and their families from the dengue fever. With the recent monsoon

rains in the city the peak season of the virus has already begun and precautionary measures at this stage are a must. One must urge the people to properly cover themselves from their wrists to collars and their ankles from mosquitoes. One must also advise the use of mosquito repellents and anti-mosquito coils. Sprays at homes are also necessary to destroy the breeding points of mosquitoes and to stop further prevalence of this disease.

Dengue fever symptoms include headache, a skin rash that looked like measles, pain in the muscles and joints, and pain in eyes. Tall buildings, demographics changes, lack of proper disposal of garbage and open drains are main causes behind the widespread dengue fever in Karachi. 18 cases have been detected in Hyderabad, one in Larkana, one in Dadu, two in Kambar, one in Khairpur, two in Sanghar, one in Naushehro Feroz, two in Shikarpur, two in Thatta and one in Kashmore since January 2013. Overall situation would improve in October with start of winter season. One must urge the people to take all precautionary measures as keeping in mind the warnings of health department and wear full sleeve clothes and use bed nets and other measures to keep mosquitoes away.

Save our wetlands to stave off future flooding -By Syed Mohammad Ali

AUGUST 28, 2015 (<u>HTTP://TRIBUNE.COM.PK/STORY/946018/SAVE-OUR-</u> WETLANDS-TO-STAVE-OFF-FUTURE-FLOODING/)

Pakistan has experienced yet another year of heavy floods, which have been wreaking havoc in the country since the beginning of this decade. The increasing links being drawn by climate scientists and environmentalists between climate change and natural disasters, including recurrent floods, suggest that severe flooding is a problem our country will have to continue struggling with in the future.

A German think tank has listed Pakistan amongst the 10 countries most vulnerable to climate change in its Global Climate Risk Index

2015. Climate change implies a number of challenges, including worsening droughts, water scarcity and changes in precipitation patterns, causing rainfall to become more intense and fall in a shorter period. It is this latter problem, alongside warmer temperatures, which are triggering faster melting of the Himalayan glaciers that is causing serious flooding across our country.

Hundreds of thousands of people have been affected by flooding again this year as floodwaters have engulfed various parts of the country over the past weeks. Northern districts like Chitral have been the hardest hit due to flashfloods caused by glacial lake outbursts in particular. The enormous damage and suffering being caused by the recurrent floods is being made worse due to inadequate planning and poor governance. There is certainly much more that can be done to ensure that the inevitable future inundations do less harm.

Along with strengthening the flood early warning system and restricting development in floodplain zones, protecting forests and natural resources can significantly reduce flood risks. Such measures have been missing from Pakistan's flood management strategy so far. Conventionally, we have only focused on the hard engineering solutions for the purposes of flood control, such as building bunds, embankments and dykes.

Even now, it is the need for dams which is more often stressed during discussions concerning more effective flood management. There is still no widespread realization concerning the utility of wetlands in helping contend with the problem of flooding. This is despite advice given to us by the Ramsar Advisory Mission which came to Pakistan at the invitation of the climate change ministry after the country had experienced unprecedented levels of flooding in 2010 and 2011.

The Ramsay experts concluded that preservation of our wetlands would not only provide the most effective means to control flooding, but also provide a low-cost way to store freshwater and recharge our alarmingly depleting underground water reservoirs. The Chinese members of the Ramsar Mission invited our decision-makers to visit the Yangtze River where embankments are being destroyed in order to restore wetlands. The Ramsar experts even identified sites from where floodwater from the Indus could be drained during flooding.

Pakistan, in fact, has over 200 major wetlands and lakes, including alpine lakes in our mountainous regions, man-made reservoirs including the Mangla and Tarbela dams, freshwater and saltwater lakes like Lakes Manchar, Namal or Kalar Kahar, as well as the Indus River and coastal area wetlands along the Arabian coast.

Besides flood control, wetlands can help prevent erosion and play a significant role in maintenance of water quality of both surface and underground water supplies, and the abatement of pollution. After the 2010 floods, the heavily polluted Manchar Lake came back to life, and since the toxins were flushed out, the fish have returned. Wetlands are also home to migratory birds and provide an important habitat for fish.

At present, the expansion of agricultural farms is killing off our wetlands. It is, however, encouraging to note that our latest National Flood Protection Plan now has a section on mapping floodplains, and restoring the watersheds and the upstream forests. Proposals by officials within the climate change ministry for designing a lowcost system of ponds to take the floodwater out to dry areas where underground water can be recharged, such as Pattisar Lake in Cholistan, is also a heartening suggestion. Like many other countries, Pakistan also needs a separate Wetlands Management Authority, to ensure that the above proposed measures are in fact implemented.

Negligence, the biggest disaster in Pakistan: By Raza Rumi

SEPTEMBER 17, 2015 (http://tribune.com.pk/story/763124/negligence-thebiggest-disaster-in-pakistan/)

As if the ongoing political crisis was not enough, we are in the middle of a natural disaster, once again. As before, the state appears to be woefully unprepared. More than 23 districts in Punjab, 10 in Azad

Jammu and Kashmir and five in Gilgit-Baltistan have been affected by the September rains killing more than 270 and affecting 2.4 million people. The federal government says that nearly 45,000 houses have been damaged and 1,544,653 acres of irrigated lands have been inundated thereby impacting livelihoods.

Taken by surprise, the federal and provincial governments are running around undertaking rescue work with plenty of photo-op sessions. The Pakistan Army remains the most resourceful arm of the government and has rescued thousands of stranded people. Once again, the detractors of democratic governance — many of whom are assembled on the streets of Islamabad — view this calamity as another sign of failed 'fake democracy'.

If media reports are true then the current government, despite briefings, did not accord disaster risk reduction the priority it needed. If anything, the disturbing scenes of a submerged Lahore made a mockery of the Metro glory that was achieved only a year ago. Without a local government, proper drainage and early warning systems, Lahore's development meant nothing for all those who suffered in the rains.

Time and again, it has been proved that the state's efficacy at the local level is seriously hampered by the dilution of the district management cadres more than a decade ago and the refusal of political parties to install elected local governments. This is why the chief minister of Punjab and the prime minister are touring all the areas and fulfilling the functions of otherwise accountable and empowered local authorities.

Granted that the scale of rains was abnormal and the neighboring Indian-administered Jammu and Kashmir suffered like our Punjab province. But we have been dealing with natural disasters since 2010.

After the deadly floods of 2010, I was part of a team that drafted the Disaster Needs Assessment report. The comprehensive document was prepared for the government of Pakistan and it both assessed and recommended actions to avoid and better manage the disasters.

A few lessons highlighted in the document included the way the disaster "overwhelmed national, provincial and local disaster/flood management capacities, particularly at the district level". In addition, the report also mentioned how the national response and contingency plans were not fully implemented and that Pakistan's early warning systems were flawed especially at the community levels; and disaster preparedness awareness for populace situated within flood plains had to be augmented.

There were subsequent floods in the following years and the national and provincial disaster management authorities were strengthened with varying resources. The recent floods arrived when the priority of a besieged federal government was to survive in office. This is what political instability does. Policy focus and the concerted ability of the state agencies perilously dwindle.

The two key institutions, the NDMA and the federal flood commission, are evidently underperforming. The reasons are familiar: inadequate funding and moribund management structures compounded by the fact that technical experts are subservient to the generalists. The Punjab wing of the disaster management authority could not respond in the manner it was expected. There is a Monsoon Contingency Plan but without local institutions, the implementation of any contingency plan would be difficult. The district level authorities are yet to be fully operational. It has been reported that the meteorological department had warned of extraordinary rains. But it was not important enough for the federal and provincial governments and the mammoth bureaucracies they lord over.

The long-term climate change data has been showing scenarios of future occurrence of heavy rainfall during monsoon seasons. Recently, the UN-led Intergovernmental Panel on Climate Change launched its 5thAssessment Report in Islamabad. Data from Pakistan shows increase in temperature and sea level rise, variations in rainfall, among other trends. Experts have been highlighting that in Pakistan climate change-related impacts are largely linked to governance. Pakistan's vulnerability to climate shifts stems from the disaster risks and endemic poverty. Policy interventions therefore have to focus on governing adaptation to climate change and supporting vulnerable communities towards better preparedness.

Our response to climate change has been more chaotic than the natural phenomena. Devolution reform of 2010 abolished the environmental ministry and then a ministry of national disaster management was created. Soon, a ministry for climate change was carved out only to be turned into a division last year. In four years, this has been the fourth institutional shake-up making a joke of how the country intends to steer and implement the climate-change agenda. Global covenants sadly don't mean much to governments obsessed with short-term populist gains.

The total budget of the climate change division for the current year is a measly Rs25 million which reflects our priorities. The civilians want more Metros and highways while the khakis want newer tanks and missiles. Add to this the engineered political instability and there is a fit case for a country determined to consume itself. Not being able to store and manage water, we lay all the blame on outsiders and even this time, the Indian conspiracy to deluge Pakistan has resurfaced its convenient head.

What is happening next door in Jammu and Kashmir is no different. The NDMA across the border has turned out to be as ineffective as the one in Pakistan. Both prime ministers have exchanged letters with good intentions but their words need to translate into common flood management plans and more significantly, joint regional agendas on climate change. No country on its own can prepare for the changes underway.

It would be essential that the federal and provincial governments unlock the various reports of the flood commission and the district management authorities, dust them and start implementing some of their recommendations. The recommendations given by a judicial commission from 2010 — and ignored by the chief minister of Punjab currently walking in long boots through the floods — could be the starting point.

Disasters are not going to go away and there is no alternative to focus on disaster risk reduction framework as a holistic approach. Similarly, the climate change policy — another document without much ownership or attention — needs to be read by those wielding power in Islamabad and Rawalpindi. After years of repeated disasters, if policymakers remain blind to this challenge, then surely they are only contributing towards the destruction of Pakistan, as we know it.

Ten years on: By Naseer Memon

OCTOBER 04, 2015 (http://tns.thenews.com.pk/ten-years-octoberearthquake/#.VhCMh_mqqko)

October 8, 2005 evokes poignant memories of a devastating earthquake that jolted northern parts of the country early morning. Ten years on, thoughts of that day continue to shake millions of hearts of those who lost their loved ones in the tragic incident.

The jolt measuring 7.6 on the Richter scale catapulted the Himalayan region of northern Pakistan and Kashmir. The area was also hit by more than 1000 aftershocks of varying intensity. Its epicenter was located approximately 19 km north-northeast of the city of Muzaffarabad. The heavily shaken areas include Muzaffarabad, Neelum, Bagh, Poonch, Shangla, Abbottabad, Mansehra, Batagram, Balakot, Allai, Besham and Kohistan. The official death toll stood at 73,350 whereas approximately 138,000 were injured and over 3.5 million were affected, including 2.8 million rendered homeless.

According to official figures, 19,000 children died when school buildings collapsed. The earthquake affected more than 500,000 families. The total area affected was 30,000 km, including a range of unprecedented damage and destruction, including half a million houses, 782 health facilities and more than 6,298 schools and colleges. Approximately 90 per cent of the destroyed or damaged housing were located in rural areas. The total estimated cost of losses was around US\$ 5.2 billion, including immediate relief, death and

injury compensation, emergency medical care, reconstruction and restoration of livelihoods.

Although a range of variables determine the scale of destruction, colossal losses inflicted on life and property cannot be simply attributed to a natural phenomenon. A deeper analysis of death and destruction caused by this earthquake unmasks human factors responsible for the intensity of the disaster.

Numerous incidents have proved that actually human factors convert a natural hazard into a disaster. Several studies conducted after the disaster examined the failed buildings and other public structures. All these studies verified that substandard and seismically insensitive construction resulted in the massive catastrophe. Most of the buildings were built in contravention to basic prerequisites of a seismically active zone.

The area has a history of earthquakes and vulnerability of such structures was glaringly obvious. Over the time, indigenous lighter weight, timber-laced structures were replaced by heavier masonry and reinforced concrete buildings. These structures though provide better insulation against harsh weather; they make the people more vulnerable to earthquakes, if built recklessly.

Most of the so-called modern structures failed miserably whereas traditional local structures like dhajji-dewari, beetar and batar performed far better and suffered far less damage. Modern RCC structures, if not built diligently prove to be more lethal than traditional structures. Lack of affordability and knowledge, terrainbound limitations of transporting material from other areas and modern construction methods sans seismic-sensitive treatment, result in hazardous construction practices.

Dry stone masonry and mud mortar is more common in rural areas. Since kiln backed 'A' class bricks are not available, locally found polygonal semi-dressed stones with pebbles as cavity-fill material are widely used as building material in rural areas of the affected region. Even in the case of reinforced concrete structures in urban areas, fine

details of reinforcement were generally ignored.

Apart from construction practices and quality, location of structures on precarious slopes also caused severe damages due to land sliding, rock sliding and subsidence. In Muzaffarabad, major concentrations of damage were noticed in the areas of deeper alluvial deposits along rivers Jhelum and Neelum. In Balakot and some other towns, the damage was directly related to fault rupture. Reasons of damage varied with the location (slopes, valleys), construction methods and use of material.

In the post-earthquake reconstruction, ERRA preferred embedding risk reduction techniques with local construction methods and materials rather than introducing completely alien structures. Local labor was trained to mesh risk reduction techniques with traditional structures and it worked well. Post-earthquake construction merits a comprehensive research to assess the efficacy of the approach and construction techniques. This learning can be useful for future incidents of similar nature.

A comprehensive research paper "General observations of building behavior during the 8th October 2005 Pakistan earthquake" authored by Jitendra K Bothara and Kubilây MO Hiçyılmaz provides copious evidences of building failure ascribed to flagrant violation of construction standards.

The authors very succinctly narrate the cause of devastation by concluding that "the root causes of the disaster were a failure to appreciate the earthquake hazard in the area, the techno-legal regime, lack of dissemination of earthquake-resistant knowledge, poor quality control mechanisms, and blind trust in certain construction materials and structural systems. Often, there was no real understanding of the sensitiveness to quality for the various construction methods (and, in particular, for the more recent methods of construction), nor was there any real evidence of an understanding of how structures behave during earthquakes. Socio-cultural and economic reasons further exacerbated the problem. It was a classic/tragic case of total failure of knowledge dissemination on earthquake-resistant construction

through virtually all levels of society and, in particular, the engineering community."

In Pakistan, construction industry in rural areas is generally bereft of any regulation. Whereas in urban areas building standards are sufficiently delineated yet are conveniently evaded by individuals as well as construction contractors. Negligence, corruption, cost saving and profit maximization mania have allowed the risky structures to proliferate. Sprawling slum areas in urban centers are controlled by an array of mafia that enjoys complete impunity. Prohibitively expensive land is a major cause of rampant vertical growth in urban areas. These tall structures with sheer imbalance of height-width ratio are often erected without proper examination of soil behavior coupled by a foundation incommensurate with live and dead load of structures.

Building control authorities in cahoots with builders wring every inch of a structure to extract money. This unscrupulous business is the hallmark of urban construction industry in the country. Experience has abundantly proved that neither building codes nor capacity of engineers and masons but refractory corruption is the principle cause behind failure of modern reinforced concrete structures in the country.

Governance in an ever growing construction sector is almost non-existent. Islamabad, the federal capital, is no less victim of this menace. In 2005, famous Margalla tower caved in due to the earthquake that originated 100kms away from the site. A dream housing tower, one of the most expensive in the city, proved to be a brazen failure of construction standards. Evidences are in abundance that the main culprit — the builder — was able to manipulate everything while working inside the development agency responsible for the capital territory. The reprehensible deed was exposed only after the earthquake shook the ground. Had the epicenter been closer, disaster could have been manifold in the illusory safe city.

In cities like Karachi, Lahore, Peshawar, Quetta, Multan and Hyderabad such deadly towers pervade the skyline. Similarly unsafe medium and low rise structures are a norm dotting every city map in the country. All these badly engineered structures can become a potential source

of havoc in case of any earthquake or other hazard. Cities like Karachi and Quetta located in the proximity of fault lines are exposed to a perennial risk of earthquake. Karachi is additionally vulnerable to tsunami and cyclones as well.

The fatal earthquake exhorted authorities to revisit the building codes in vogue. A major learning ushered in the revision of seismic zoning of country and supplanting building codes with seismic provisions. The erstwhile seismic risk map of Pakistan divided the whole country into four zones (Zone-1 to Zone-4, representing low to high seismicity). However, most of the areas obliterated by earthquake were marked in Zone-3. ERRA revised risk zoning in accordance with new seismic grid for the country.

Concomitantly the Pakistan Building Code (PBC, 2007) was also improvised to feature seismic factors. Bespoke seismic zones and building codes will serve the purpose only if regulatory regime is made stringent. Building standards cannot be improved only by introducing laws and codes unless the same are practiced with perfection and diligently monitored by the concerned authorities.

Pakistan has a pathetic track record of land use planning and quality of public and private housing. Corrupt regulatory bodies are not only incapable of executing their functions; they are also rendered paraplegic by debilitating external interference. Regulating land and builder mafia is not just a matter of institutional capacity but more of a conspicuously absent political will. If past cannot be corrected, future can at least be prudently adjusted for posterity.

Post-earthquake relief efforts and the race against winter – By Luavut Zahid

OCTOBER 31, 2015

(http://www.pakistantoday.com.pk/2015/10/31/features/ post-earthquake-relief-efforts-and-the-race-againstwinter/)

Pakistan has to learn from the experiences of others

The 7.5 magnitude earthquake that rattled Pakistan on October 26 left 271 dead, and obliterated 35,491 houses — and counting. While the numbers themselves are harrowing enough, they are just the tip of the iceberg.

As winter begins to settle in, there are tough problems coming for the people worst affected by the quake. Khyber Pakhtunkhwa suffered the most damage, with Azad Jammu and Kashmir, and Punjab, following somewhere behind.

According to the NDMA surveys, Shangla had the highest number of dead with 50 people, followed by Swat with 36, Chitral 32, Lower Dir 25, Tor Ghar 20, Upper Dir 17, and so on. The number of injured and the houses damaged were also highest in these areas.

The NDMA also just issued warnings for precautionary measures for all relief efforts. Many of the areas that were hit by the quake are about to experience extreme temperatures — scattered rains and snowfall is heading for most places, according to the Met office.

For people who have lost their homes, this isn't a good time to be stuck out in the open.

NDMA Spokesperson Ahmed Kemal said that the weather change will hit in the first week of November. Temperatures are expected to fall below zero degrees in some places. Relief and rehabilitation will become exceedingly tricky in the coming days.

Luke Rehmat, a social worker and head of Kalash People Development Network, agreed that troubling times are coming. Chitral itself has been recovering from flash floods, and Kalash Valley suffered the brunt of that natural disaster as well.

"The flood and earthquake affected families could face more issues. We know that rain and snowfall is to start from Monday and this will add to the difficulties that people face here," Rehmat said while talking to Pakistan Today.

The NDMA also just issued warnings for precautionary measures for all relief efforts. Many of the areas that were hit by the quake are about to experience extreme temperatures

"Rehabilitation work will also get disrupted because of the cold weather. There is no question about it, the cement work cannot be continued once the weather goes into such extreme temperatures," he continued grimly.

The earthquake took down several houses completely in the Kalash Valley, while many others suffered partial damage.

"A five year old boy died because of a landslide when the earthquake hit the valley," Rehmat said.

Whenever aid and relief activities begin they start with the easiest-toreach places. The mountain side in Pakistan is one big chunk of hardto-reach land, with some places that are harder that others to reach.

When the flash floods hit earlier this year, there was a general fear that something much worse would follow if rehabilitation wasn't completed before winter — and here we are now.

Rehmat pointed out that aid and relief work was yet to start in the valley, which had been exceedingly hard for authorities to reach during the flashflood carnage. "Some food has been distributed here but reconstruction hasn't begun yet," Rehmat said.

Trail of Tragedy - 6

May 2014 – October 2015

Jawad Iqbal, a resident of Swat and patron of Swat State Student Society, corroborates what Rehmat has highlighted, but for an entirely different area.

"Harder to reach places are not getting the relief response that is needed from the government. Some of them have been given some flour or sugar and what not," he told Pakistan Today.

Many people in the earthquake areas quickly found shelter elsewhere. Many were able to find refuse in the home of a relative. This is an interesting and odd theme that recurs throughout KP irrespective of what disaster strikes. People lose their homes made of mud, find refuge with a relative, wait for government help; and whether or not that help comes, they at some point then find a way to rebuild their homes and their lives.

"People are facing a lot of problems. There has been no discussion or response from the government about any kind of rehabilitation. People are trying to kill time and stay with whoever they know, but for how long?" Iqbal questioned.

Relief work in mountain regions is often slow owing not just to the harsh terrain but also the lack of infrastructure needed for massive efforts. "The PDMA comes and does its surveys and nothing else," Iqbal complained.

"People that live here are egoistic and unable to express their sorrows openly. They will not ask for help and there has been no relief for them," he lamented.

The organisation that Iqbal works with created volunteer teams to conduct their own surveys. "It's hard to get very accurate numbers but from what our teams can tell in the hilly areas over 60 per cent of the houses are either completely damaged or partially damaged. The plains are different and the damage is also different from one place to the next. 40 per cent of the houses in the plains are damaged," he said.

"Winter is itself a problem. People are living beneath an open sky and have no warm clothes or blankets," he added.

The weather of the area is harsh enough to put any plans of reconstruction on hold, but the people of the area have no real option.

"When it's cold in these areas it's quite difficult to construct houses but the villagers are planning to do it at any cost because they have a dire need for shelter. They have no other option," Iqbal said.

But that's easier said than done. Resources are scare and it will take time to rebuild. 'When ample resources are present it takes over three months to construct a house. And right now over 90 per cent of the people here are waiting for aid to come through, they have nothing,' Iqbal explained.

Pakistan at this point needs to look into investing in a strategy whereby mountain people are taught resilience. Examples of such practices can be found in neighbouring India and can even be borrowed from Nepal

In his own village not a single person has been given any sort of aid. A strong community system has been helping people. While people find relatives to stay they still have to tackle a food shortage, various diseases including influenza and other chest infections, and gastro diseases.

While medical facilities are nothing to boast about in the area, some organisations have setup medical camps. "I would say that they are satisfactory given the circumstances," Iqbal said.

Provincial and federal governments have already started distributing aid, but will it get to people quickly enough is a question that needs a speedy answer.

Pakistan has to learn from the experiences of others. When a 7.8 magnitude earthquake hit Nepal in April this year, their government was quick to hand out not just rations but also materials that mountainous communities could use to build temporary shelters.

While the NDMA, PDMAs, and armed forces, have collectively given out around 36,299 tents, they have done so in areas that suffer from some of the harshest weather possible. Can a tent weather the icy storm that's right around the corner for these communities?

Moreover, relief efforts must also take into account how long rations can last for these communities. Will they be able to get by on what they are being provided with in the coming months? Some of the areas that have been battered by the earthquake have been battered before — in some cases only months ago — is it enough to just met out cheques and aid and do nothing else?

Pakistan at this point needs to look into investing in a strategy whereby mountain people are taught resilience. Examples of such practices can be found in neighbouring India and can even be borrowed from Nepal.

Simply getting throttled by one disaster after another cannot be an option for the country anymore. And nothing can make that more clear than the winter that's waiting at the doorsteps of those still reeling from the aftershocks of the earthquake.