



MONSOON REPORT 2025 SINDH



Provincial Disaster Management Authority Sindh
Rehabilitation Department
Government of Sindh

Monsoon 2025 in Sindh

from June 26, 2025 to October 30, 2025



PROVINCIAL DISASTER MANAGEMENT AUTHORITY - SINDH
(PDMA - Sindh)

Abbreviations

PDMA	Provincial Disaster Management Authority
DDMA	District Disaster Management Authority
PMD	Pakistan Meteorological Department
SASCOF	South Asian Climate Outlook Forum
CSUF	Climate Services User Forum
ENSO	El Niño–Southern Oscillation
IOD	Indian Ocean Dipole
MME	Multi-Model Ensemble
JAS	July–August–September
GIS	Geographic Information System
OBM	Outboard Motor
EUMETSAT	European Organization for the Exploitation of Meteorological Satellites



MESSAGE FROM ADVISOR TO CHIEF MINISTER

The Provincial Disaster Management Authority (PDMA) and District Disaster Management Authorities (DDMAs) have been at the forefront of managing these challenges, working tirelessly to mitigate the impacts of disasters and strengthen preparedness for future climate-induced risks.

I am pleased to present the Provincial **Monsoon Report 2025**, which provides a comprehensive account of the 2025 monsoon season. The report encompasses an in-depth analysis of weather patterns, preparedness measures, response operations, damages and losses, recovery initiatives, and lessons learned. It highlights the collective efforts of PDMA, DDMAs, and partner organizations in ensuring timely and coordinated actions during and after the monsoon.

This report not only reflects our response performance but also serves as an important learning tool to evaluate our strengths and identify areas for improvement. It underscores the importance of collaboration, coordination, and data-driven decision-making in managing disasters effectively.

I extend my appreciation to all stakeholders, including PDMA, DDMAs, and line departments, for their dedication and commitment throughout the 2025 monsoon season. Their coordinated efforts have been instrumental in safeguarding lives, minimizing damages, and supporting affected communities in their recovery.

Moving forward, PDMA remains committed to continuous improvement, integrating lessons learned from this report into future planning and preparedness measures. I am confident that through collective resolve and sustained efforts, we will continue to make significant progress in strengthening our disaster management systems and achieving our shared vision of a resilient and safer Sindh.

Giyan Chand Essarani
Advisor to Chief Minister
Rehabilitation Department



MESSAGE FROM SECRETARY

During the recent monsoon season, the world once again witnessed the alarming effects of global climate change. Extreme weather patterns, rising temperatures, and shifting climatic conditions have continued to challenge our region. Heatwaves, urban and riverine floods, cyclones, droughts, and other disasters have become increasingly frequent and severe, resulting in considerable losses to human lives, agricultural land, infrastructure, and economic activities. These realities remind us of the urgent need to strengthen our resilience and preparedness.

Disaster management is a continuous and evolving process that demands learning, adaptation, and improvement. Our department remains steadfast in its commitment to enhancing institutional capacity, refining response mechanisms, and reducing vulnerabilities across Sindh. We will continue to analyze post-disaster findings, update our strategies accordingly, and work in close collaboration with partner organizations and agencies to improve resilience and recovery efforts.

I would like to commend the dedicated teams of PDMA, DDMA, and all line departments who played a vital role during the 2025 monsoon season. Their tireless efforts in preparedness, response, and recovery operations were instrumental in safeguarding lives and supporting affected communities.

The **Monsoon Report 2025** provides a comprehensive analysis of the season's events, response measures undertaken, lessons learned, and recommendations for future improvement. It serves as a key reference document for all stakeholders to enhance coordination, resource management, and long-term planning. I encourage everyone to utilize this report as a learning tool to strengthen disaster resilience and work collectively toward a safer, climate-resilient Sindh for future generations.

Rafique Mustafa Shaikh
Secretary to Government of Sindh
Rehabilitation Department



MESSAGE FROM DIRECTOR GENERAL

In the era of global warming and changing climatic conditions, our province continues to face multifaceted challenges. These include the devastating impacts of heatwaves, droughts, urban and riverine floods, flash floods, and cyclones—each capable of disrupting lives, livelihoods, and infrastructure. The unprecedented events of the 2010 super floods and the heavy rains of 2022 serve as stark reminders of our vulnerabilities. While we strive to avert such disasters, we must also recognize that their frequency and intensity are likely to increase as climate patterns evolve.

The **Provincial Monsoon Report 2025** reflects our ongoing commitment to reducing these risks by assessing the vulnerabilities, response mechanisms, and recovery efforts across the province. It provides valuable insights into the operational challenges encountered during the 2025 monsoon season and highlights opportunities to further strengthen coordination, early warning systems, and community-based resilience.

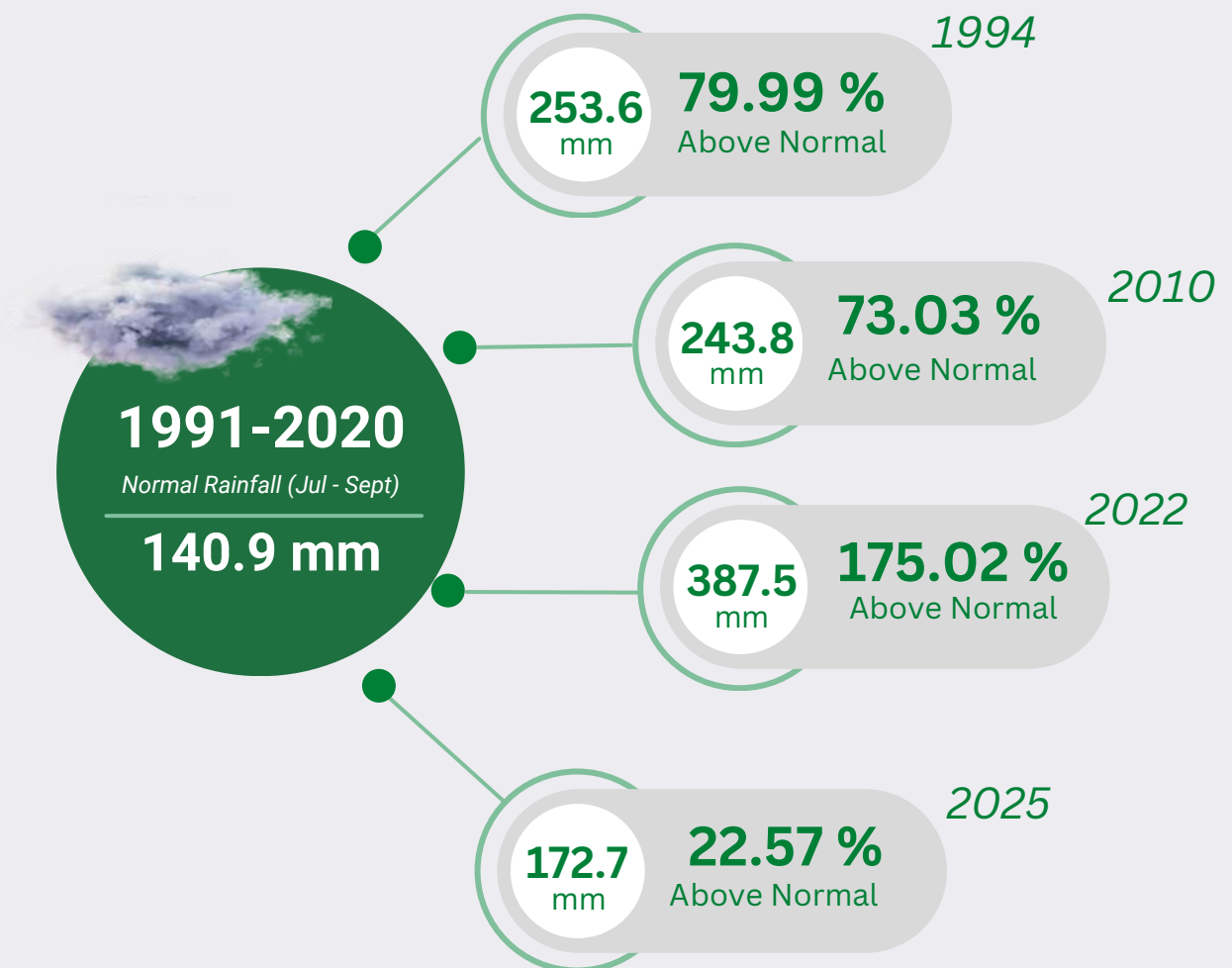
I would like to extend my heartfelt appreciation to all stakeholders, government departments, and district authorities whose tireless efforts and collaboration made our collective response possible. Their dedication and professionalism played a crucial role in protecting lives and minimizing losses during the monsoon season.

As we move forward, it is essential that we continue to learn from these experiences and work collectively to enhance our capacity for preparedness, response, and recovery. Let us reaffirm our shared commitment to building a disaster-resilient Sindh—one that stands ready to face future challenges and ensures a safer, more secure future for all its people.

Syed Salman Shah
Director General, PDMA Sindh

Monsoon 2025

According to PMD during the July, August & September (JAS) season, most parts of the country experienced above-normal rainfall, while Gilgit-Baltistan recorded below-normal rainfall. Since the onset of the monsoon in the last week of June, approximately ten rainfall spells have been observed. Isolated heavy downpours led to severe urban and flash flooding, particularly affecting the northern, eastern and southern regions of the country.



Heaviest monsoon season rainfall records from the past

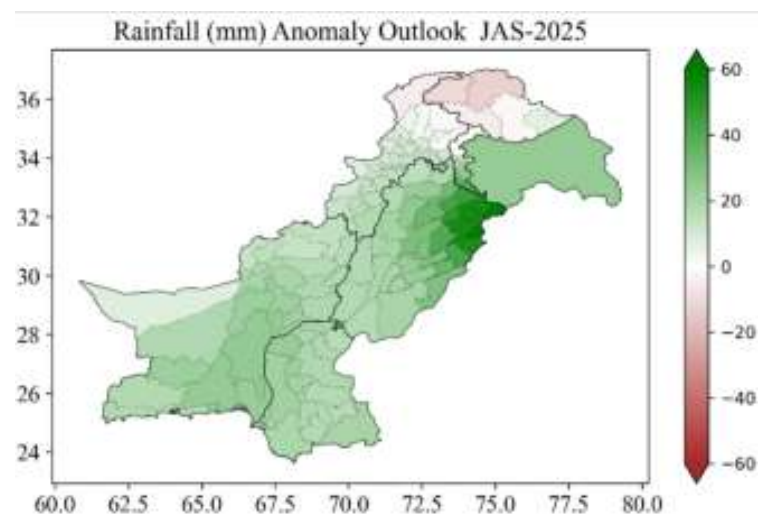
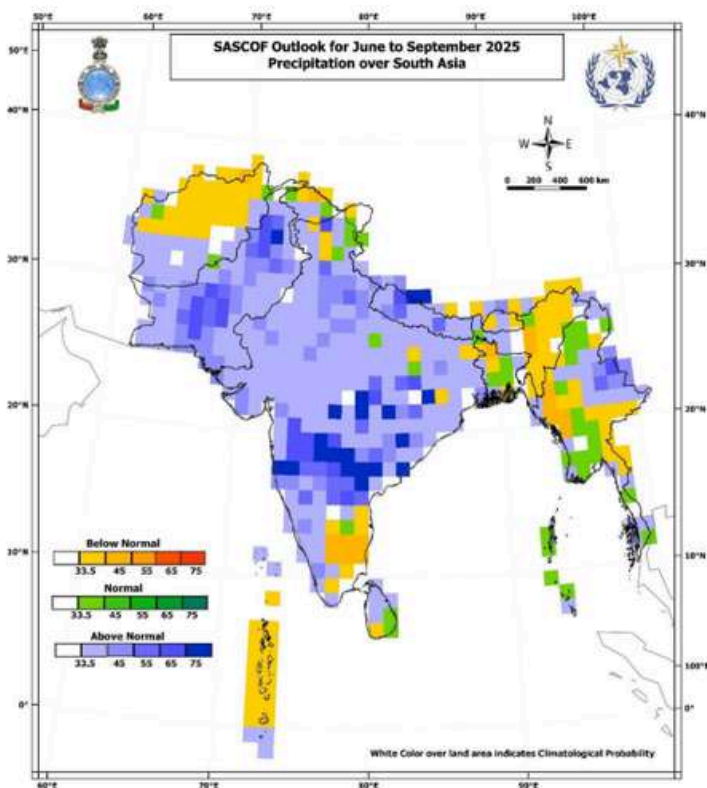
Seasonal Forecast

(PMD) reported that based on the Multi-Model Ensemble (MME) of eight global prediction models, ENSO neutral and negative IOD conditions are expected during the season. These factors indicate a likelihood of normal to slightly above normal rainfall over the central and southern parts of the country.

- *Normal to slightly above-normal rainfall is likely over the central and southern parts*
- *Highest rainfall departures are expected in the northeastern parts of Punjab and Kashmir*
- *Slightly below normal rainfall is likely in northern areas, including Khyber Pakhtunkhwa and Gilgit-Baltistan.*

In a consensus issued during SASCOF-31, experts agreed that ENSO neutral conditions are likely to be favorable for above normal southwest monsoon rainfall over most parts of South Asia, except in some northern, southern, eastern and northeastern areas where normal to below normal rainfall is expected.

Based on the seasonal forecasts as mentioned, PDMA Sindh issued alerts to relevant departments for necessary preparation in view of likely impacts.

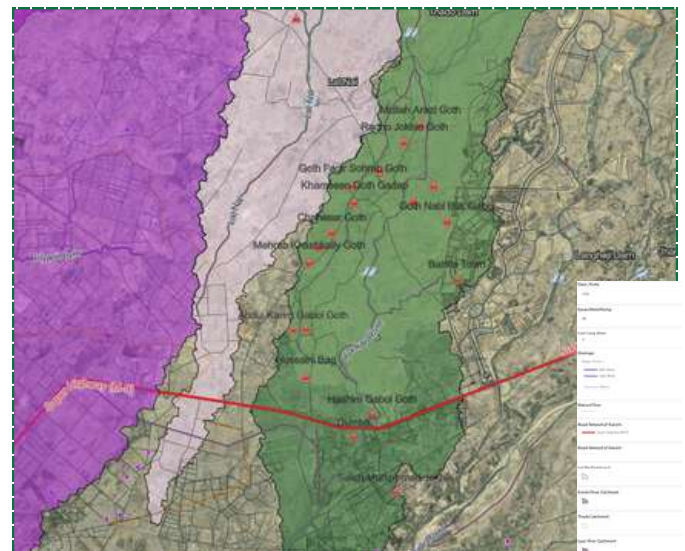
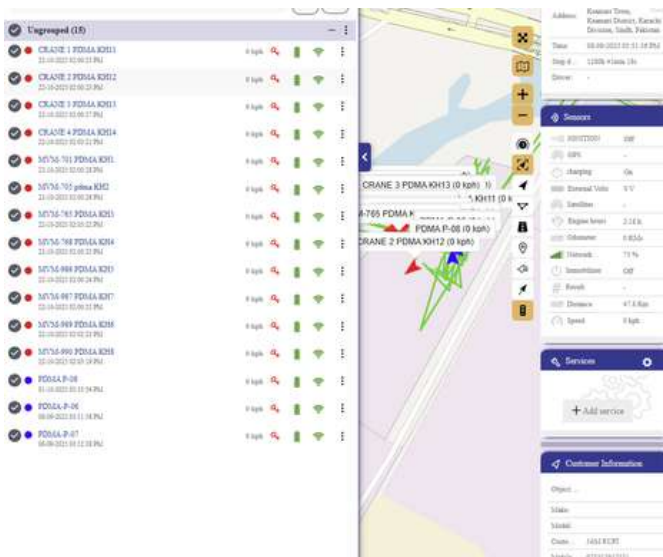
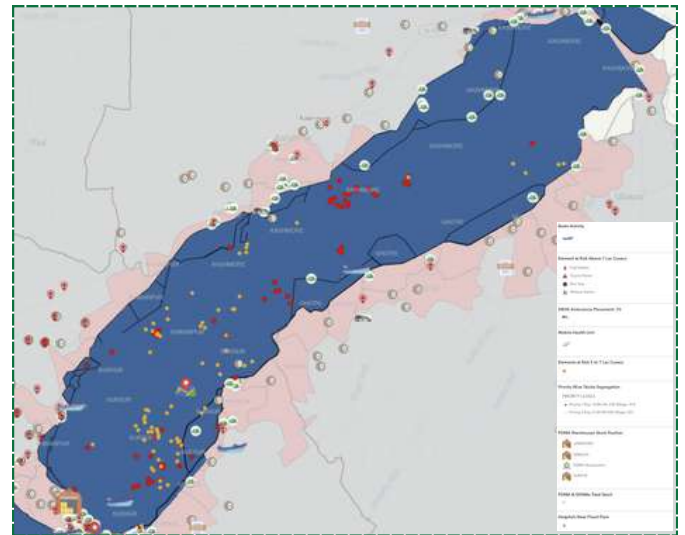
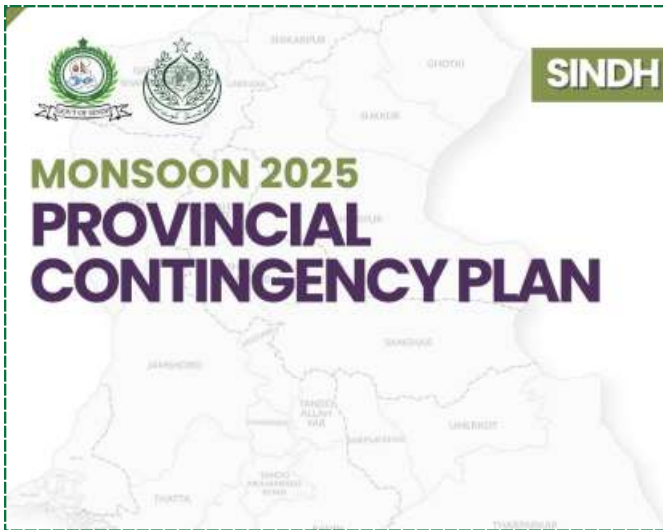


Rainfall Anomaly Outlook, JAS-2025, issued by Pakistan Meteorological Department (PMD)

SASCOF Outlook for June to September 2025 Rainfall over South Asia

Preparedness

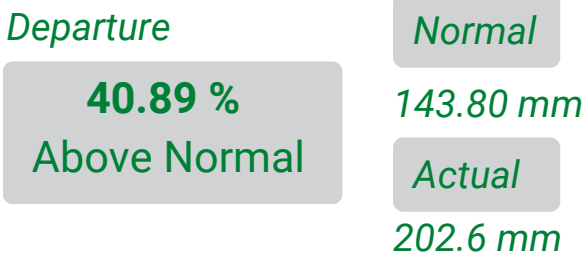
As part of the planning for the 2025 monsoon season, PDMA Sindh first prepared the Monsoon Contingency Plan 2025 to manage both urban and riverine floods. Following the plan, dewatering machinery and emergency equipment were deployed at vulnerable points during rain spells to ensure a quick response. To support better planning and coordination, interactive maps were developed in advance tool of GIS showing Urban flooding, flood-prone areas, key infrastructure, and population exposure. These maps helped monitor flood conditions, guide timely decisions, and improve coordination with DDMA's across the province.



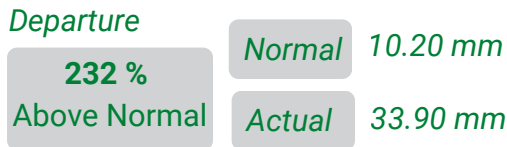
Monsoon 2025- Sindh

The onset of the monsoon in Sindh occurred earlier than usual, beginning on June 30th, with initial rainfall recorded between June 26th and 30th. Overall, June received 232% above-normal rainfall, while July experienced below-normal rainfall with a 47% deficit. In contrast, August recorded rainfall 1% above normal, and September witnessed exceptionally high rainfall, 317% above normal. The extreme rainfall in September was attributed to a strong low-pressure depression system that entered Sindh from India.

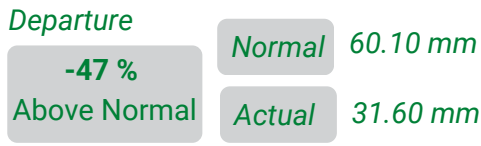
Season (June - September)



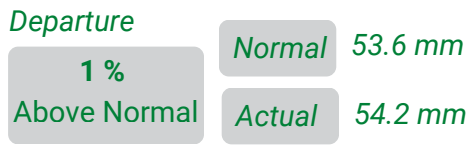
June



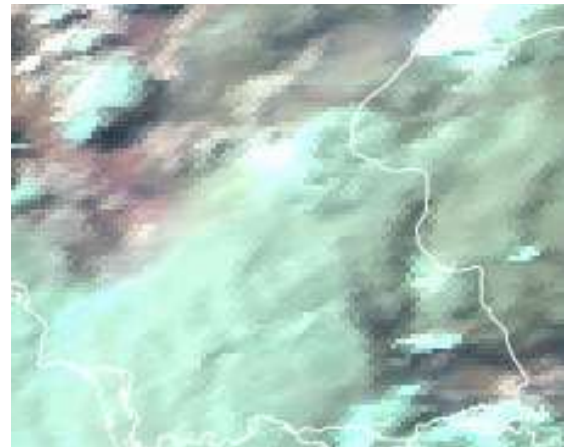
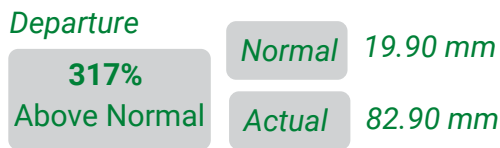
July



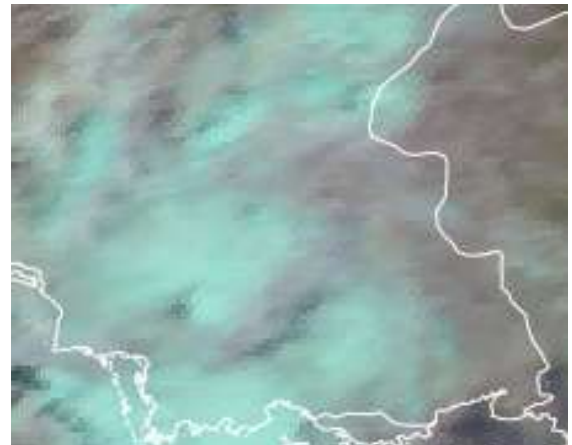
August



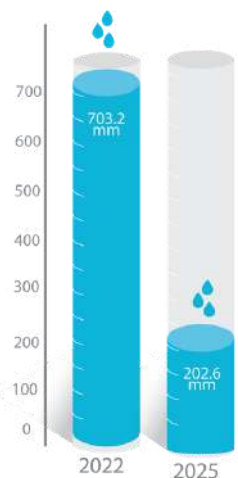
September



Cloud formation of Over Southern of Sindh on 19th August 13:05 UTC, 2025



Cloud formation of Over Southern of Sindh on 9th September, 6 UTC, 2025



Heaviest rainfall records of Sindh as recorded by PMD

June & July

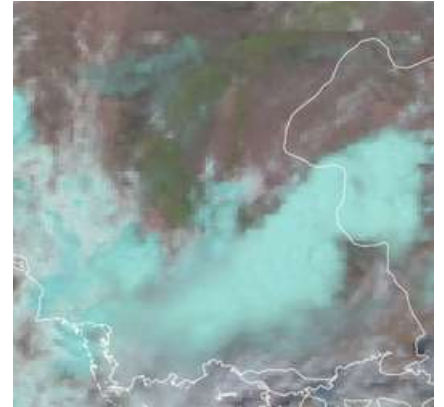
Sindh experienced one major rainfall spells and two isolated events originating from Balochistan and Arabian Sea in June & July respectively. These events were associated with a seasonal low over western Balochistan, along with moist currents from the Bay of Bengal and Arabian Sea.

One Spells - June

01

- 26th to 30th

Dense rain bearing clouds Southern Sindh system entered from India 27th June, 2025 08:30 UTC



Isolated events - July

02

- 14th
- 19th to 21st

Dense rain bearing clouds entering Sindh from the Balochistan 14th July, 2025 12:00 UTC



Average Highest Rainfall- June



MITHI



SBA



FAISAL BASE



HYDERABAD CITY



HYDERABAD

Average Highest Rainfall- July



HYDERABAD



M. JO DARO



HYDERABAD CITY



BADIN



LARKANA

Impacts

Rainfall Spells & Isolated heavy rainfall event caused urban flooding in low lying areas of the cities in Karachi & Hyderabad city.

August

One major spell of monsoon season 2025 was observed from 17th August to 22nd August . The system that formed over the Bay of Bengal entered Sindh and caused intense rainfall in southern parts of the province.

One Spells - August

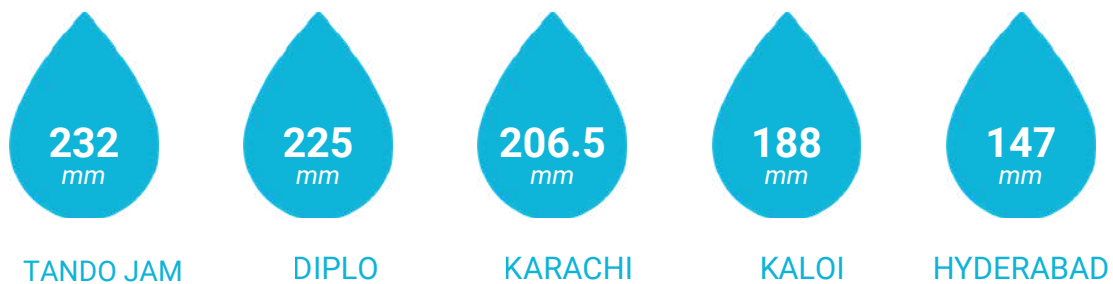
01

- 17th - 22nd



Heavy rain clouds centering over all Sindh 19th August, 2025 12:50 UTC

Average Highest Rainfall



Impacts

Most of damages, losses and displacement of people occurred during these spells. Additionally, huge quantum of water from Punjab province overloaded the drainage of Indus river facing the high flows. Furthermore, Karachi facing the major sever urban flooding in this rainfall spell.

September

September remained relatively slightly above normal in season of 2025. One spell occurred over the the Sindh. The spell affected Southern & south eastern Sindh.

Wet Spells

01

- 7th - 13th



Clouds over the Sindh on 9th September, 2025 7:00 UTC

Average Highest Rainfall

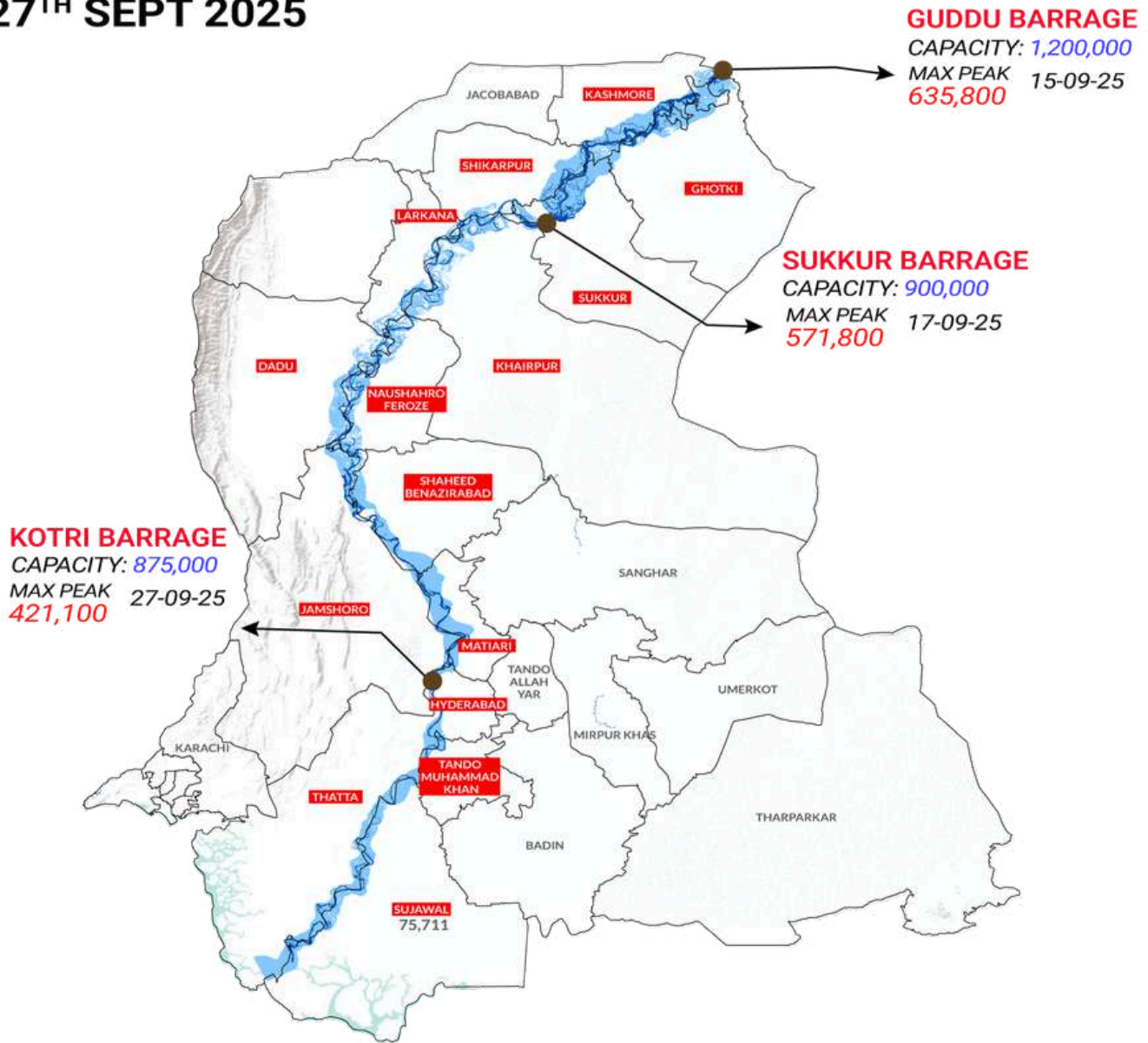


Impacts

The month of September recorded exceptionally above-normal rainfall – about 317% higher than the average. During this period, the Indus River experienced high flood levels at Guddu and Sukkur barrages, while Kotri Barrage remained in a medium flood stage, primarily due to heavy inflows from India following the opening of dam spillways. Moreover, Karachi faced severe urban flooding, particularly in the Gadap region and nearby districts, caused by intense rainfall and the overflow of the Thaddo Dam.

Riverine Flood - 2025

RIVER INDUS DISCHARGE (CUSECS) 27TH SEPT 2025



Note:

On 24 August 2025, a high flood of approximately 543.2 thousand cusecs was recorded at Guddu Barrage, while a high flood of about 457.0 thousand cusecs was observed at Sukkur Barrage.

Subsequently, on 15 September 2025, the flood intensity increased with a high flood of approximately 635.8 thousand cusecs at Guddu Barrage and 538.9 thousand cusecs at Sukkur Barrage.


Losses and Damages

Initial data of losses and damages from both the monsoon and riverine floods was collected through DDMA's for estimation and coordination of disaster response. The synoptic state of losses and damages is presented below.


Deaths and Injuries

 *Deaths*
98

 *Injuries*
87

 *Livestock*
577


Infrastructure Damages


 *Houses (Count)*
3,332


 *Roads (Km)*
491

 *Bridges/ Culvert (Count)*
66

Population Affected


 *Affected Population*
625,429


 *Displaced Population*
198,425

 *Livestock Evacuated*
500,258

Crop Damages

 *Acres*
229,533

 *Kacha Houses*
2,888

 *Pakka Houses*
444

Deaths and Injuries

Segregation of deaths and injuries and district-wise distribution remained as;

Deaths

98



June - October

Injuries

87






June - October

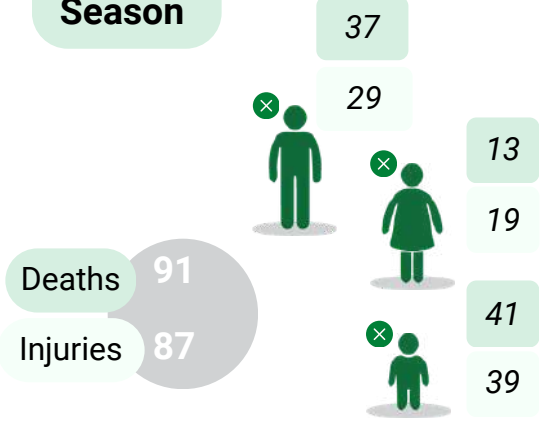
Livestock

Livestock plays important role particularly in rural economy. It is does not only support local consumption of diary and meat but also large number of population depends on livestock business Sindh. Loss of livestock results in loss of survival and livelihood for population engaged in this business. Details are;

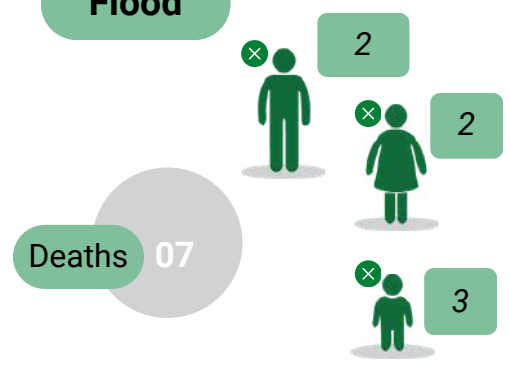
Most Affected District

			
Tharparkar	11	11	217
Karachi East	10	5	-
Malir	10	2	4

Monsoon Season



Riverine Flood



Livestock Loss



577

June - October

Monsoon Season

Riverine Flood



Human Deaths



Injuries



Livestock Loss



Human Deaths

Larkana

Hyderabad

Mirpurkhas SBA Sukkur

Karachi

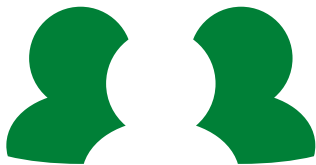
	Human Deaths	Injuries	Livestock Loss	Human Deaths
Larkana	2	-	-	-
Kamber Shahdadkot	1	-	-	-
Kashmore	3	-	-	1
Jacobabad	7	-	-	-
Shikarpur	-	-	-	2
Hyderabad	5	18	-	-
Jamshoro			112	
Dadu	-	-	-	2
Matiari	-	-	-	1
Tando Allahyar	1	7	13	-
Tando M. Khan	2	1	-	-
Badin	9	3	112	-
Sujawal	1	-	-	-
Sukkur	6	2	-	-
Khairpur	5	-	50	1
Sanghar	1	4	-	-
Mirpurkhas	3	6	10	-
Umerkot	3	4	-	-
Tharparkar	11	11	217	-
Karachi Central	3	-	-	-
Karachi East	10	5	-	-
Karachi South	3	12	-	-
Karachi West	1	2	-	-
Korangi	4	10	-	-
Keamari	-	-	59	-
Malir	10	2	4	-

Affected and Displaced Population

Rainfall combined with riverine flooding and inflow of water into Sindh affected the floodplain populated areas of the riverine districts. As the main agrarian belt lies within the floodplains, the rains and accompanying floods caused significant hardship, leading to the evacuation of the population from the floodplains. Details are;

Affected Population

625,429



June - October

Displaced Population

198,376



June - October

Livestock Evacuation

Rainfall combined with riverine flooding and the cumulative inflow of water into Sindh also affected a large number of livestock in the flood-affected areas. Animals were evacuated from the inundated floodplains, and veterinary assistance was provided to ensure their health and safety during the emergency.

Livestock Evacuated

500,258



June - October

Most Affected Districts

Khairpur	57,674	51,048	315,406
Kashmore	120,454	32,401	61,536
Jamshoro	48,472	20,851	13,096
Sukkur	57,476	17,292	14,311



Population Affected



Displaced Population



Livestock Evacuated

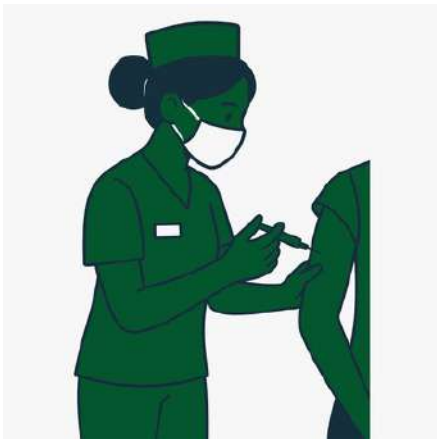
		Population Affected	Displaced Population	Livestock Evacuated
Larkana	Larkana	15,578	1,470	520
	Kashmore	120,454	32,401	61,536
	Shikarpur	26,698	4,810	1,250
	Hyderabad	11,305	1,680	120
Hyderabad	Jamshoro	48,472	20,851	13,096
	Dadu	28,662	12,721	-
	Tando M. Khan	5,296	-	-
	Matiari	16,059	5,947	35,819
	Thatta	84,196	3,071	9,428
Sukkur	Sujawal	72,729	5,005	3,813
	Sukkur	57,476	17,292	14,311
	Khairpur	57,674	51,048	315,406
	Ghotki	34,994	12,902	4,428
Karachi SBA	Shaheed Benazirabad	28,767	11,977	14,096
	N. Feroze	17,051	17,232	26,427
	Karachi	18	18	-

Persons & Livestock Treated

Heavy rainfall, riverine flooding, and the continuous inflow of water into Sindh affected many densely populated riverine districts. Since most agricultural areas lie within the floodplains, the rains and floods caused serious difficulties for local communities. During this time, a large number of people received medical treatment, and livestock were given veterinary care in the affected areas. Details are;

No. of Person Treated

152,685



June - October

Most Affected Districts



Khairpur	19,847	315,406
Kashmore	18,463	134,223
Ghotki	17,627	129,630
Jamshoro	15,601	98,605

No. of Livestock Treated

1,778,667



June - October



No. of Person Treated

No. of Animal Treated

Larkana

Larkana

9,959

76,239

Kashmore

18,463

134,223

Shikarpur

5,315

86,754

Hyderabad

5,591

222,513

Jamshoro

15,601

98,605

Dadu

11,926

190,755

Hyderabad

Tando M. Khan

9,769

17,785

Matiari

2,323

140,608

Thatta

9,839

52,947

Sujawal

7,630

46,076

Sukkur

Sukkur

8,159

80,562

Khairpur

19,847

315,406

Ghotki

17,627

129,630

SBA

Shaheed Benazirabad

6,251

56,947

N. Feroze

4,385

129,617

Crop Damaged




Monsoon rainfall and riverine flooding in 2025 were caused by the release of water from India into the Chenab, Sutlej, and Ravi rivers. As a result, high flood levels were recorded at Guddu and Sukkur barrages, while Kotri barrage experienced medium flood levels. The floods primarily affected crop areas in the floodplains, while heavy monsoon rainfall caused widespread damage to houses. The breakdown of crop damages is as follows:

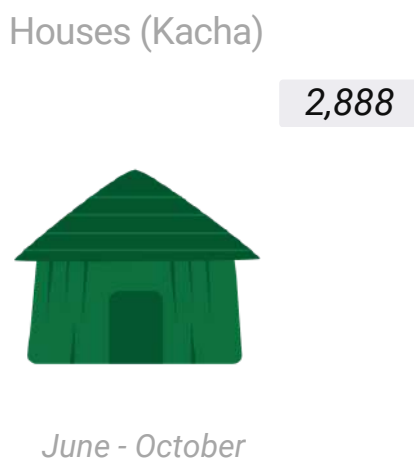
Houses Damaged

More than 3 thousands of homes were damaged. Around a 0.2 million of displaced population remained in organized camps. The total of 3,332 houses are damaged breaking up in Kacha and Pakka Houses damaged.



Most Affected Districts

			
N.Feroze	41,698	-	-
Jamshoro	29,146	340	190
Ghotki	27,998	80	-





Crops
Damaged



Houses
(Kacha)



Houses
(Pakka)

Larkana

Larkana 26,645 95 -

Kashmore 8,600 - -

Shikarpur 7,400 - -

Jacobabad 350 - -

Hyderabad 784 350 5

Jamshoro 29,146 340 190

Hyderabad

Dadu 16,530 896 196

Tando Allahyar 2,425 - 1

Tando M. Khan 163 485 26

Badin 7,905 53 -

Matiari 4,150 - -

Sujawal 2,517 517 -

Sukkur

Sukkur 14,699 - -

Khairpur 25,943 30 5

Ghotki 27,998 80 -

SBA

Shaheed Benazirabad 12,580 - -

N. Feroze 41,698 - -

Sanghar - 1 -

Mirpurkhas

Mirpurkhas - - 2

Karachi









Karachi - 41 19

Note:

Crop area damaged is still under process, so far 229,533 acres have been confirmed and verified. Remaining 84,857 acres out of 314,390 acres reported earlier dated 26th September, 2025 us yet to be surveyed and confirmed.

Infrastructure Damaged

The Riverine Flood of 2025 caused extensive infrastructure damage across Sindh, inundating roads, bridges/Culvert and communication networks. Irrigation and drainage systems were disrupted, while power and water supplies suffered prolonged outages. Public buildings, schools and health facilities were also severely affected.

	Public Building/ Offices	Education Affected	Roads Affected	Bridges/ Culvert	
	 42	 30	 491	 66	
	 Public Building Affected	 Education Affected	 Roads (Unit) Affected	 Bridges/ Culvert Affected	
Hyderabad	Tando Allahyar	-	1	50	-
	Dadu	-	-	108	45
	Jamhsoro	-	-	65	2
	Hyderabad	38	29	32	3
	Sujawal	1	-	7	10
	Tando Muhammad Khan	-	-	5	6
SBA	Sanghar	2	-	-	-
Karachi	Karachi	1	-	224	-





Relief Activities

The 2025 flood was a significant disaster in the province, caused by 35.6% above-normal rainfall and further aggravated when India released water from spillways of dams on the Chenab, Sutlej, and Ravi rivers, resulting in high riverine flooding that affected parts of Sindh. Guddu and Sukkur barrages experienced high flood levels, while Kotri barrage observed a medium flood. Despite the challenges, the PDMA maintained a 24/7 coordinated response to manage the disaster effectively.




Shelter

	<i>Tents</i> 11,670
	<i>Tarpaulin Sheets</i> 14,245
	<i>Mosquito Nets</i> 39,470
	<i>Animal Mosquito Nets</i> 9,000




Rescue

	<i>Life Jacket</i> 1,280
	<i>Life Rings</i> 10
	<i>Floating Rope</i> 10
	<i>Mega Phone</i> 4

Household

	<i>woolen Mattresses</i> 10,660
	<i>Plastic Mat/Chatai</i> 11,150
	<i>Jerry Cans</i> 11,150

Machinery

	<i>Truck Mounted Dewatering Pump</i> -
	<i>Small Dewatering Pump</i> -
	<i>Boats with OBM</i> 23

Shelter & Household

During the 2025 monsoon and Riverine flood emergency in Sindh, thousands of families were rendered shelter less, taking refuge relief camps near their inundated villages. The PDMA Sindh, in coordination with DDMA, established 705 relief camps across the affected districts to accommodate and assist the displaced population.

A total of 198,425 displaced persons were provided with temporary shelters, while 625,429 people were affected by the monsoon rainfall and riverine flood. Along with tents, essential relief supplies such as tarpaulins, mosquito nets (for people and animals), jerry cans, bed sheets, pillows, kitchen sets and emergency response kits were distributed to support the affected communities.

Tents

11,670



June - October

Tarpaulin Sheets

14,245



June - October

Most Recipient

Khairpur	2,500	5,020	12,000	-
Larkana	2,000	2,000	6,000	2,000
Sukkur	2,000	2,000	6,000	2,000
Jamshoro	3,000	1,000	1,000	
Larkana	2,400	2,000	2,000	
Sukkur	2,400	2,000	2,000	

Mosquito Nets

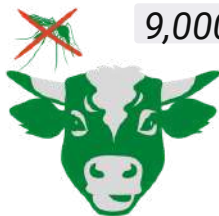
39,470



June - October

Animal Mosquito Nets

9,000



June - October

Plastic Mat/Chatai

11,150



June - October

Jerry Can (10 Ltrs)

11,150



June - October





Woolen Mattressess




10,660



June - October



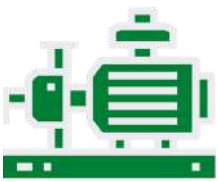
	 Tents	 Tarpaulin	 Mosquito Nets	 Animal Nets	
Larkana	Larkana	2,000	2,000	6,000	2,000
	Shikarpur	2,000	2,000	6,000	2,000
	Jacobabad	150	150	450	-
Hyderabad	Hyderabad	-	50	-	-
	Rescue 1122 Hyderabad	-	5	-	-
	Jamshoro	1,000	1,000	3,000	1,000
Sukkur	Sukkur	2,000	2,000	6,000	2,000
	Pak Navy Sukkur	20	20	20	-
	Khairpur	2,500	5,020	12,000	-
	Ghotki	2,000	2,000	6,000	2,000

	 woolen Mattresses	 Plastic Mat/ Chatai	 Jerry Can (10 Ltrs)	
Larkana	Larkana	2,400	2,000	2,000
	Shikarpur	2,400	2,000	2,000
	Jacobabad	450	150	150
Hyderabad	Jamshoro	3,000	1,000	1,000
	Sukkur	2,400	2,000	2,000
Sukkur	Pak Navy Sukkur	10	-	-
	Khairpur	-	2,000	2,000
	Ghotki	-	2,000	2,000

Machinery

Low gradients coupled with human interactions have made poor drainage system in the province. Most the times water suction is required to dewater from settled areas. During each rainy season, PDMA provide portable machinery to concerned quarters for removal of stagnant water from low lying areas. This year water suction pumps of variable sized and capacities were provided to DDMA's and other authorities for removal of water.

Truck Dewatering Pump



195

June - October

Boats with OBM



June - October

23

Small Dewatering Pump



75

June - October

Most Recipient



Karachi

83

-

-

Hyderabad

43

14

-

Jamshoro

16

-

3





Truck Mounted
Dewatering Pump



Small Dewatering
Pump



Boats with
OBM

Larkana	Commissioner Larkana	-	-	04
	Larkana	-	12	-
	Kamber Shahdadkot	07	12	-
	Shikarpur	-	02	-
	Jacobabad	05	02	-
	Hyderabad	43	14	-
Hyderabad	Jamshoro	16	-	03
	Matiari	-	05	-
	Tando Allahyar	-	-	-
	Tando M. Khan	06	-	-
	Badin	02	-	-
	Thatta	02	-	-
Sukkur	Sujawal	-	-	-
	Sukkur	19	14	-
	Khairpur	08	-	-
	Commissioner Sukkur	-	-	07
SBA	Sukkur Navy	-	-	05
	Commissioner SBA	-	-	04
	Shaheed Benazirabad	02	08	-
	N. Feroze	-	04	-
Mirpurkhas	Tharparkar	02	02	-
Karachi	Karachi	83	-	-

Note: Cumulative deployed de-watering pumps during monsoon season 2025

Lesson Learned

Good Practices Established:

- In follow-up to the PMD Advisory, a proactive approach was adopted by deploying truck-mounted and stationary dewatering pumps, along with trained manpower, at vulnerable locations across major cities well before each rain spell.
- Despite damaged and inundated road infrastructure, relief and rescue equipment were mobilized promptly and effectively, resulting in the timely evacuation of thousands of people, thereby saving numerous lives.
- A digital relief distribution system was implemented to track and monitor relief operations, while business intelligence tools were utilized for data collection, analysis, and visualization. In addition, dedicated portals were developed to facilitate information sharing.
- Scenario-based flood simulations were conducted and interactive maps were developed in ArcGIS Pro to enhance situational awareness, support initial damage assessments, and assist in the monitoring of flood conditions.

Conclusion

During the Monsoon 2025, Sindh experienced several low-pressure systems and depressions that originated over the Bay of Bengal and India, later moving westward towards the province. These systems brought above-normal rainfall during August and September, while July recorded below-normal precipitation across most parts of Sindh. As a result, high flood levels were recorded at Guddu and Sukkur Barrages, while Kotri Barrage experienced a medium flood situation, primarily due to the release of excess water from India into the Indus River system. Karachi also witnessed its worst single-day rainfall on record, and in September, the city experienced severe urban flooding due to the overflow of the Thaddo Dam. Despite the uneven rainfall distribution and emerging flood conditions, the Provincial Disaster Management Authority (PDMA) Sindh had proactively prepositioned emergency supplies and resources at the district level before the onset of the monsoon to ensure timely response and effective management of potential flood-related situations.

The impacts of climate change and evolving weather systems are becoming increasingly apparent across the globe. In recent years, record-breaking and extreme weather events have occurred in many regions, a trend that is likely to persist in the form of heavy rains, severe storms, heatwaves, and other climate-induced hazards. Sindh, situated at the intersection of multiple regional weather systems, remains particularly vulnerable to these changing climatic conditions.

In addition to these emerging challenges, Sindh also faces several long-standing disaster threats that demand permanent and sustainable solutions. The uncontrolled flow of rainwater from Balochistan continues to endanger communities along the right bank of the Indus River. On the left bank, there is a critical need for a well-planned, eco-friendly, and integrated drainage network to ensure the safe passage of excess water during heavy rainfall events.

Furthermore, infrastructure development must incorporate technically sound culverts and bridges to allow natural water flow and minimize obstruction. Restoring natural depressions to their original state will also improve water retention and help mitigate flood risks. Major cities and towns, particularly those prone to urban flooding, should develop separate stormwater drainage systems to effectively manage intense rainfall.

Adopting such permanent and sustainable measures is essential for building long-term resilience and ensuring meaningful disaster management. Without these structural solutions, each major weather event will continue to drain public resources, as temporary and ad hoc responses often prove ineffective and unsustainable.



PDMA

SINDH

Provincial Disaster Management Authority Sindh

*Rehabilitation Department
Government of Sindh*

Helpline: 

PDMA 1736

Email: 

info@pdma.gos.pk

Contact Us: 

PDMA Office: 021-35381810 / PEOC: 0335-5557362 / Fax: 021-35314219

 PLOT NO. 26-C, MAIN KHAYABAN-E-JAMI, DHA PHASE-VII, KARACHI.