



Hisaar Foundation

**WATER  
PEOPLE  
HEALTH**  
Coping with the Floods

# Recent Flooding in Malir & Lyari Rivers and Its Impact on Karachi (2025)

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# Urban Flooding

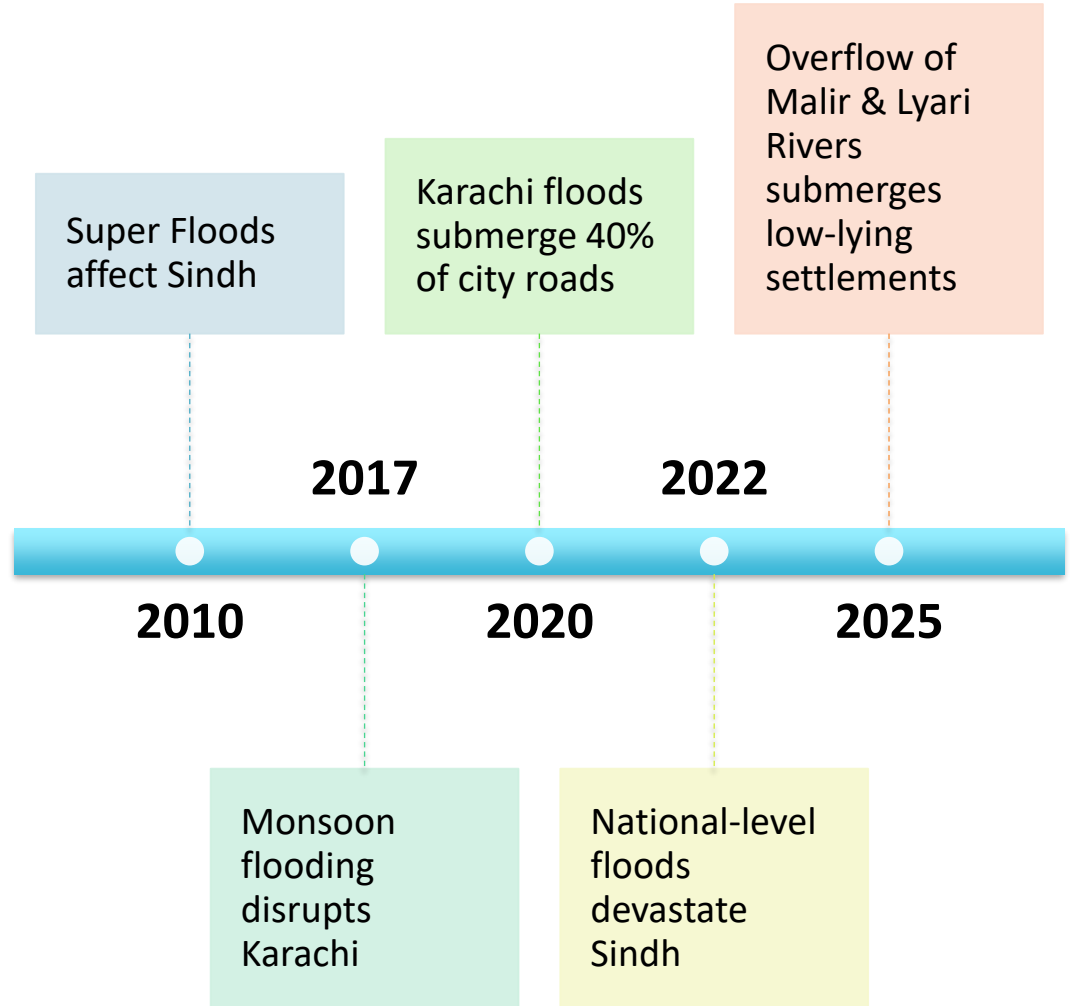
- Urban flooding is the inundation of land or property in a city caused by excessive rainfall overwhelming the capacity of drainage systems. It occurs in urban areas where hard, impermeable surfaces like roads and buildings prevent water from soaking into the ground, causing rapid runoff that accumulates and causes flooding. This is compounded by factors like inadequate infrastructure, poor urban planning, and changing climate patterns leading to more intense rain events

# Urban Flooding in Karachi – Context

Karachi faces recurrent urban flooding due to unplanned growth, settlements on nalas, inadequate stormwater infrastructure, and climate-induced monsoons.

The 2025 floods in Malir and Lyari Rivers caused major urban disruption, impacting lives, infrastructure, and economy.

# Timeline of Major Flood Events (2010–2025)



# Karachi Rainfall

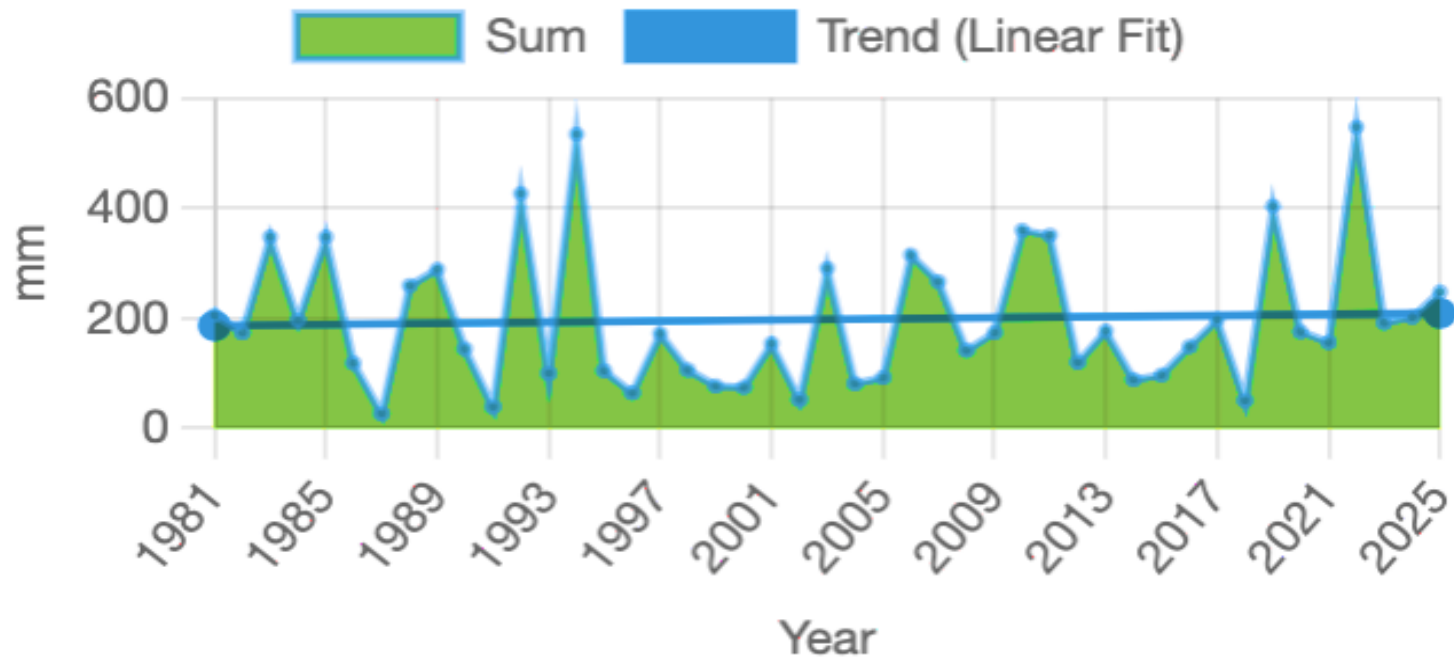
## KARACHI

Precipitation - ECMWF

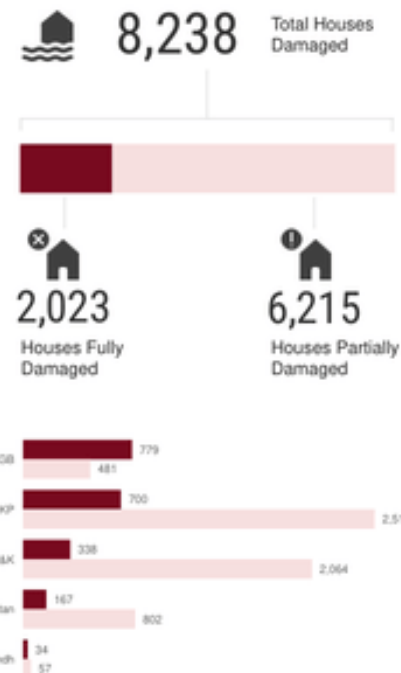
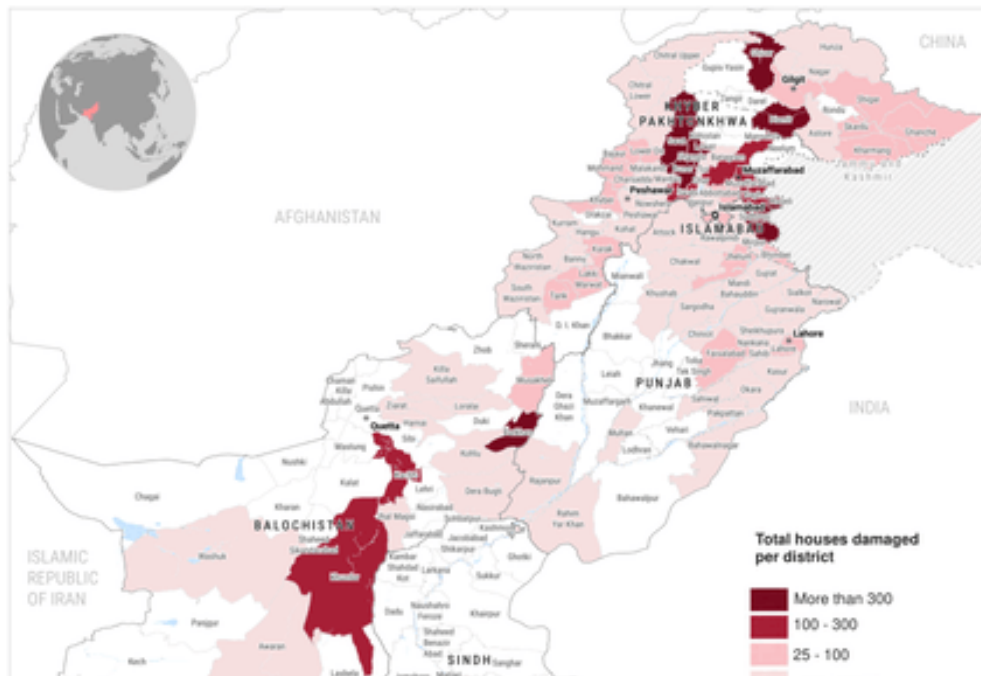


ERA5 Land Monthly

Aggr. 1981/2025



\*Houses fully and partially damaged - cumulative from 26 June to 11 September 2025



## 2025 Flood Overview – Karachi

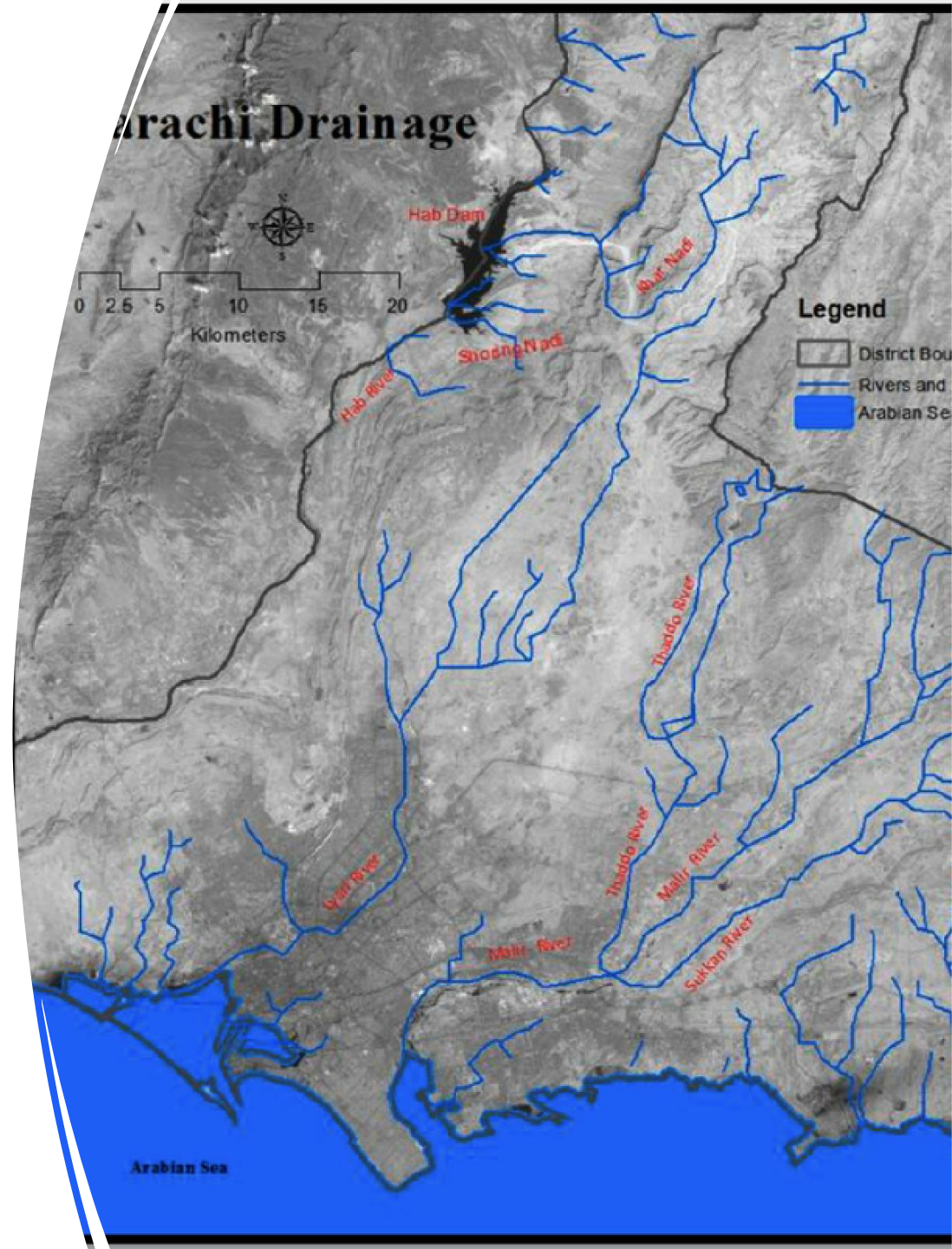
- Rainfall: 215 mm in 36 hours (PMD, Aug 2025)
- Affected: Malir, Lyari, Kemari, Korangi, Shah Faisal, Gulshan-e-Iqbal
- 120,000 people displaced
- Major roads submerged including Korangi Causeway

# Karachi Water Shed

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From Collection of Arif Hassan sb.

- Hub, Liyari and Malir rivers Delineated



# Liyari River in Floods - 1952





View of the Malir River inundated following heavy monsoon rains in Karachi on Sept 10, 2025

## Malir River Floods – 2025

- Intense runoff from Gadap & Malir catchments overflowed river
- Floodwaters hit Korangi Industrial Area, Landhi, Qaidabad
- Encroachments worsened drainage efficiency

*“Malir River overflow flooding Korangi Causeway, Karachi, 10 September 2025 (Source: Daily Times).”*

# Lyari River Floods – 2025

- Overflow breached embankments near Garden, Mauripur, SITE
- Informal settlers displaced along riverbanks
- Major damage to utilities and road networks



*“Lyari River inundation near Sohrab Goth, Karachi, September 2025 (Source: Dawn News).*

# Root Causes of Urban Flooding in Karachi



- Encroachment of natural drainage channels



- Unregulated urban expansion



- Solid waste clogging drains



- Outdated infrastructure



- Lack of coordinated management



## Infrastructure Impacts

- Damage to roads, bridges, underpasses
- Power & water supply disruption for days
- Industrial shutdowns in Korangi and SITE

# Social and Livelihood Impacts

- 120,000+ displaced, mainly from informal settlements
- Daily income loss for informal workers
- Health issues, waterborne diseases
- Damage to low-income housing

## Flood-displaced families take shelter on sidewalks

Affectees, mostly Hindus, say they have lost everything and have nowhere to go

Our Correspondent | September 15, 2025 | 2 min read



# Environmental Impacts



- industrial effluents & sewage get mixed with flood water polluting vast area of ocean



- Riverbank erosion increased sedimentation



- Coastal water pollution near Korangi Creek

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# Comparison: 2020 vs 2022 vs 2025 Floods

- 2020: Localized Scale but Heavy Downpour / Cloud Burst on Karachi is southern parts of Sindh
- 2022: National-scale, rural Sindh focus
- 2022 damages: Agricultural; 2025: Urban infrastructure
- 2022 displacement: 8 million in Sindh;
- 2025: Urban-centric Karachi flooding
- 2025: displacement 120,000 in Karachi

# Institutional Response after 2020 Urban Floods in Karachi

Federal and Provincial Governments realized need of urgent intervention.

1 Trillion Rupees Package Announced

Mahmoudabad, Gujjar, Orangi Nullahs cleared, sidelines cleared of encroachments and retaining walls along with roads on both sides constructed

# Building a Flood-Resilient Karachi



Short-term: Nullah clearance, early warnings



Medium-term: Drainage masterplan, resilient infrastructure



Long-term: Climate-adaptive urban design, green corridors, reforms

Focus Area	Key Actions	Expected Outcomes
Integrated Drainage Planning	<ul style="list-style-type: none"> <li>• Citywide Master Plan</li> <li>• Catchment-based design for Malir &amp; Lyari</li> <li>• Routine desilting &amp; GIS monitoring</li> </ul>	<ul style="list-style-type: none"> <li>• Reduced flooding</li> <li>• Efficient stormwater management</li> </ul>
Restore Natural Waterways	<ul style="list-style-type: none"> <li>• Clear encroachments humanely</li> <li>• Demarcate flood zones</li> <li>• Rehabilitate wetlands &amp; mangroves</li> </ul>	<ul style="list-style-type: none"> <li>• Natural flow restored</li> <li>• Coastal flood absorption</li> </ul>
“Sponge City” Infrastructure	<ul style="list-style-type: none"> <li>• Permeable pavements, green medians</li> <li>• Rainwater harvesting</li> <li>• Retention ponds &amp; green corridors</li> </ul>	<ul style="list-style-type: none"> <li>• Groundwater recharge</li> <li>• Reduced surface runoff</li> </ul>
Governance & Coordination	<ul style="list-style-type: none"> <li>• Karachi Resilience Cell</li> <li>• Unified flood command</li> <li>• Legal clarity on responsibilities</li> </ul>	<ul style="list-style-type: none"> <li>• Faster response</li> <li>• Accountability</li> </ul>
Climate-Proof Urban Design	<ul style="list-style-type: none"> <li>• Elevated roads &amp; underpasses</li> <li>• Industrial drainage upgrades</li> <li>• Resilient building codes &amp; bioswales</li> </ul>	<ul style="list-style-type: none"> <li>• Infrastructure withstands monsoon extremes</li> </ul>
Community Resilience	<ul style="list-style-type: none"> <li>• Local preparedness committees</li> <li>• Volunteer training</li> <li>• Awareness &amp; school programs</li> </ul>	<ul style="list-style-type: none"> <li>• Informed citizens</li> <li>• Early response capability</li> </ul>

## Building a Flood-Resilient Karachi – Resilience Roadmap



- The 2025 floods in Malir & Lyari Rivers remind us that Karachi's resilience lies in sustainable drainage, planning, and coordination.
- 'Resilient Karachi begins with resilient watersheds.'