BANGLADESH:
Disaster displacement risk profile

Key findings

- Bangladesh has recorded over 21 million disaster displacements between 2008 and 2024.
- Riverine floods and storm surges drive the highest displacement levels, with 740,000 – 780,000 people at risk each year under current climate conditions.
- Climate change is expected to intensify these risks under optimistic and pessimistic scenarios.
- High-intensity, extreme events are likely to result in large-scale displacements.
- Sylhet, Dhaka, Chittagong, Khulna and Barisal are most at risk of displacement due to disasters.
- Under current climate conditions, severe floods could displace over 4 million people in total across Dhaka, Chittagong, and Sylhet.
- Storm-surge extremes could displace up to 2 million people in Barisal under pessimistic climate conditions.
- In the pessimistic climate scenario, Khulna's displacement levels rise exponentially across riverine floods, storm surges, and cyclonic winds.

Implications for government action

1. Integrate displacement risk into national plans
   Focus on Delta Plan 2100, National Adaptation Plan (NAP) and disaster risk reduction (DRR) strategies.
2. Prioritise high-risk, densely populated districts
   Target Dhaka and other exposed areas for resilient infrastructure and safer housing.
3. Strengthen preparedness and early warning systems
   Improve shelter capacity and local response mechanisms.
4. Scale up nature-based solutions
   Reduce flood and storm surge risks through ecosystem protection.
5. Improve urban planning and enforcement
   Prevent unsafe expansion in hazard-prone areas and ensure compliance with land-use rules.
6. Plan for high-impact, extreme events
   Use displacement estimates to guide shelter needs, logistics and infrastructure planning.

About this profile

This profile applies IDMC's Global Displacement Risk Model 2.0 to estimate how many people may be displaced by disasters under three climate scenarios:

- Current: observed climate conditions from 1979 to 2016,
- Optimistic: about 1°C temperature rise by 2100, and
- Pessimistic: about 5°C temperature rise by 2100.

The model assesses the likelihood of displacement linked to severe housing damage and loss of livelihoods. It focuses on the risk of medium- to long-term displacement and does not include pre-emptive evacuations.

Outputs are generated at administrative level 1 for each hazard using two metrics:

- Average Annual Displacement (AAD): expected average number of people displaced in any given year.
- Probable Maximum Displacement (PMD): estimated displacement from rare, high-intensity events based on return periods (expected average time between two events of a given intensity).

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Displacement drivers and trends

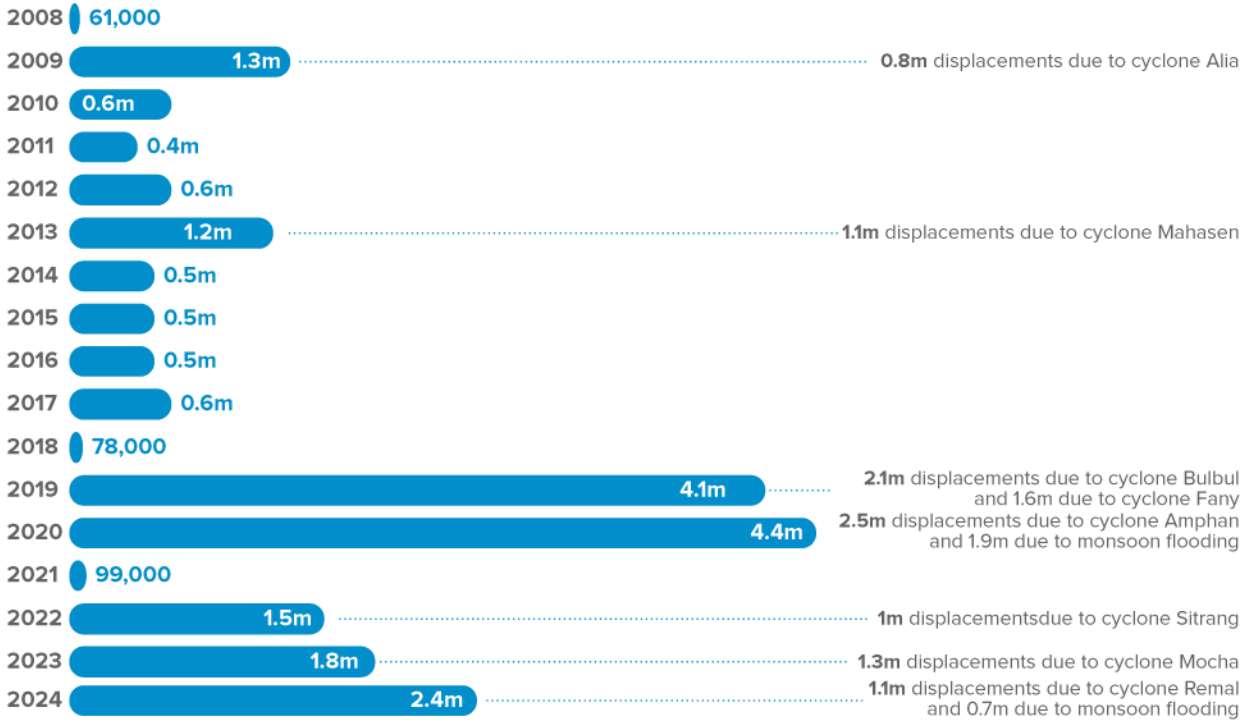
Bangladesh's disaster displacement risk is shaped by:

- **Low-lying, riverine topography**
  Most of the country sits under 10 metres elevation, increasing flood exposure.
- **High population density**
  Bangladesh is the eighth-most populous country in the world and one of the most densely populated.
- **Climate-sensitive livelihoods**
  Heavy reliance on agriculture and fisheries heightens vulnerability to weather-related shocks.
- **Frequent cyclones and major river floods**
  Since 2008, 123 disaster events have hit the country, particularly during the June-September monsoon season, driving recurrent displacements and damage to residential buildings.

Recent trends

- **In 2024, the number of disaster displacements rose for the fourth year in a row to reach 2.4 million, its third highest figure on record.**
- **Displacement peaked in 2019 and 2020 due to intense cyclones and severe monsoon floods.**
- **In 2020, it was estimated that more than 55,000 homes were destroyed by Cyclone Amphan.**
- **About 11.3 million cyclone-related displacements took the form of pre-emptive evacuations that saved lives.**
- **Floods and storms increasingly lead to protracted displacement linked to housing damage, loss of productive assets, and livelihood disruption.**

Internal displacements by disasters in Bangladesh, 2008-2024



Source: IDMC, 2025.

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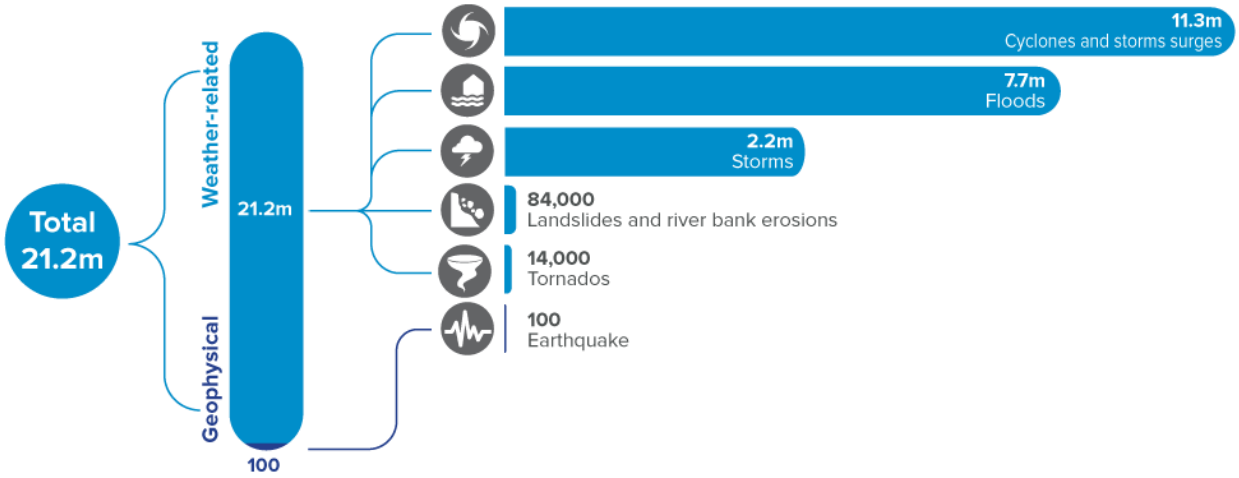


Source: IDMC, 2025.

Displacement risks by hazard type

Riverine floods

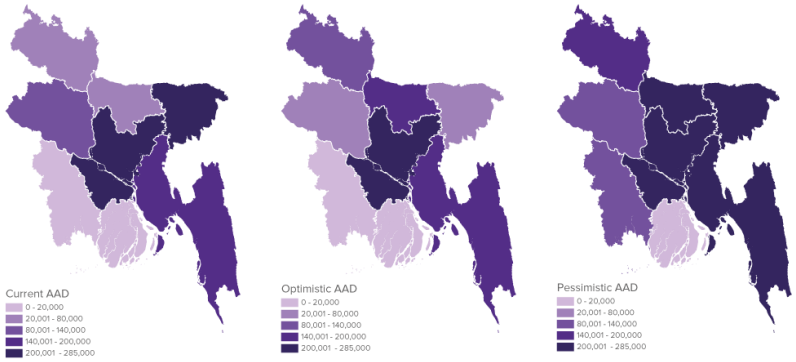
Displacement risk at a glance

Displacements by climate scenarios:
→ Current: 740,000.
→ Optimistic: 760,000.
→ Pessimistic: 1.5 million.

Rare 50-year riverine floods (PMD50)

There is a 64% probability that, in the next 50 years, a severe rare riverine flood (50-year return period) will displace:
→ Current: 6 million.
→ Optimistic: 8 million.
→ Pessimistic: 14 million.

Average Annual Displacement risk by riverine floods under different climate scenarios



Source: IDMC, 2025.

Most at-risk districts

Displacements under current climate scenario:
→ Sylhet: 183,000.
→ Dhaka: 181,000.
→ Chittagong: 146,000.

Displacements under pessimistic climate scenario:
→ Dhaka: 285,000 (+57.5%).
→ Sylhet: 274,000 (+50%).
→ Chittagong: 245,000 (+68%).
→ Khulna: 114,000 (+936%).

Under pessimistic climate scenario, severe rare floods could displace:
→ 2.9 million in Dhaka.
→ 2.8 million in Chittagong.
→ 2.5 million in Sylhet.

Storm surges

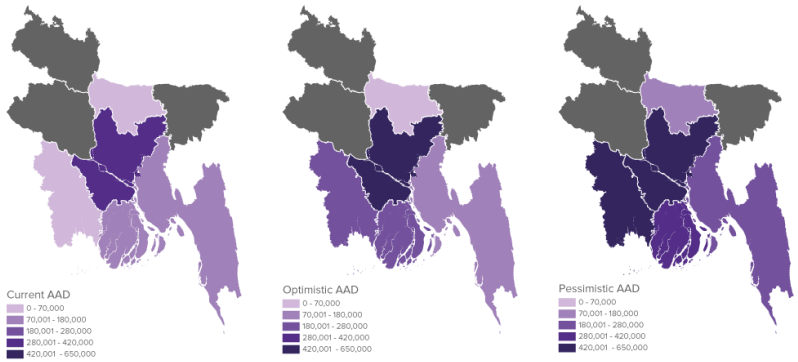
Displacement risk at a glance

Displacements by climate scenarios:
→ Current: 779,000.
→ Optimistic: 1.3 million.
→ Pessimistic: 1.9 million.

Rare 50-year storm surges (PMD50)

There is a 64% probability that, in the next 50 years, severe rare storm surges (50-year return period) will displace:
→ Current: 1.6 million.
→ Optimistic: 3.2 million.
→ Pessimistic: 5 million.

Average Annual Displacement risk by storm surges under different climate scenarios



Source: IDMC, 2025.

Most at-risk districts

Displacements under the current climate scenario:
→ Dhaka: 379,000.
→ Barisal: 161,000.
→ Chittagong: 117,000.

Displacements in the pessimistic climate scenario:
→ Khulna: 495,000 (+628%).
→ Dhaka: 644,000 (+70%).
→ Barisal: 399,000 (+148%).

Under the pessimistic climate scenario, severe rare storm surges could displace:
→ 2 million in Barisal.
→ 1.2 million in Dhaka.
→ 836,000 in Khulna.

Droughts

Displacement risk at a glance

Displacements by climate scenarios:
→ Current: 303.
→ Optimistic: 229.
→ Pessimistic: 272.

Rare 100-year droughts (PMD100)

There is a 39% probability that, in the next 50 years, severe rare droughts (100-year return period) will displace:
→ Current: 10,500.
→ Optimistic: 7,100.
→ Pessimistic: 8,400.

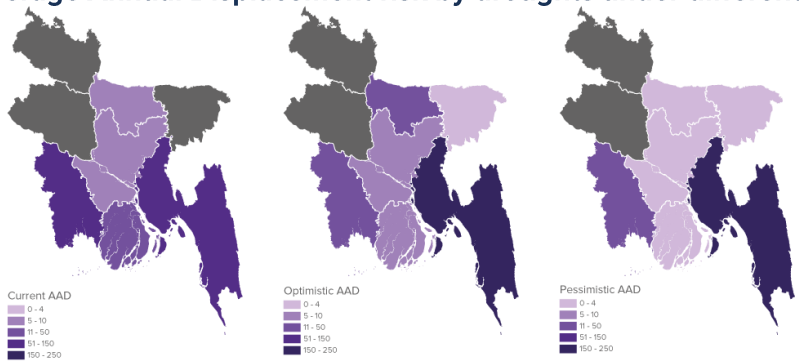
Most at-risk districts

Displacements in the current scenario:
→ Chittagong: 140.
→ Khulna: 140.

Displacements in the pessimistic scenario:
→ Chittagong: 230 (+64%).
→ Khulna: 33 (-76.4%).

Under the pessimistic climate scenario, severe droughts could displace:
→ 5,700 in Chittagong
→ 2,200 in Khulna
→ 220 in Barisal

Average Annual Displacement risk by droughts under different climate scenarios



Source: IDMC, 2025.

Cyclonic winds

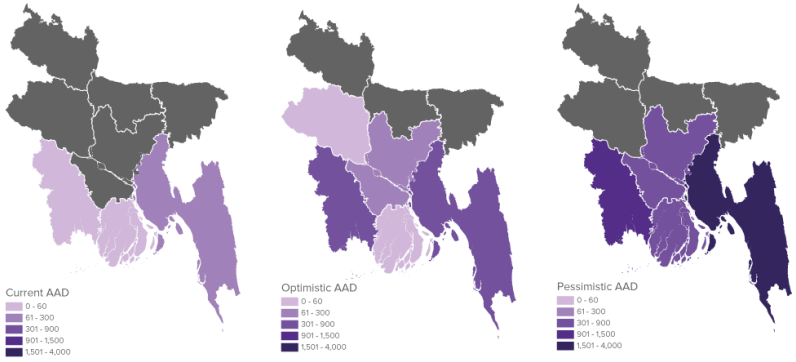
Displacement risk at a glance

→ Current: 290.
→ Optimistic: 1,600.
→ Pessimistic: 6,600.

Rare 250-year cyclonic winds (PMD250)

In the pessimistic scenario, there is a 12% probability that, in the next 30 years, severe rare cyclonic winds (250-year return period) will displace 63,400 people.

Average Annual Displacement risk by cyclonic winds under different climate scenarios



Source: IDMC, 2025.

Most at-risk districts

Displacements under the current scenario:
→ Chittagong: 210.
→ Barisal: 51.

Displacements in the pessimistic scenario:
→ Chittagong: 3,900 (+1757%)
→ Khulna: 970 (+3607%).
→ Barisal: 890 (+1629%).

Severe cyclonic winds displacements in the pessimistic scenario:
→ 31,000 in Chittagong
→ 29,000 in Khulna
→ 3,400 in Barisal

Acknowledgements

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