

NIGERIA: Disaster displacement risk profile

Key findings

- Nigeria has recorded over 9.9 million disaster displacements between 2008 and 2024.
- Droughts and riverine floods drive the highest displacement levels, with 543,416 – 628,600 people at risk each year under current climate conditions.
- Climate change is expected to intensify these risks under optimistic and pessimistic climate scenarios.
- High-intensity, extreme events are likely to result in large-scale displacements.
- Bayelsa, Benue, Delta, Kaduna, Kano, Katsina, Kogi, Lagos, and Rivers are most at risk of displacement due to disasters.
- Under current climate conditions, severe rare floods could displace 1.5 million people in total across Rivers, Delta, and Bayelsa.
- Severe rare droughts could displace up to 886,000 people in Benue, under pessimistic climate conditions.
- In the pessimistic climate scenario, displacement levels of Lagos, Kwara, and Sokoto rise exponentially across riverine floods and droughts.

Implications for government action

1. Integrate displacement risk into national plans
Focus on National Climate Change Policy, National Action Plan, and disaster risk reduction (DRR) strategies.
2. Prioritise high-risk, densely populated states
Target Lagos and Rivers 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 drought 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

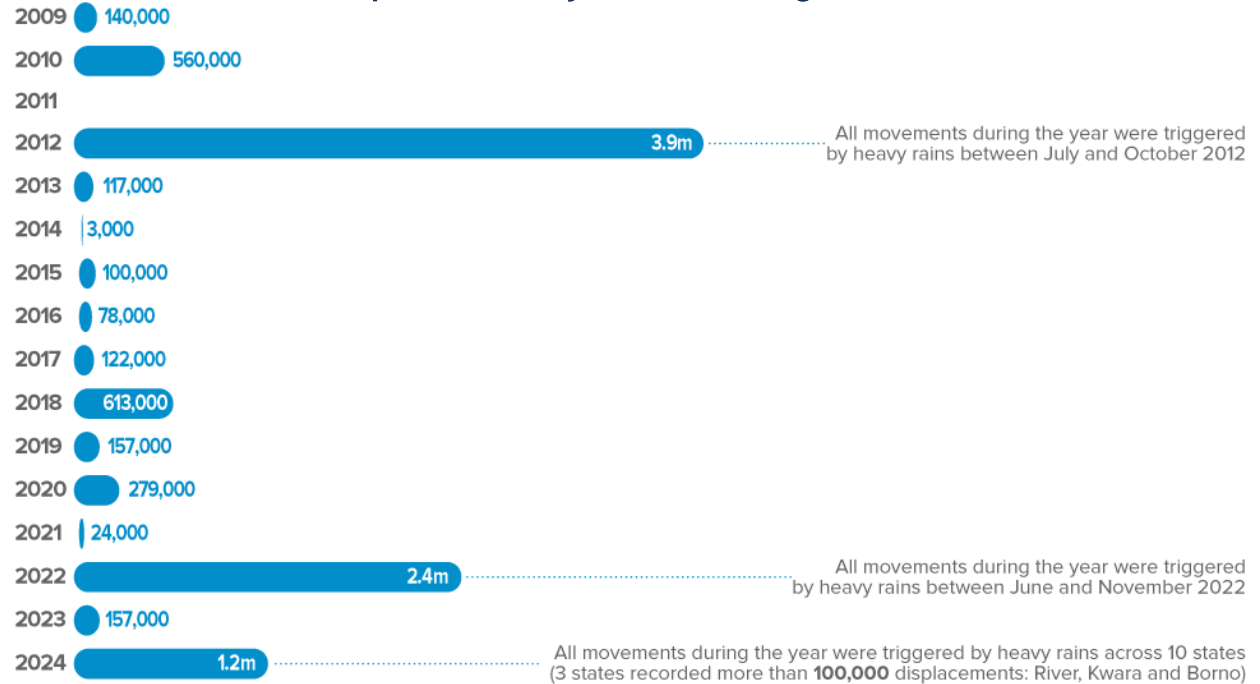
Nigeria's disaster displacement risk is shaped by:

- Diverse climate zones**
 Nigeria spans three distinct climate zones: humid tropical, savannah, and semi-arid Sahelian. These contrasts drive large regional differences in rainfall, temperature and seasonality.
- High urban vulnerability**
 Rapid urban growth in coastal and river-basin cities has increased the number of informal settlements, leaving millions of urban poor highly exposed to floods and displacement.
- Dual exposure to conflict and climate shocks**
 Criminal and communal violence drive large-scale displacement in the North. Recurrent and severe flooding affects all states, compounding displacement risks.
- Pronounced wet and dry seasons**
 The wet season typically spans from March to October, followed by the dry season from October to March. Seasonal patterns shape the timing and recurrence of flood displacement.

Recent trends

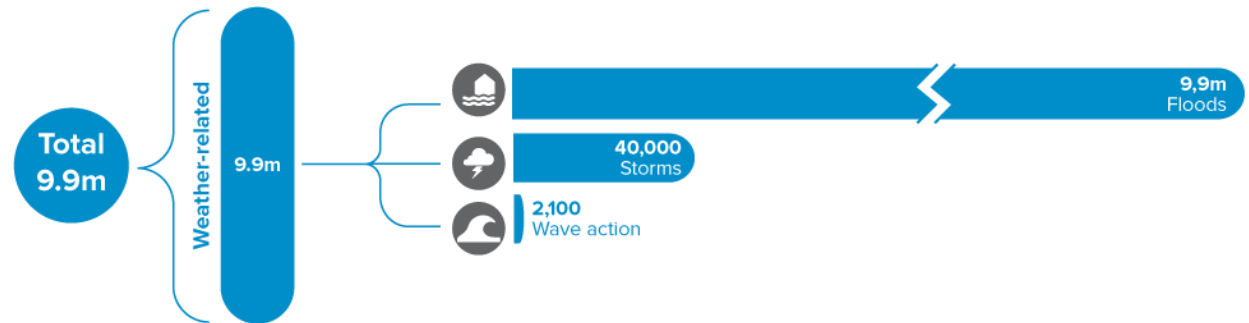
- Nigeria reported the highest disaster displacements figure in Africa between 2008 and 2024.
- Between 2008 and 2024, 168 disaster displacement events, mainly floods, have affected the country, driving recurrent displacement.
- Flood disasters in 2012 and 2022 were the most severe on record, triggering 3.9 million and 2.4 million movements respectively.
- In 2024, disaster displacements exceeded 1.2 million, with floods affecting all states and overlapping with conflict.
- Recurrent floods continue to hit densely populated, low-lying areas along the Niger and Benue basins, where exposure and vulnerability are high.

Internal displacements by disasters in Nigeria, 2008-2024



Source: IDMC, 2025.

Internal displacements by disasters in Nigeria, 2008-2024



Source: IDMC, 2025.

Displacement risks by hazard type



Riverine floods

Displacement risk at a glance

Displacements in any given year in the future by climate scenarios:

- Current: 543,416.
- Optimistic: 990,381.
- 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: 2.8 million.
- Optimistic: 4.7 million.
- Pessimistic: 6.3 million.

Most at-risk districts

Displacements in the current scenario:

- Bayelsa: 71,000.
- Delta: 64,000.
- Rivers: 42,000.

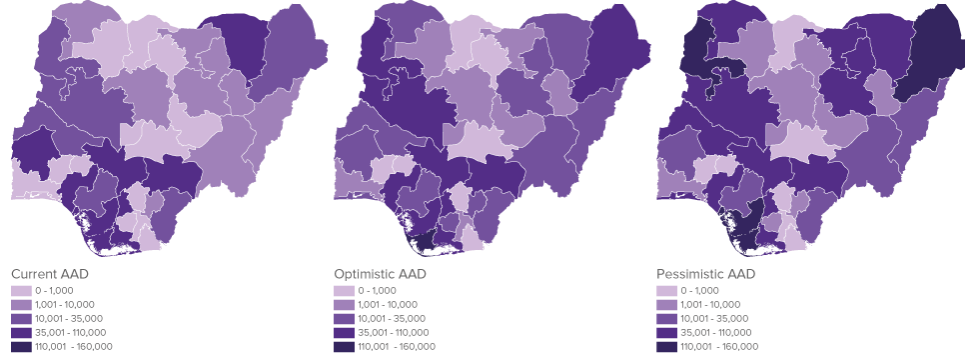
Displacements in the pessimistic scenario:

- Borno: 156,000 (+767%).
- Bayelsa: 132,000 (+86%).
- Kebbi: 131,000 (+495%).
- Lagos: 40,000 (+3982%).
- Sokoto: 48,000 (+3900%).

Under pessimistic climate scenario, severe rare floods could displace:

- 1.1 million in Rivers.
- 839,000 in Delta.
- 720,000 in Bayelsa.

Average Annual Displacement risk by riverine floods under different climate scenarios



Source: IDMC, 2025.



Droughts

Displacement risk at a glance

Displacements in any given year in the future by climate scenarios:

- Current: 628,600.
- Optimistic: 956,600.
- Pessimistic: 1.9 million.

Rare 100-year droughts (PMD100)

There is a 39% probability that, in the next 50 years, a severe drought (100-year return period) will displace:

- Current: 16 million.
- Optimistic: 15.3 million.
- Pessimistic: 27.4 million.

Most at-risk districts

Displacements in the current scenario:

- Kano: 41,000.
- Katsina: 37,000.
- Kaduna: 32,000.

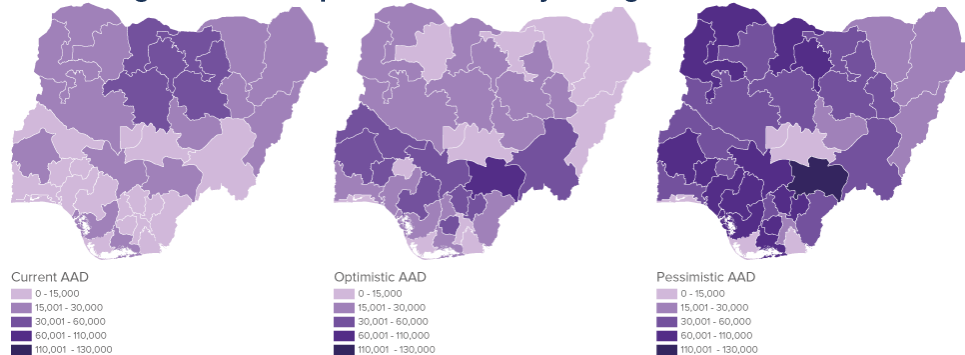
Displacements in the pessimistic scenario:

- Benue: 123,000 (+486%).
- Kogi: 110,000 (+511%).
- Enugu: 94,000 (+623%).
- Kwara: 59,000 (+656%).
- Anambra: 48,000 (+616%).

Under pessimistic climate scenario, severe rare droughts could displace:

- 1.4 million in Kano.
- 1.4 million in Katsina.
- 1.3 million in Benue.

Average Annual Displacement risk by droughts under different climate scenarios



Source: IDMC, 2025.



Storm surges

Displacement risk at a glance

Displacements in any given year in the future by climate scenarios:

- Current: 4,023.
- Optimistic: 18,135.
- Pessimistic: 66,170.

Rare 50-year storm surges (PMD50)

There is a 64% probability that, in the next 50 years, a severe rare storm surge (50-year return period) will displace:

- Current: 4,014.
- Optimistic: 15,800.
- Pessimistic: 84,100.

Most at-risk districts

Displacements under the current scenario:

- Lagos: 2,600.
- Rivers: 1,000.
- Delta: 360.

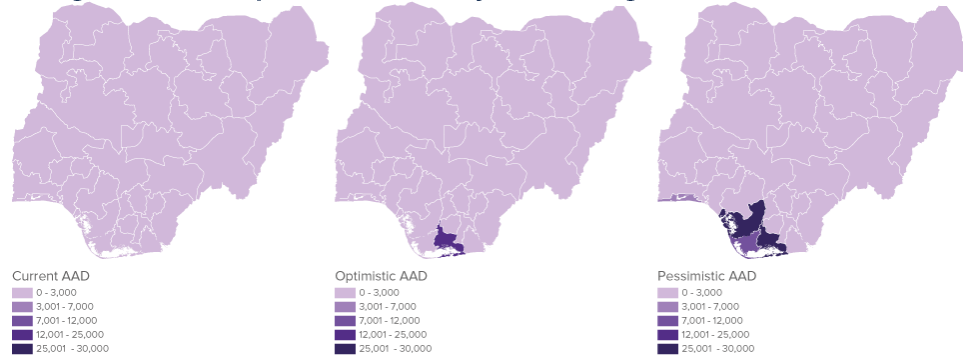
Displacements in the pessimistic scenario:

- Rivers: 27,000 (+2600%).
- Delta: 26,000 (+7122%).
- Bayelsa: 8,600 (+13551%).

Severe storm surges displacements in the pessimistic scenario:

- 35,000 in Rivers.
- 30,000 in Delta.
- 13,000 in Bayelsa.

Average Annual Displacement risk by storm surges under different climate scenarios



Source: IDMC, 2025.

Acknowledgements

Read the [detailed profile](#). This profile was made possible thanks to the generous contribution of the European Union and the Federal Republic of Germany Foreign Office.



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