

Role of Insurance in Managing Risk

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ADB

Solving Complex Challenges Together

Asia and the Pacific highly exposed



6.9bn

people affected

People affected by disasters in Asia and the Pacific, 1970-2023.

$2.5tn

direct losses

Estimated regional direct disaster losses over 1970-2023.

40%

of global losses

A disproportionate share of global losses relative to economic share.

3

main drivers

Floods, earthquakes and storms are repeatedly identified as major loss drivers.

Hydrometeorological disasters dominate

Floods, storms, heat and drought increasingly affect people, infrastructure, agriculture and cities.

Geophysical risk remains material

Earthquake and tsunami risk should not disappear from financing, insurance and infrastructure discussions.

Historical data is only the start

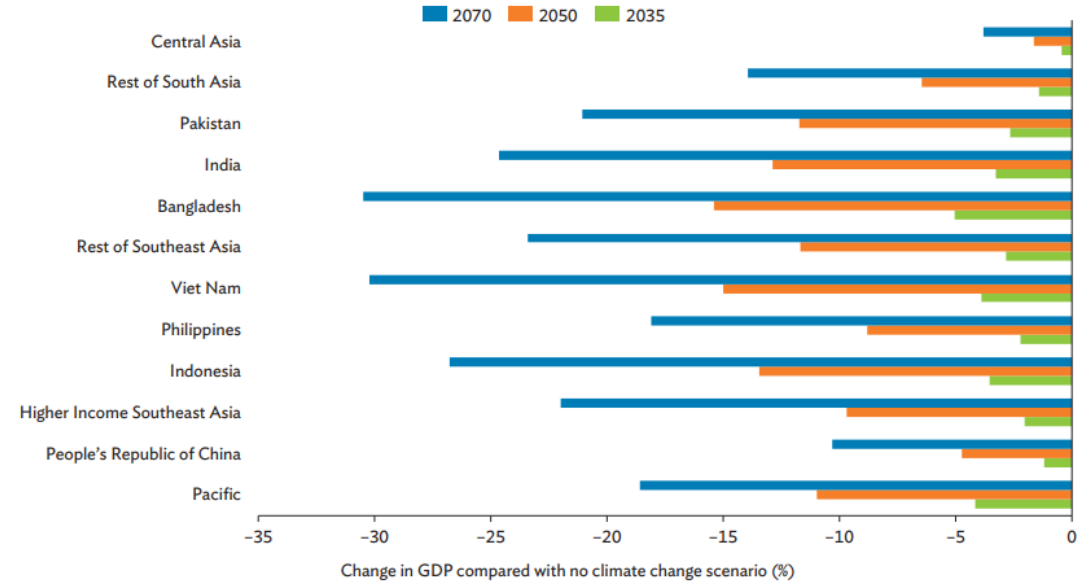
Forward-looking risk requires hazard, exposure and vulnerability modelling, not event counts alone.

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Disaster risk has direct macroeconomic & fiscal consequences

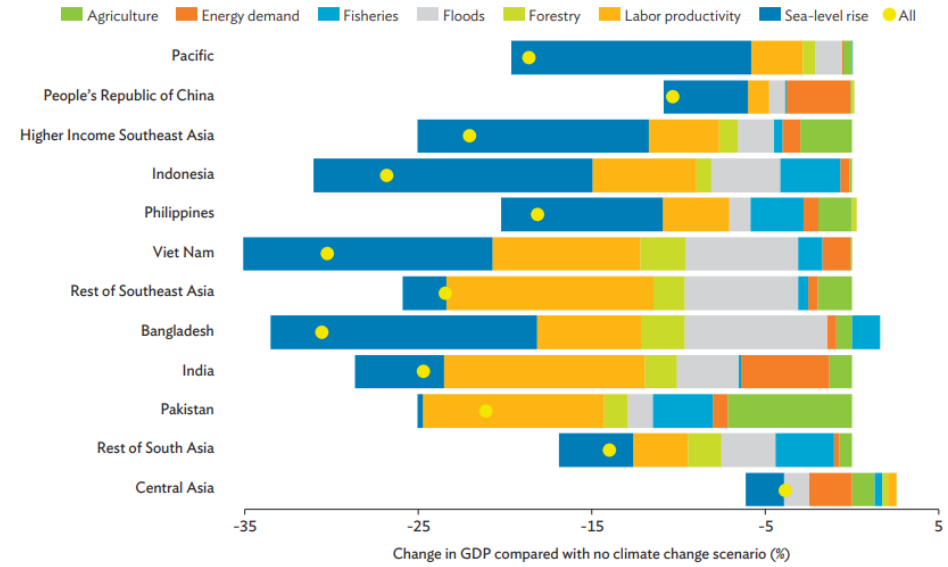


GDP Loss under high emission scenario



Source: ADB Asia-Pacific Climate Report 2024, Figure 2.15 (GDP loss under high emissions).

GDP Loss Composition



Source: ADB Asia-Pacific Climate Report 2024

Public balance sheets

Emergency spending, reconstruction, contingent liabilities and debt dynamics.

Growth and productivity

Heat stress, labor losses, disrupted supply chains and lower agricultural output.

Assets and finance

Infrastructure damage, collateral risk, insurance availability and pricing.

Households/firms

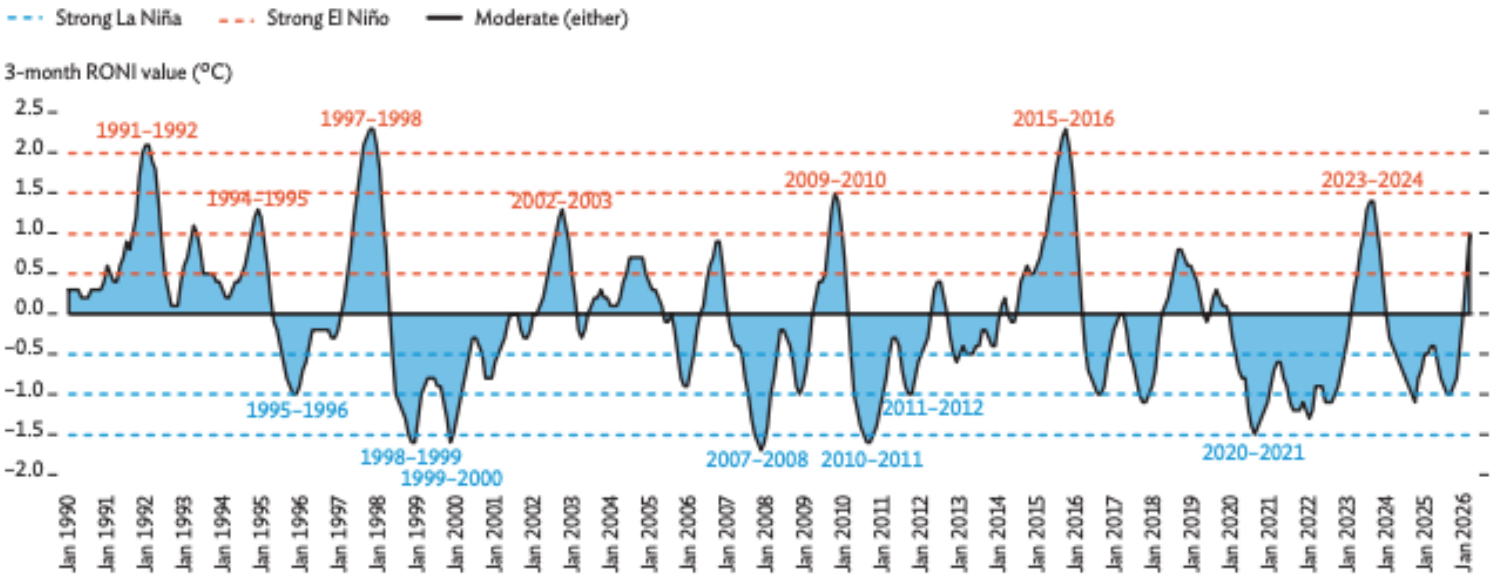
Income shocks, asset depletion and interrupted livelihoods.

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El niño & la niña since 1990



Strength of El Niño and La Niña events varied since 1990, with the strongest El Niño peaks in 1997–1998 and 2015–2016 and the 2026 event already building.



RONI = Relative Oceanic Niño Index.

Source: Golden Gate Weather Services. 2026. El Niño and La Niña Years and Intensities.

Risk signal

- 90% probability of very strong el niño Sept 2026 - Feb 2027
- Warmer seas shift rainfall patterns and raise temperatures.
- Expected to peak in around Nov 2026 and ease in early 2027 (NOAA)

Physical impacts

Drought, lower reservoir levels, heat, fire, and extreme rainfall.

Economic transmission

- Agriculture, power, logistics, industry, markets, and household purchasing power.
- Largest impacts expected in 2027.

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Types of Insurance



Instrument	What triggers payment	Strategic value	Key uncertainty
Indemnity insurance	Actual loss	Closer alignment to realized loss	Claims assessment can delay payment
Parametric insurance	Pre-agreed trigger	Rapid, transparent liquidity	Basis risk
Regional risk pools	Shared portfolio	Diversification and buying power	Affordability and member demand
Catastrophe bonds / ILS	Defined trigger and term	Multi-year, collateralized market capacity	Investor and structuring constraints

Core principle: layer, and combine instruments

Retain frequent losses, finance intermediate shocks, and transfer severe tail risk through the most suitable instrument.

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History of catastrophe risk insurance



- **Early coverage:** Insurance protected against floods, hurricanes, windstorms and hail.
- **Reinsurance:** Insurers shared large losses with reinsurers, spreading risk across countries and perils.
- **1992:** Hurricane Andrew exposed capacity limits and accelerated the search for external capital.
- **Late 1990s:** Catastrophe bonds connected insurers and reinsurers with capital-market investors.
- **Investor role:** Pension funds and other investors sought catastrophe-linked returns with low correlation to stocks and bonds.



Illustrative hurricane image (AI-generated)

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Role of insurance



- Pricing risk
- Asset protection
- Liability reduction
- Facilitation of capital inflow from the financial markets

Insurers impacted on both sides of the balance sheet

Underwriters

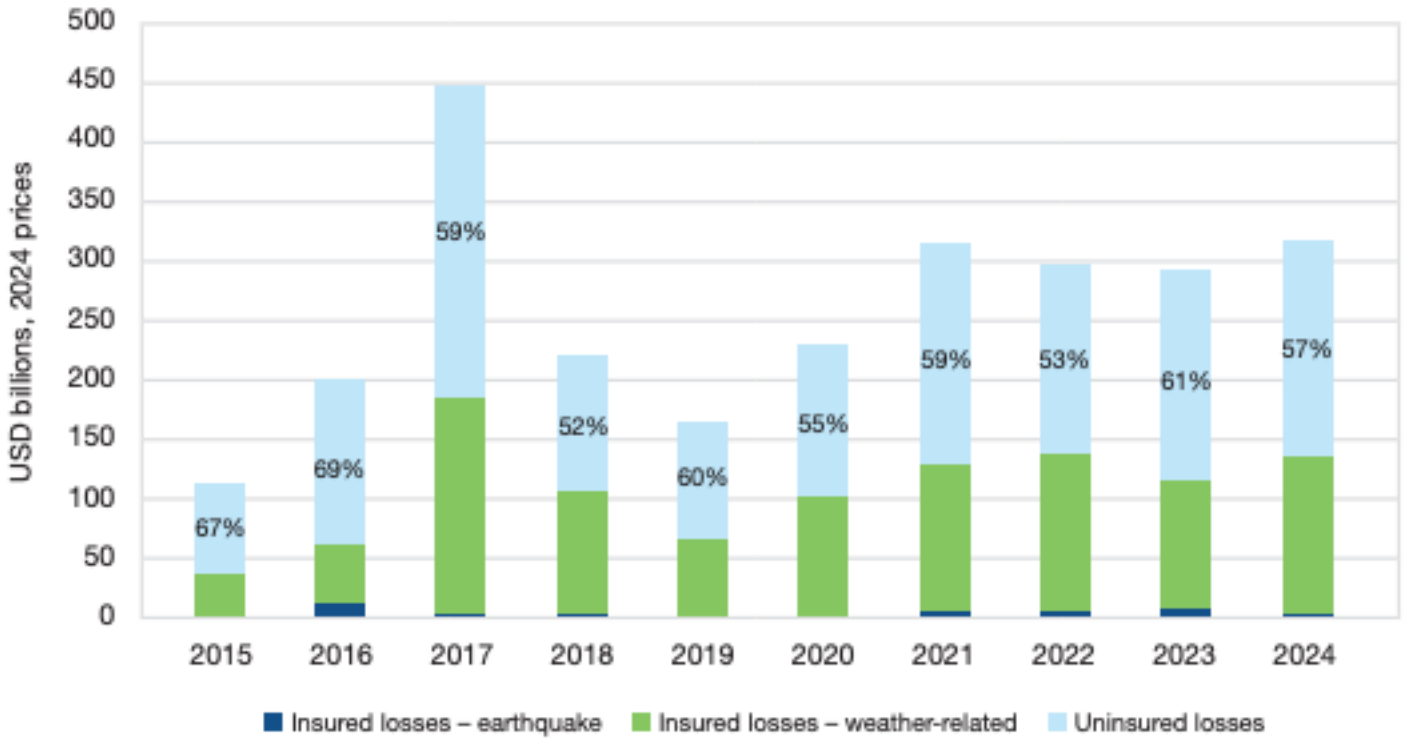
Investors

Corporate Citizens

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Nat Cat Insurance Protection Gap





US$424bn in 2025, up from US$395 billion a year earlier (Swiss Re)

Insurance coverage in the Philippines, Indonesia, Vietnam, and India remains below 1% of GDP.

In 2025 Asia accounted for 30% of global cat risk losses but only 5% of insured loss.

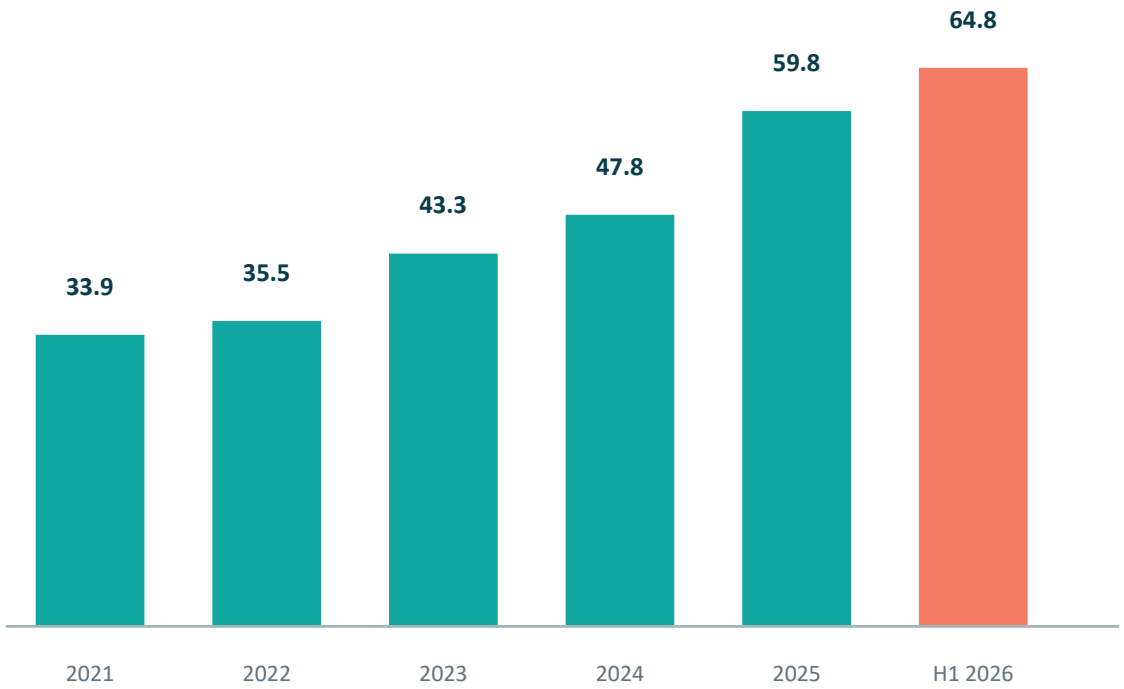
Source: Swiss Re Sigma, 2025

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Capital markets catastrophe risk capacity



Cat bond market notional outstanding (USD bn)



15.48% CAGR since 2021

$17.6bn
gross issuance in H1 2026

64 transactions
in the first half of 2026

12
first-time sponsors

$5.0bn
estimated net new capital

Why it matters

A deeper ILS market broadens the pool of risk-bearing capital and can diversify financial protection beyond traditional reinsurance.

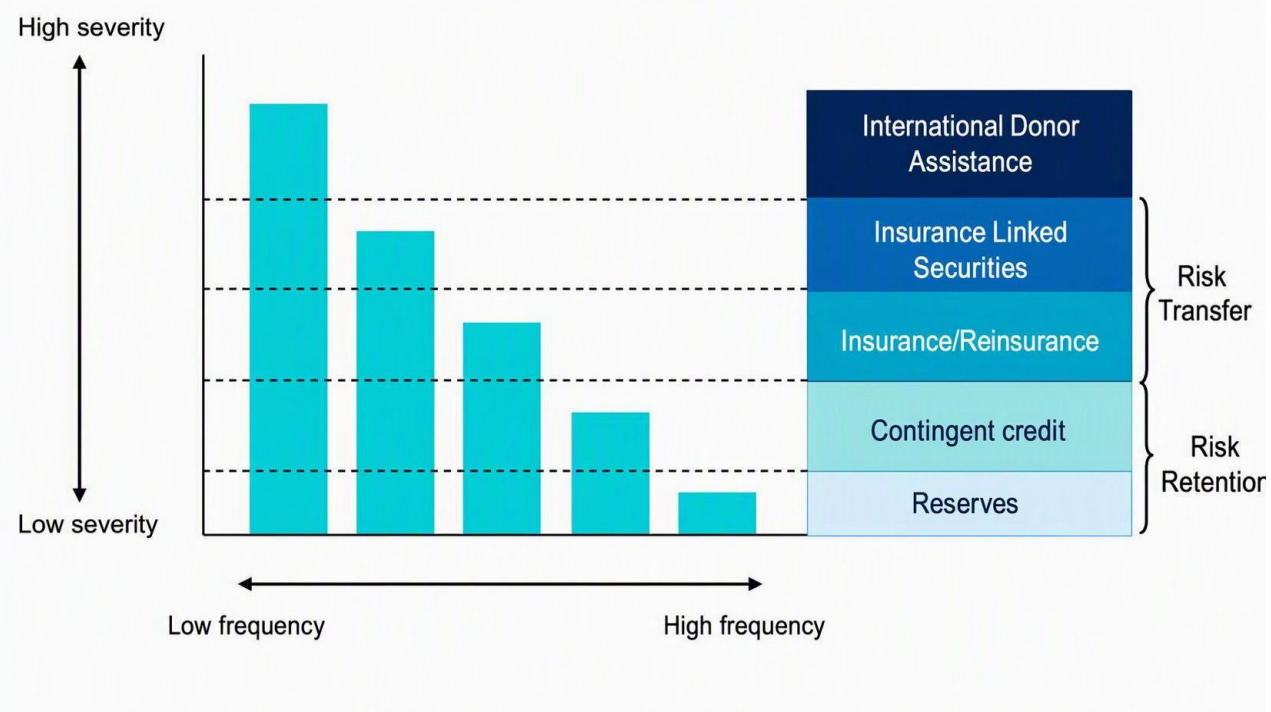
Source: Swiss Re, Market Insights July 2026

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Disaster losses are a structural feature of Asia and The Pacific



General risk layering structure



ADB and development partners directly support two pre-arranged instruments: contingent disaster financing under policy-based lending, and sovereign parametric insurance through risk pools.

~5% of regional GDP lost to disasters in an average year

14–21% of GDP: estimated fiscal cost of a severe disaster spread over three years[1]

1–1.5% of GDP a year in reserves needed for adequate self-insurance, a level few governments can sustain[1]

[1] *IMF Working Paper WP/19/152 (2019); regional estimates, individual country experience varies.*

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Risk Transfer Supported by ADB



PACIFIC CATASTROPHE RISK INSURANCE COMPANY

SEADRIF
SOUTHEAST ASIA DISASTER RISK INSURANCE FACILITY

Regional disaster risk solutions

(PCRIC, SEADRIF)



Agricultural insurance

(India & Philippines)



Disaster Relief Bond

(Kyrgz & Tajikistan)

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Key challenges for disaster risk insurance



Insurability

- Systemic risks and data gaps can make cover unavailable.
- Better data, policy engagement and innovation can help.

Affordability

- Rising premiums can put coverage out of reach.
- Domestic funding can encourage adaptation investment.

Underwriting

- Accurate pricing and pooling underpin viability.
- Premiums must cover claims and operating costs.





images (AI-generated)

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Three takeaways



1	**Price signals matter**	Insurance makes risk visible and supports better decisions.
2	**Capital can be mobilized**	Reinsurance, pools and ILS expand the risk-bearing base.
3	**Resilience comes first**	Financial protection is strongest when linked to adaptation and nature.

The policy objective is not insurance itself. It is optimal financial protection within a broader resilience strategy.

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Thank you.

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