

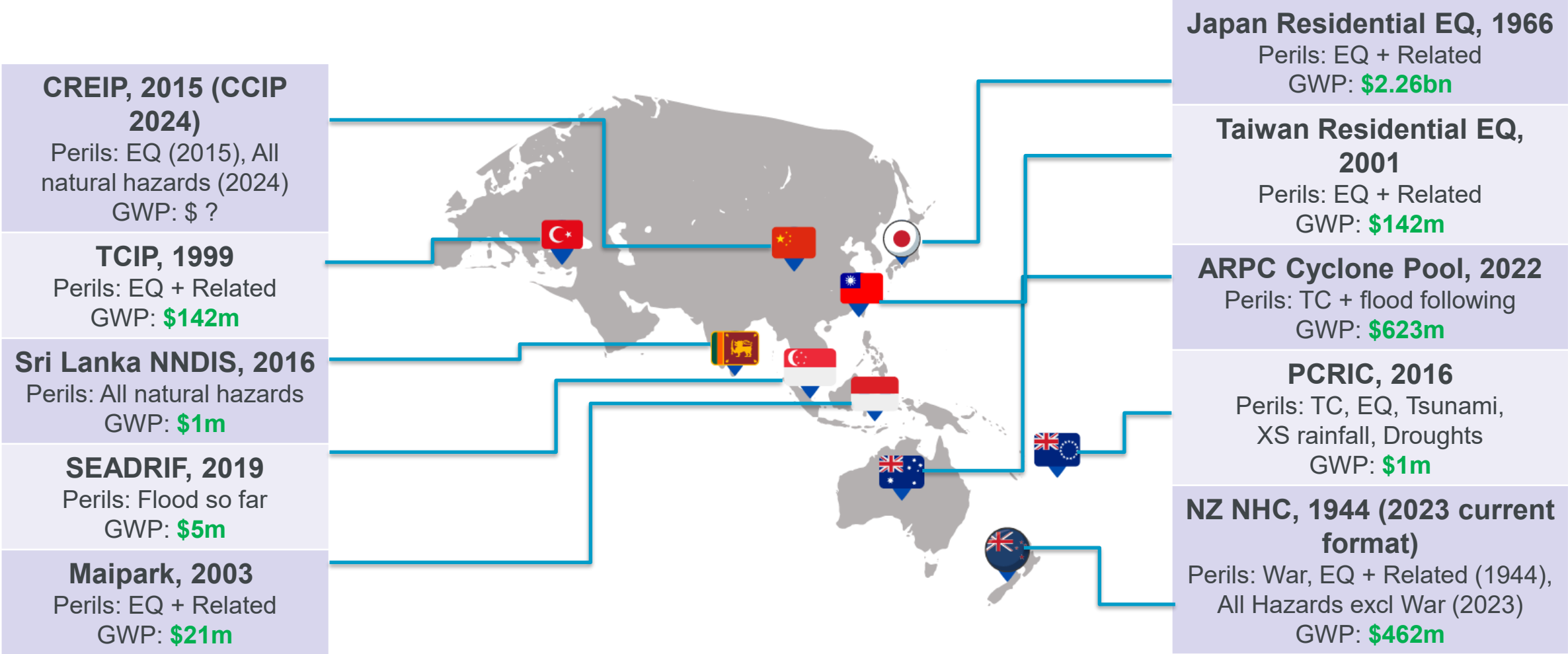
EMERGING RISKS AND OPPORTUNITIES IN THE APAC NON-LIFE MARKET

A Dive into the use of Pools to provide Property Natural Hazards protection to vulnerable areas



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Overview of APAC Pools



All GWP shown in USD



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Pool Proliferation – Why is it Happening?

1. Increased Level of Nat CAT economic losses and large Insurance protection gap

- Expansion of residential dwellings into vulnerable areas leading to ↑ losses from natural hazards.
- Climate change potentially resulting in larger/more frequent natural catastrophes.
- The insurance protection gap in Asia is estimated to be 83% (source: Swiss Re)

2. Increased Public Sector Appetite to Participate in Natural Hazards Protection

- Governments and global public sector organisations increasingly aware of importance of insurance affordability and penetration. Insurance is no longer solely provided by private sector.
- Media effectively highlighting impact of catastrophes: becoming a relevant political topic.

3. Increased pricing granularity in de-tariffed markets

- ↑ Stratification → Unaffordable premiums in high-risk areas.
- Insurance is based on principle of pooling... yet “pricing progress” → smaller risk buckets → less pooling!
- Insurers have no incentive to cross-subsidise risk, so governments step in to ensure “fairness”.



Insurance Protection Gap in Asia – 10-year losses from natural catastrophes (source: Swiss Re)



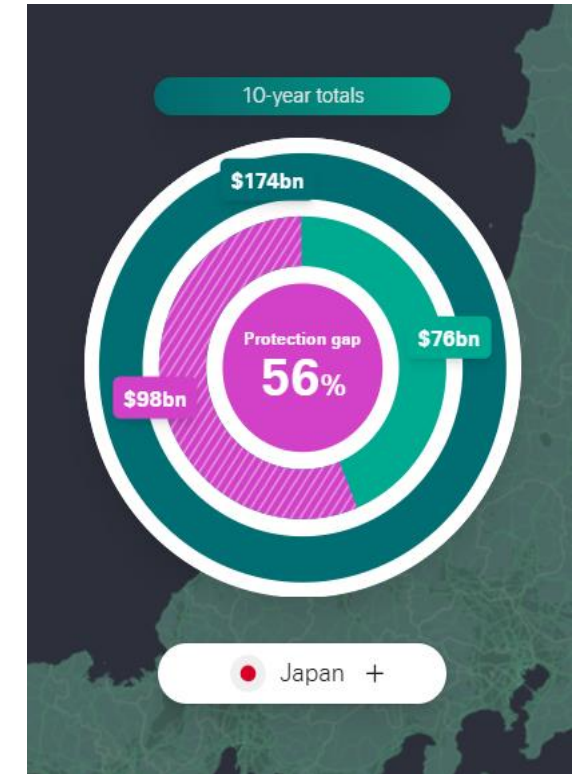
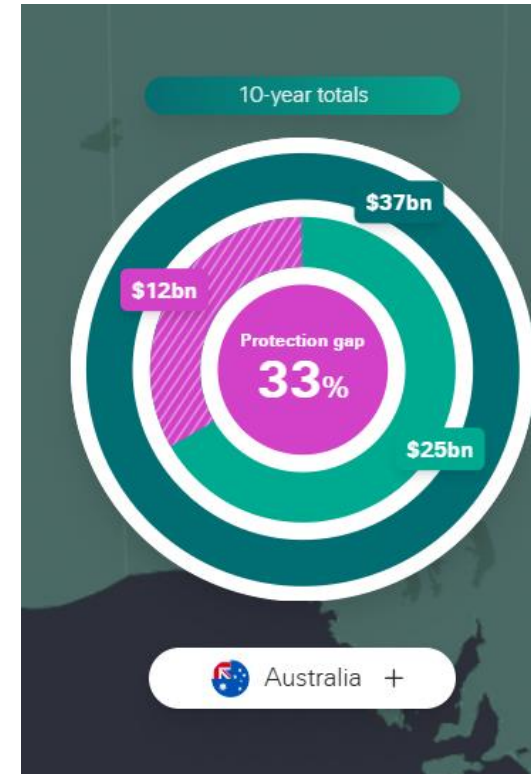
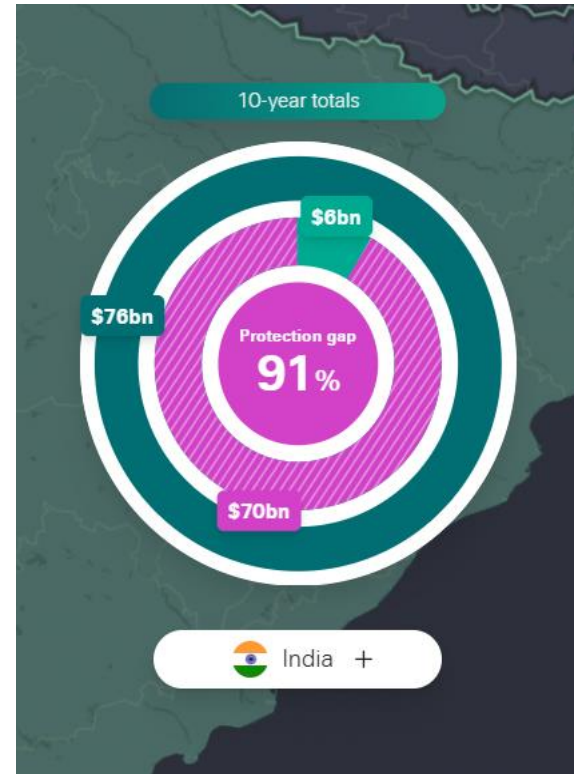
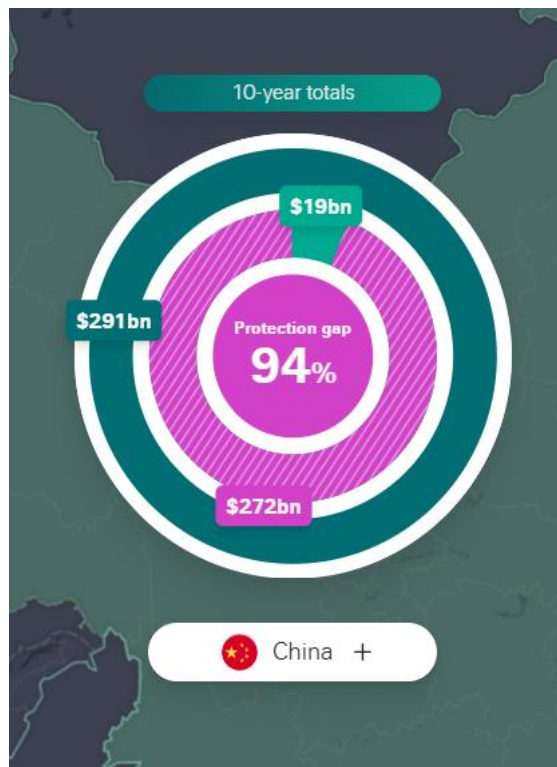
Key Drivers:

- Densely populated urban clusters such as Mumbai, Tokyo, Shanghai with assets concentrated in flood-prone areas
- Monsoon climate with rapid urbanization
- Earthquakes are a major concern for Indonesia, the Philippines, Nepal and India

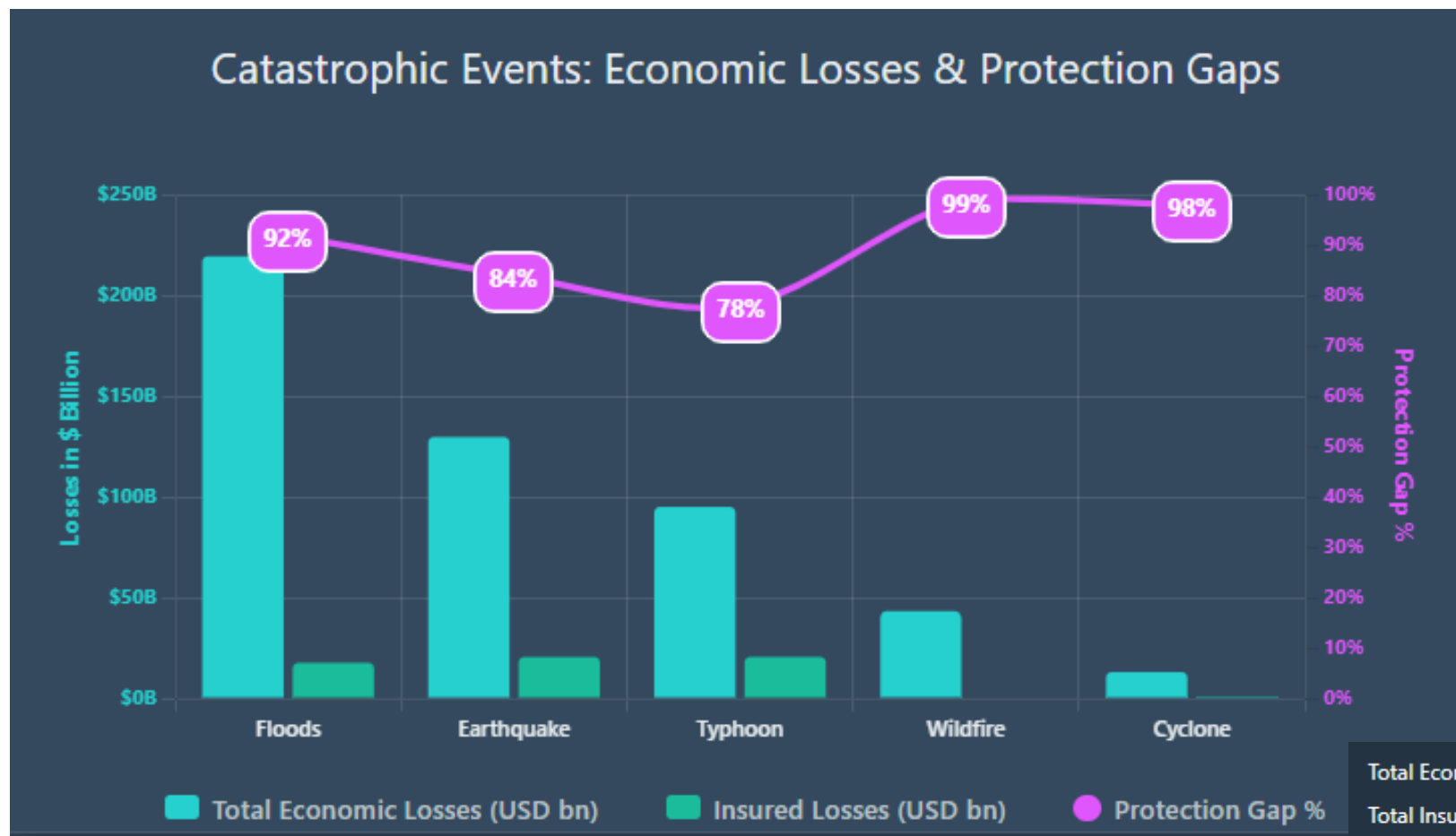


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Insurance Protection Gap in APAC – country-specific data (source: Swiss Re)



Insurance Protection Gap in APAC – CAT event type



Key Insights:

- Floods drive 44% of losses but only 8% insured
- Wildfires show the highest vulnerability at 99% protection gap
- Economic Impact: \$441B in uninsured losses = massive vulnerability
- 88% average gap shows need for insurance innovation

Total Economic Losses: **\$500.7B**
Total Insured: **\$59.4B**
Average Protection Gap: **88%**



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The SEADRIF Insurance Company

An impactful ESG insurer

With a proven track-record of reliable & rapid emergency response financing for the poor & most vulnerable populations



Facing ever-growing demand for resilience solutions

Addressing critical need for scalable and customized disaster risk finance in the region

An efficient & modular platform for sustainable resilience

Leveraging the private sector to help developing countries address a wide range of climate and systemic risks, through market-based solutions

- Climate Resilience & ESG
- Humanitarian & Emergency Response Finance
- Critical Services & Public Infrastructure

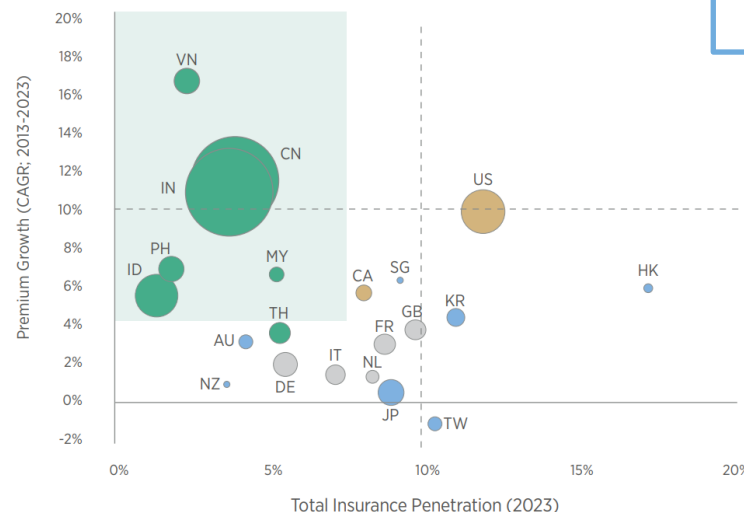
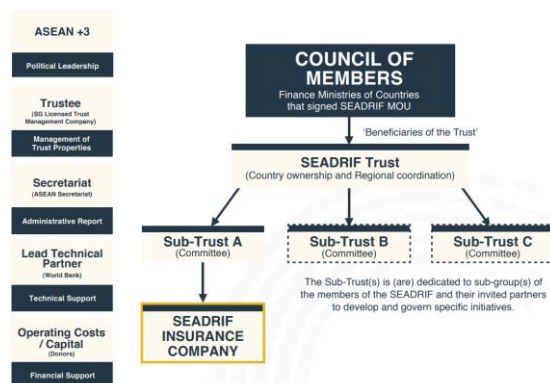


Payout ceremony at Lao's Ministry of Finance on October 03rd, 2024, and with attendance from the World Bank, the Japanese Embassy and other key government departments including the Ministry of Planning and Investment and the Ministry of Labour and Social Welfare



A \$3m payout was made within 2 weeks following passage of tropical cyclone Yagi in Laos, late September/October 2024

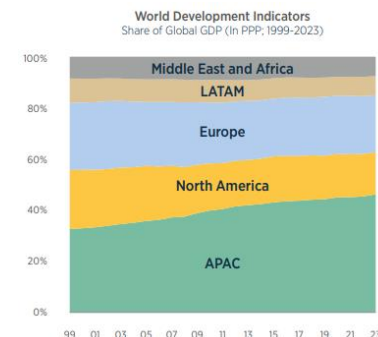
Supported by a strong leadership & governance structure



● North America ● Advanced EMEA ● Advanced APAC ● Emerging APAC

Low insurance penetration rates but high growth rates in the Asia Pacific region...

source: Gallagher Re, Asia Pacific Market Watch Report, October 2024



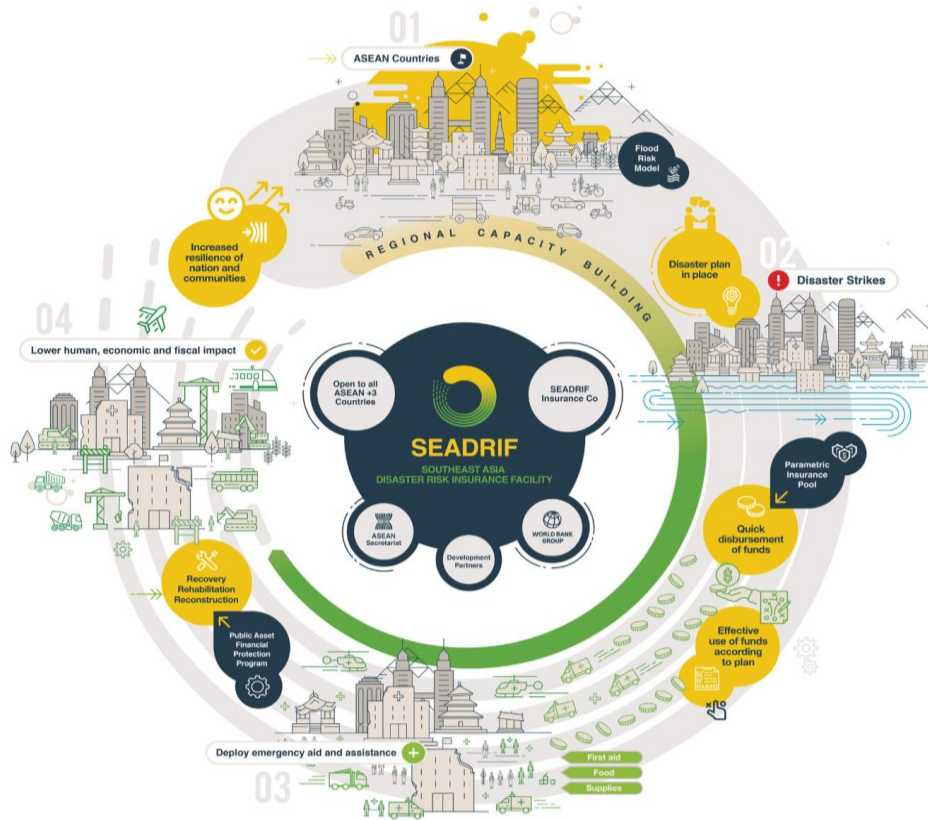
... further evidenced by strong economic development trends and potential



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SEADRIF: A Platform for Financial Preparedness To Disasters

Helps strengthen the financial resilience of people exposed to climate and disaster events in the ASEAN region



A “Skin In The Game” Development Insurer

SEADRIF paid within just one business day a claim on their Lao PDR Flood Policy

SEADRIF’s Mandate: Investing in Financial Resilience to Help Governments

- Increase SEADRIF members’ financial capacity to respond to shocks
- Reduce the impact of disasters on social and economic development by smoothing shocks to government budgets, household spending and businesses
- Protect human development and economic gains, and thus contributes to poverty reduction and shared prosperity

SEADRIF works to develop programs and products that are tailored to each country’s needs and financial protection goals, as well as provide benefits beyond faster, more reliable access to money

Guiding Principles: **Peril Agnostic, Model Agnostic** → Solution Agnostic

Current Members: Lao PDR, Philippines, Indonesia, Cambodia, Japan, Myanmar, Singapore and Vietnam



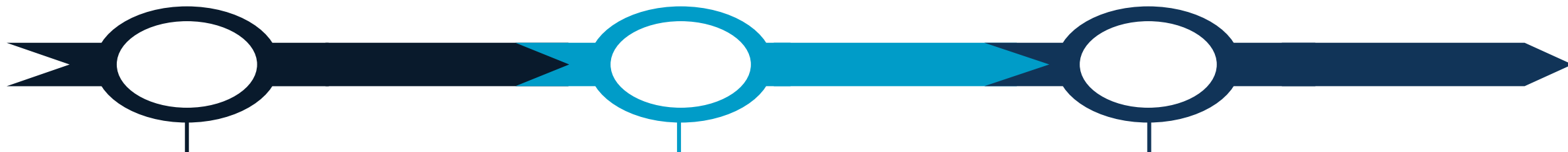
Future expansion plans for SEADRIF are targeted, bold and innovative

‘Connecting Reinsurance Capital to Climate Resilience’



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2021 Direct Insurance Programme – SEADRIF's First Product



Section A - Parametric

Triggers based on the number of people affected by a flood of “sufficient” depth

Core Feature Is The Two Stepped Structure:

1. ‘Medium Event’ (RP 1 in 8)
2. ‘Severe Event’ (RP 1 in 20)



Coverage outline

- Three-year policy period (1 Feb 2021 – 31 Jan 2024)
- Originally covered both Lao PDR & Union of Myanmar for flood
- Consisted of two complementary components – Finite & Parametric
- Following the Feb 2021 Myanmar Coup, Myanmar section was cancelled and only Lao PDR was insured

Section B - Finite

- Provides protection against events that might not trigger a payout under the strictly objective rules of the parametric component
- The country is required to provide evidence that a disaster event has occurred.
- **Summer 2023 payout** completed in **one business day** – providing real value to Lao PDR

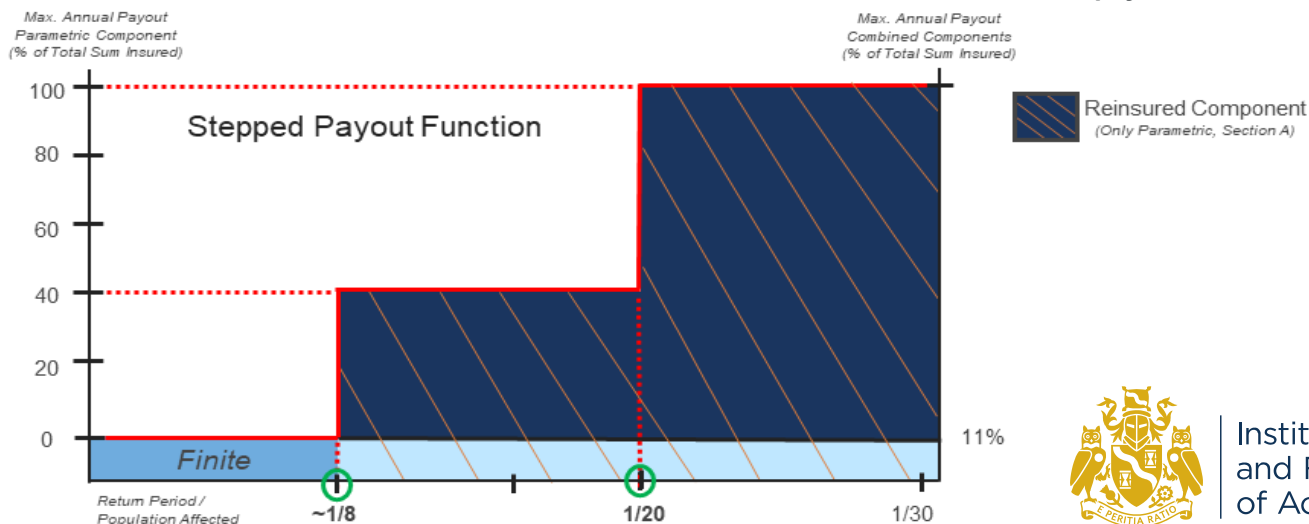
Key Info

Calculation Agent

- Responsible for determining the payout based on the structure

The SEADRIF Stochastic Flood Risk Model

- The model that quantifies the risk to flood events in terms of number of people affected within flood extent. **Served as the basis for whether a payout has been triggered.**



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2025 – Pioneering trigger mechanism introduced for the 2025 placement

Pushing the boundaries of traditional risk transfer

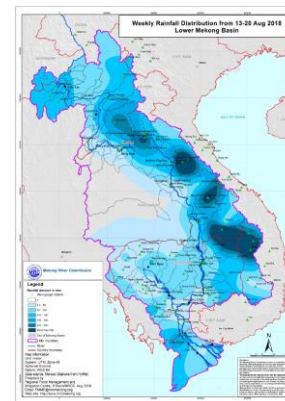
- Highly Innovative Triggering: With support from reinsurance broking partner, an optimal triggering mechanism was selected, utilizing existing local reporting agency NDMO and its post-event loss estimates (population affected).
- This minimizes basis risk significantly and ensures full consistency with other humanitarian response efforts (which utilize NDMO already).
- Independent modelling confirms NDMO's strong correlation with gauge station-derived information and the feasibility for its usage.

Reinsurance Structure

- Annual aggregate cover. Policy term 03 May 2025 – 30 April 2027
- Successfully placed on 02 May 2025 with leading reinsurance markets.

ESG & Growth Ambitions

- Proven set-up, with strong leadership, expertise and governance, to effectively address the Protection Gap in the region.
- Innovative Parametric structure shows potential for replicability and scale in neighbouring countries exposed to flooding.



Summary Features

SEADRIF

- Established Development Insurer, entering 5th year of operations with Lao PDR
- Benefitting from strong buy-in from client, regional authorities, donors and development partners
- With significant growth potential in Southeast Asia (both in terms of countries and products)

2025 R/I

- Innovative & simple triggering mechanism leveraging central reporting agency NDMO, ensuring consistency with established humanitarian response processes and buy-in from client and partners
- Supported by strong governance structure and legal framework
- Offering the potential to scale-up applications beyond current policy



THE WORLD BANK

財務省

Ministry of Finance Japan



Monetary Authority of Singapore



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The Way Forward: Beyond Filling the Gaps

- **Pools provide some relief** to the protection gap challenges that the industry faces.
- However, they are not a comprehensive solution in their own right. In some cases, pools may successfully fill a void left by insurers, but doing so could require **unsustainable levels of government financing/insurer levies**.
- **In many cases, pools are not intended to exist indefinitely**, so the success of a pool could be measured by its ability to make its own existence unnecessary!
- This means a truly effective pool should focus on **research, education, collaboration and influencing government policy**, in addition to their immediate role of filling protection gaps.
- Traditionally, pools have been actively involved in collaboration with governments, regulators and insurers.
- However, to solve the protection gap problem at its roots, it is crucial that engagement with key stakeholders such as the **banking** and **construction** industries increases.



The Way Forward: Banking and Construction Engagement

Banking Industry

- Banks have significant exposure to insurance protection gaps through their mortgage portfolios. Whilst this represents a key risk, it also means they have the leverage to drive real change.
- Simplistic approach to reducing their exposure to property damage is to mandate insurance purchase as a condition of lending.
- However, in a world in which insurance availability and affordability is being severely stressed, this may no longer be enough.
- Banks are starting to factor climate risk into their own credit risk and loan approval decisions, yet by 2023 only 18% of the top 50 global banks incorporated physical risk into their business models.
- Pools can maximise their impact by collaborating with banks and insurers to minimise society's exposure to property losses.



Construction Industry

- Another key stakeholder in this area is the construction industry. A common complaint from insurers and banks is that there is insufficient incentive for builders to avoid high-hazard areas and implement resilience measure.
- Pools could play an important role in this area by encouraging governments and regulators to establish a stronger link between the level of building risk and a builder's profitability.
- Builders already have some exposure through the construction insurance premiums they pay, but pools could help promote stronger measures. One example could be tax breaks/penalties linked to the hazard-intensity of land built upon, as well as how resilient the resulting properties are to natural and man-made disasters.



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Pools WP Members

- *Adam George*
- *Charchit Agrawal*
- *Darren Murch*
- *Manisha Sharma*
- *Prathmesh Shah*

