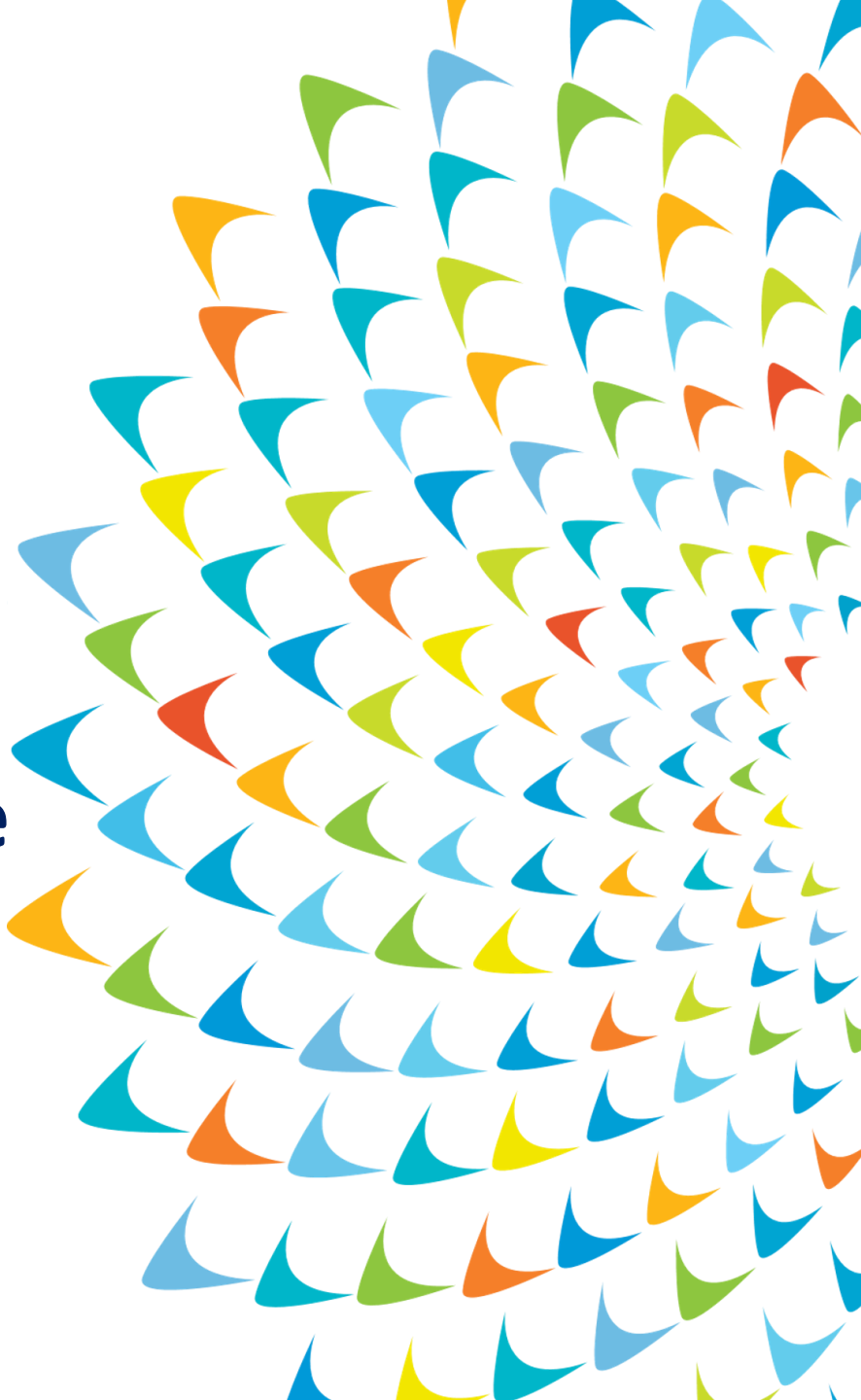
Consultation Meeting with the CAREC National Focal Points

Special Session –

Building Climate Change Resilience through Disaster Insurance

Ashgabat, 10 October 2018



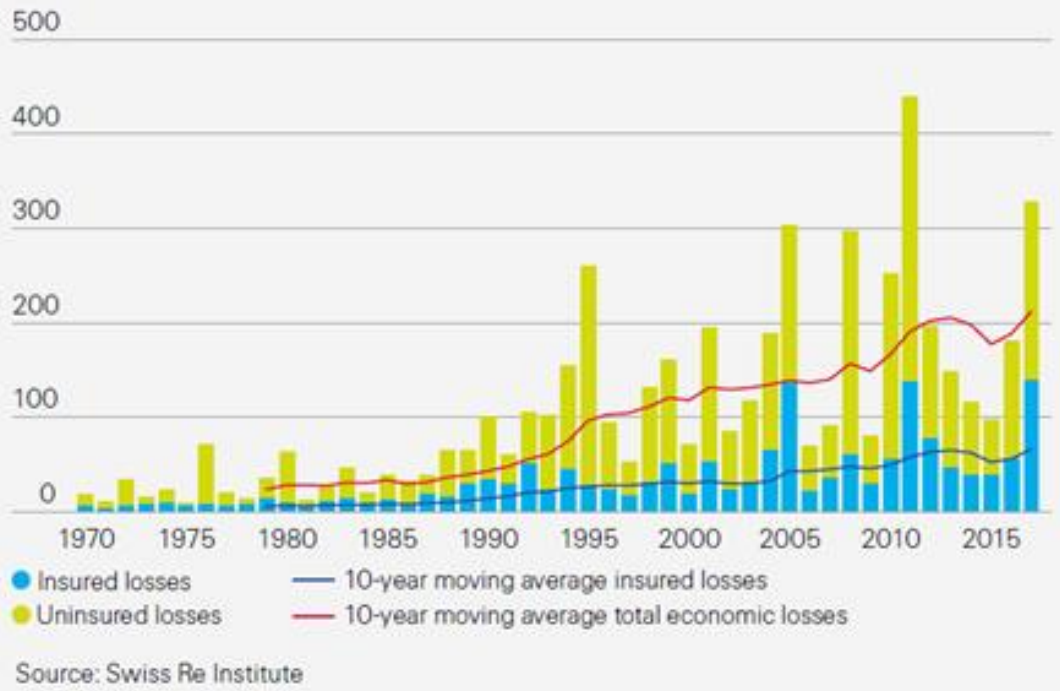
Risk Transfer and Risk Sharing Solutions as a Key Element of Disaster Risk Finance

The Protection Gap

Economic losses due to disaster events will further increase with climate change and concentration of economic assets

Figure 4
Insured vs uninsured losses, 1970 – 2017, in USD billion at 2017 prices

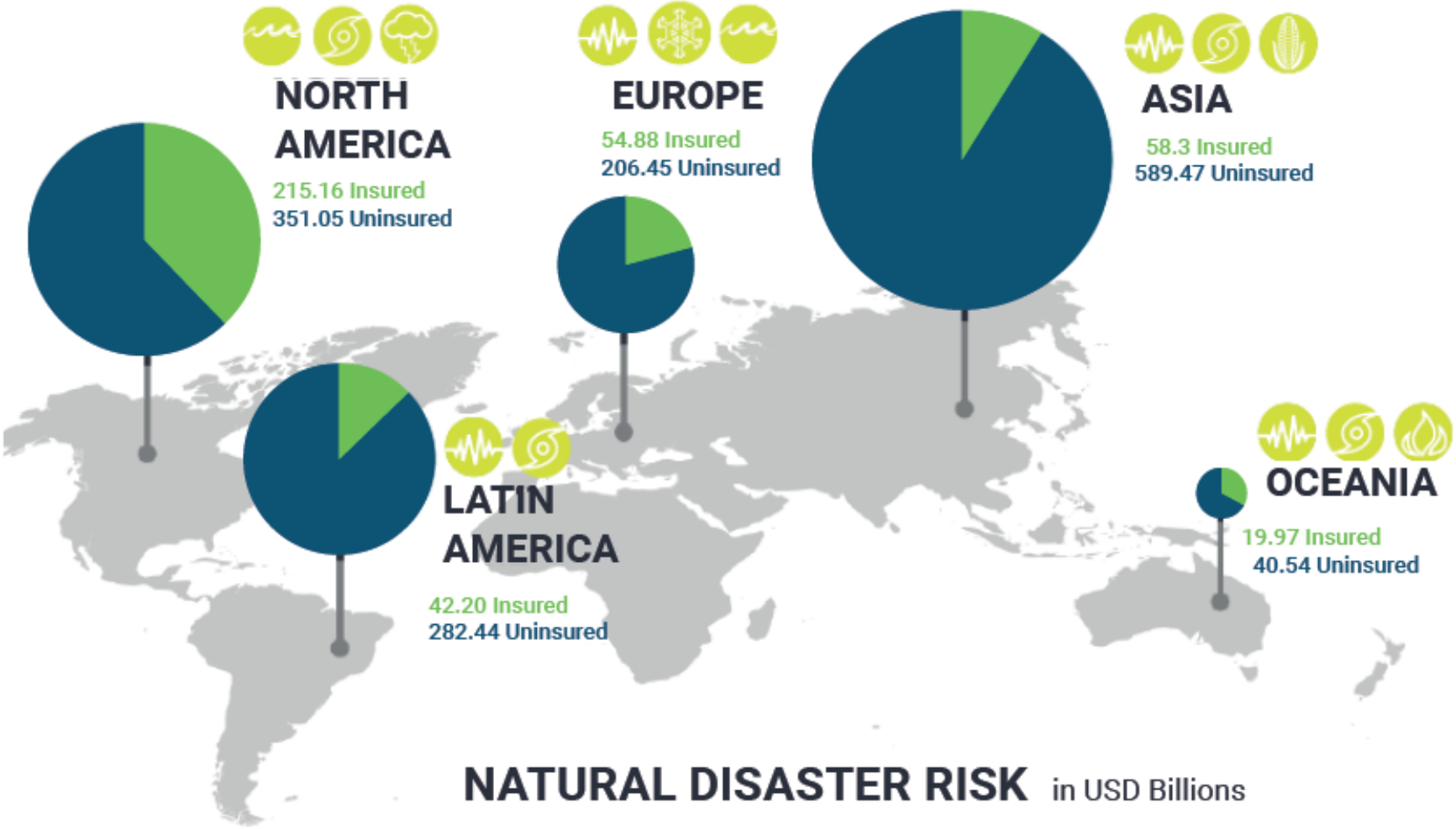
Economic losses
=
insured +
uninsured losses



Source: Swiss Re Institute

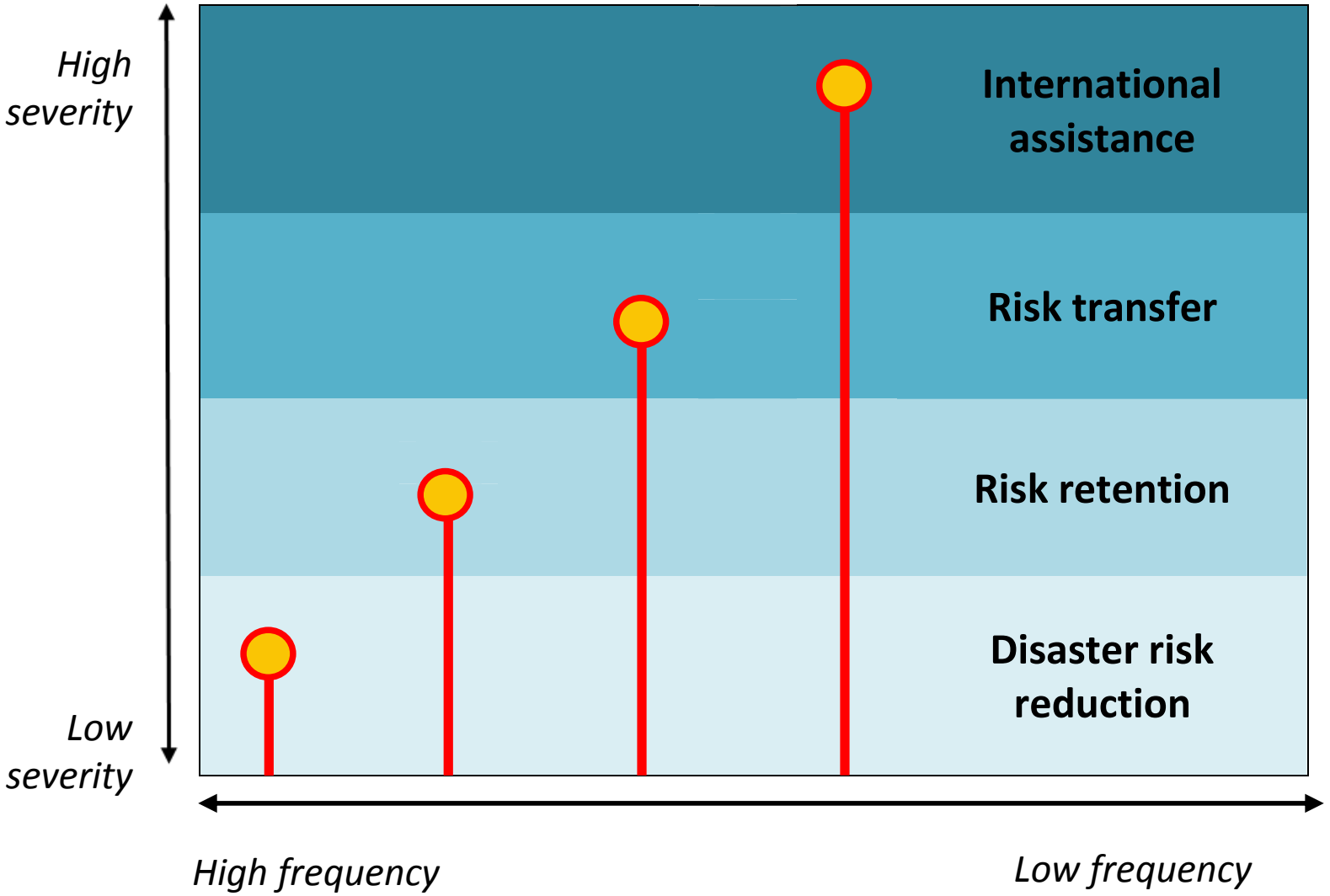
The Protection Gap

Size of the protection gap globally in early 2017

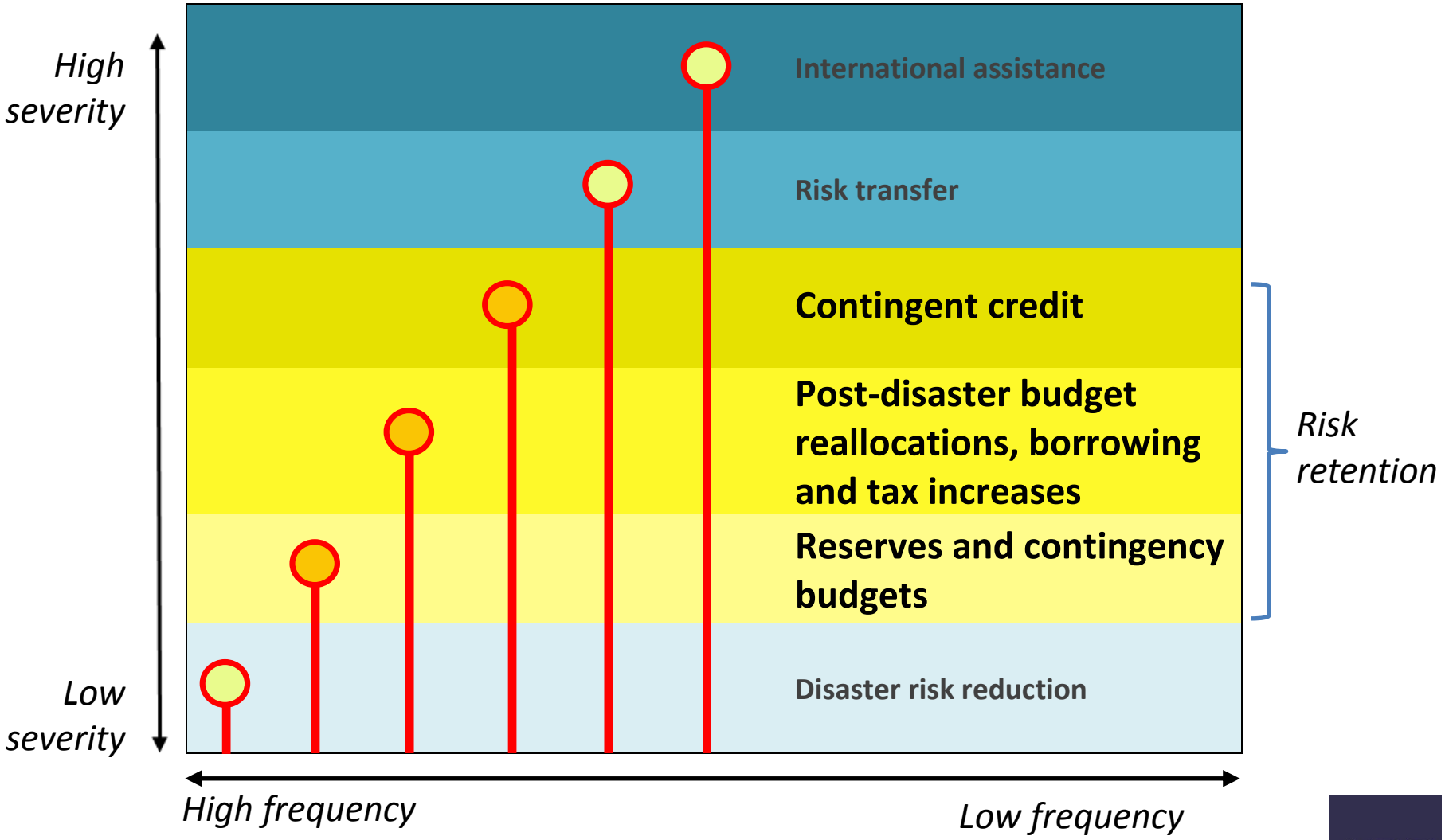


Source: AIR Worldwide.

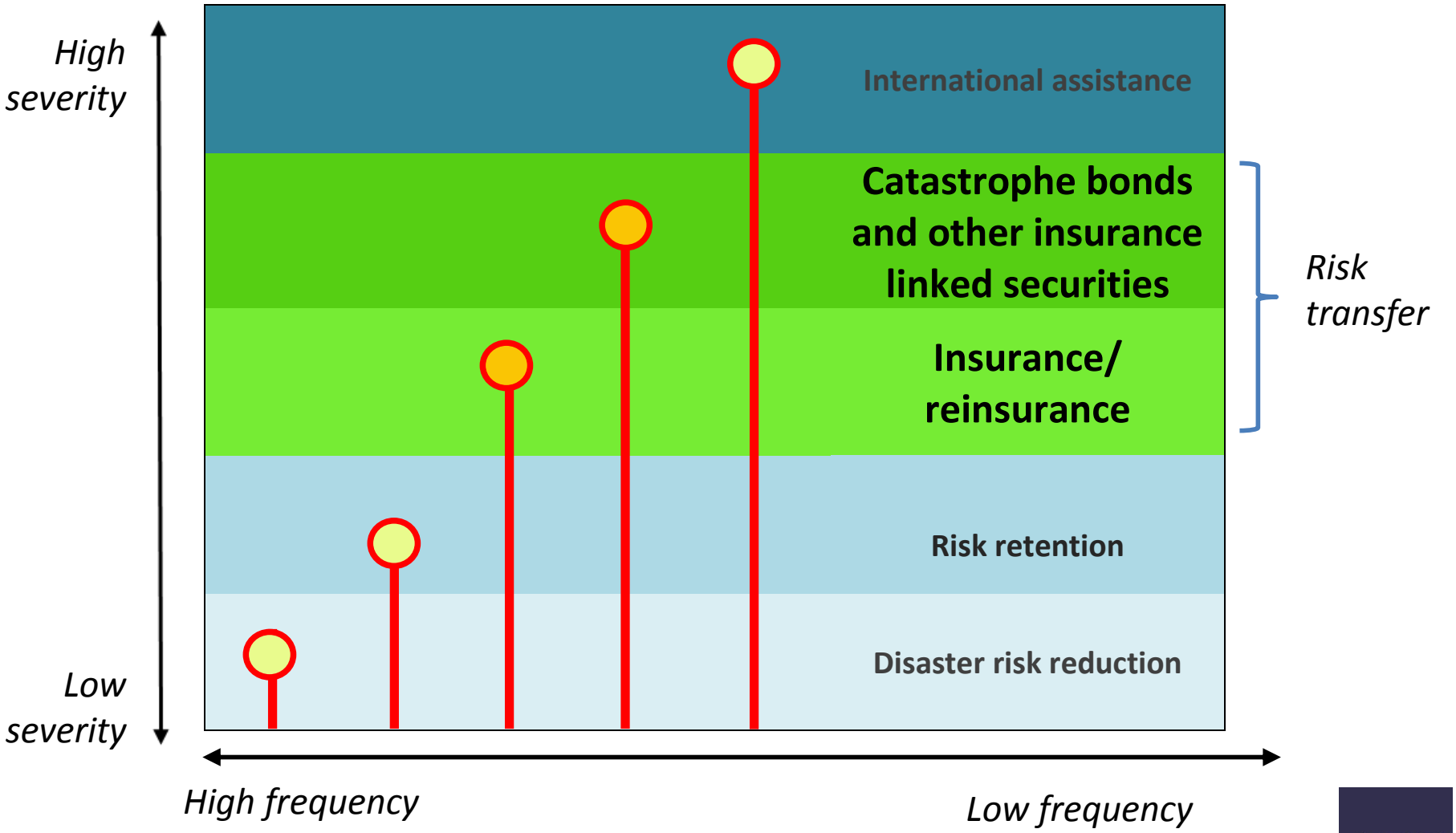
Disaster risk financing: a layered approach



Disaster risk financing: a layered approach

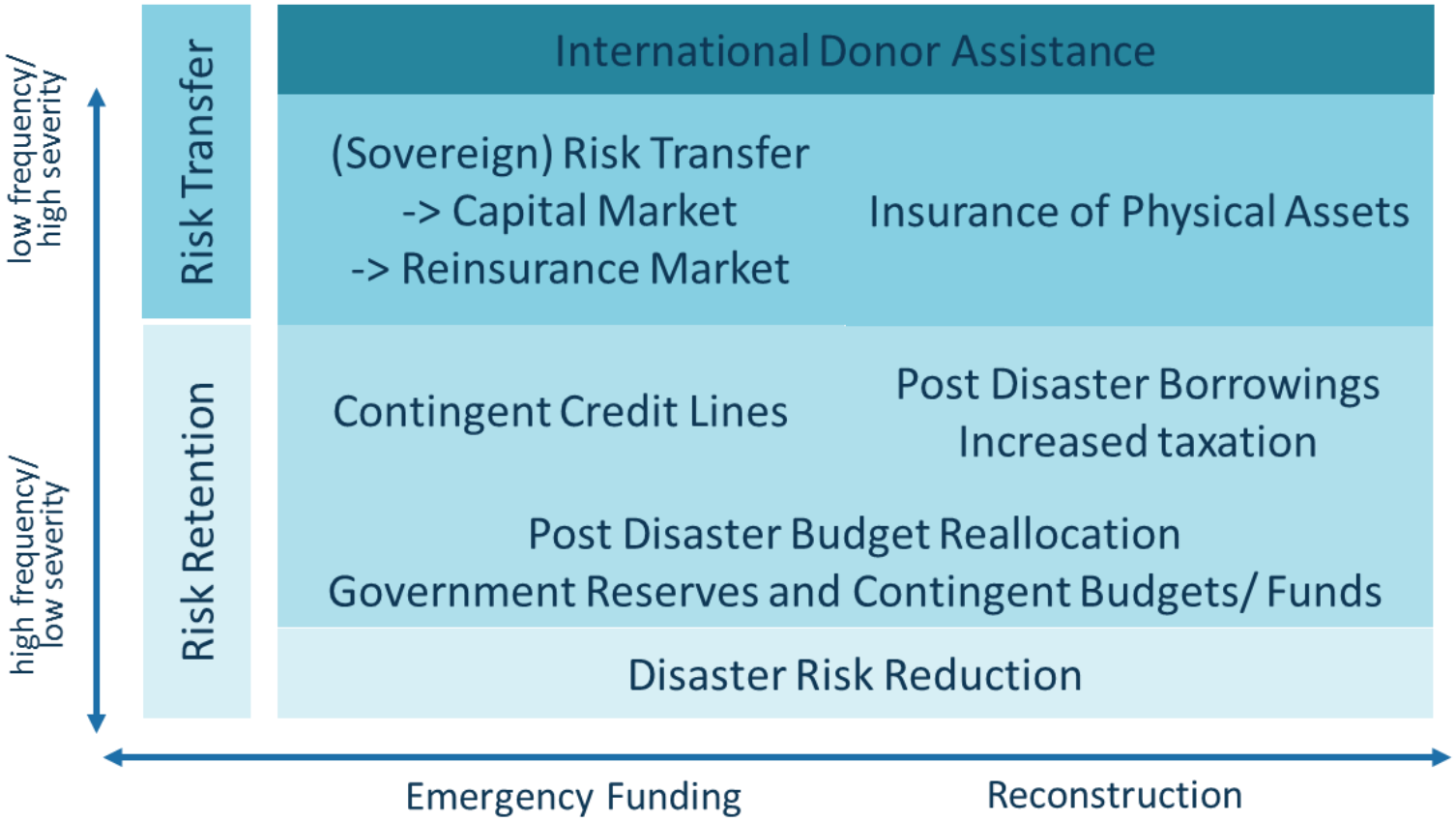


Disaster risk financing: a layered approach



Public sector budget resilience

Government disaster finance strategy needs to be defined



"From an ex-post perspective, the availability of insurance offers the best mitigation approach against real and fiscal consequences of disasters"

World Bank, Policy Research Working Paper 5564, 2011

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Major Hazards in the CAREC region

Floods

Droughts

Earthquakes

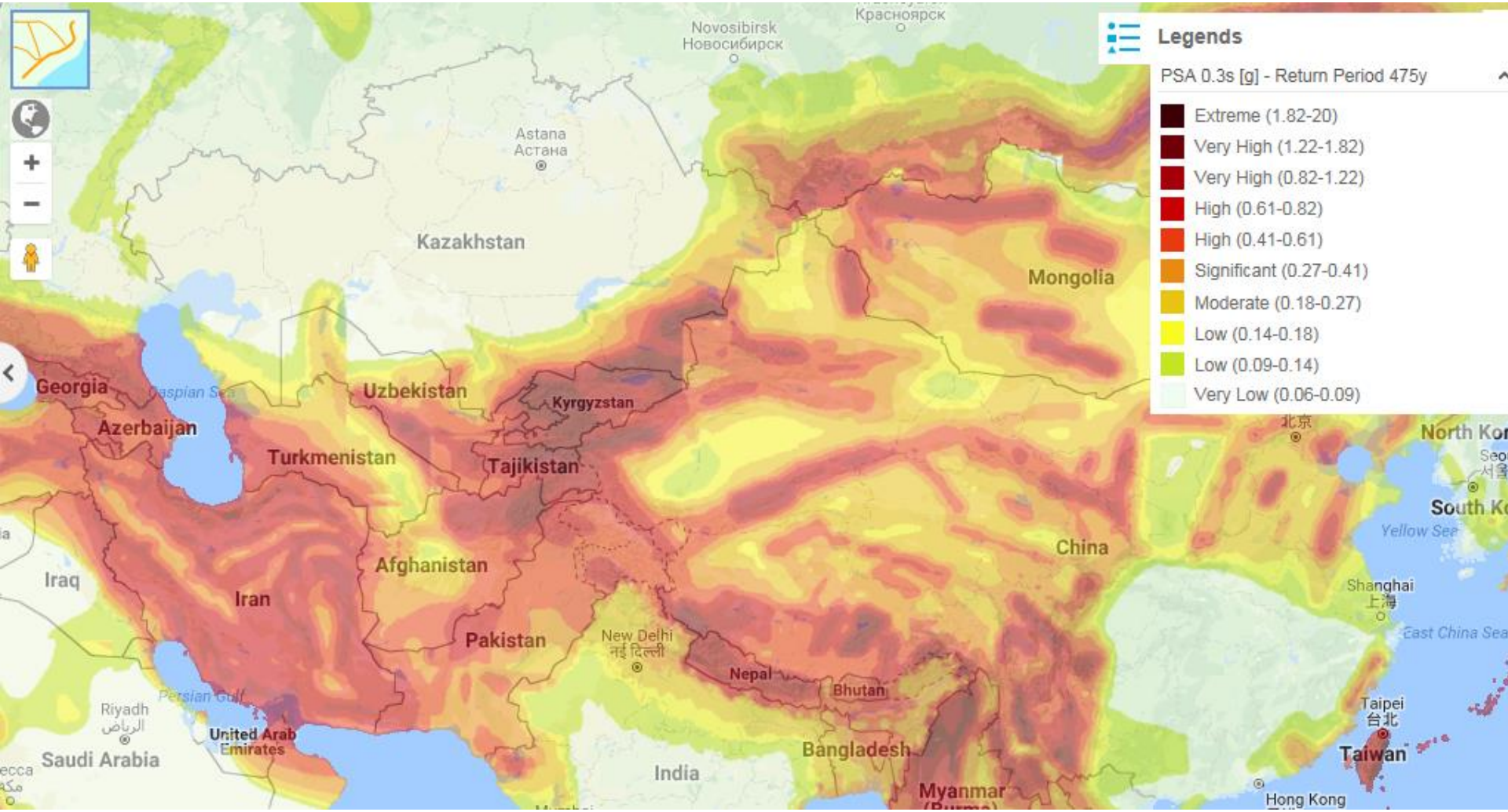
Landslides

Extreme temperatures

Disaster Risk Hazards in the CAREC region

Earthquake: low frequency / high severity

Seismic Hazard map

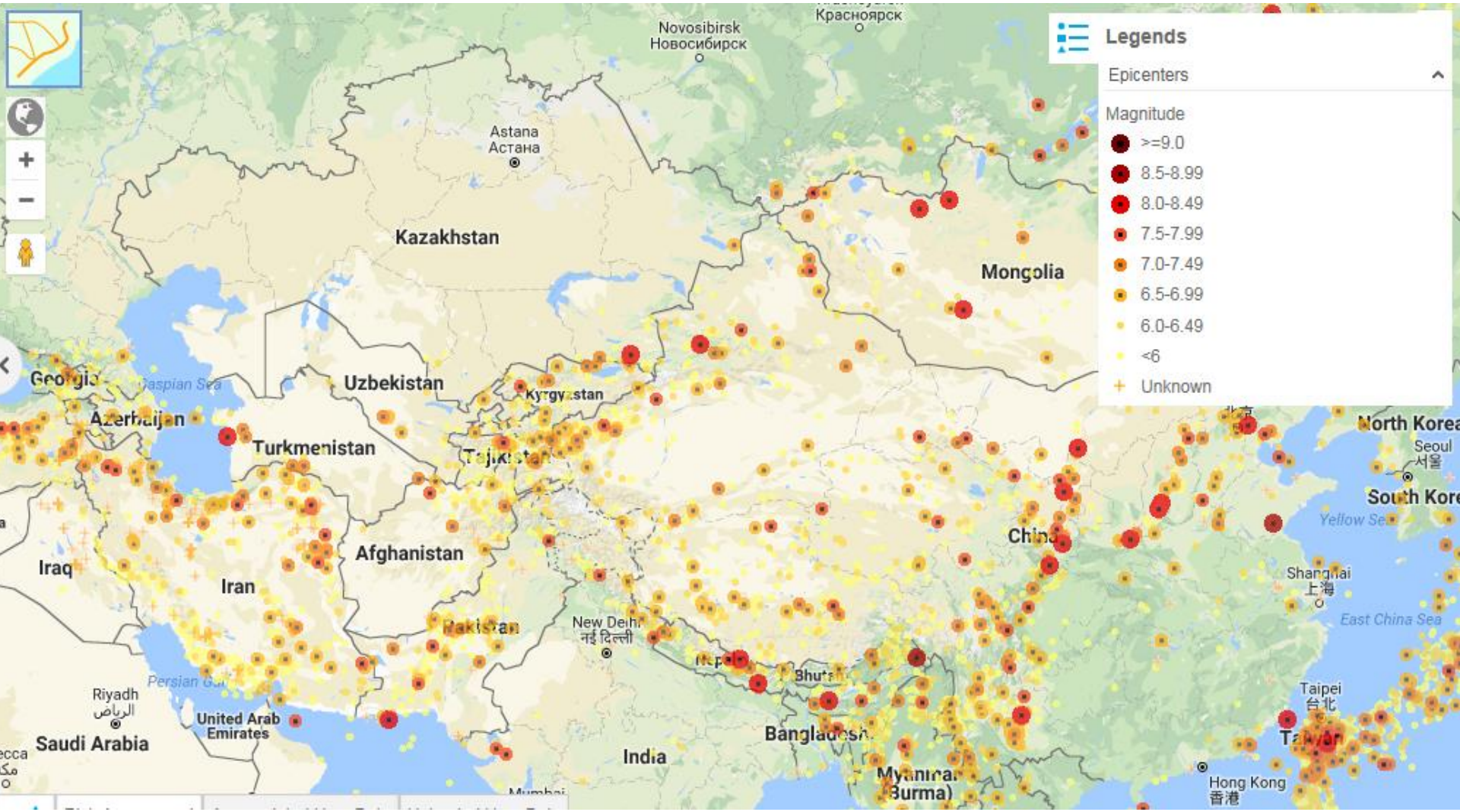


Source: Swiss Re Cat Net

Disaster Risk Hazards in the CAREC region

Earthquake: low frequency / high severity

Historic Epicenters



Source: Swiss Re Cat Net

Disaster Risk Hazards in the CAREC region

Historic Earthquakes modelled from today's perspective

Event	Country	Then	Now	Norm. W. Vuln. Change
1948 Ashgabat Earthquake	TKM	$359m	$3550m	$21.4bn
1902 Andizhan Earthquake	UZB	$7.7m	$607m	$7.2bn
1966 Tashkent Earthquake	UZB	$300m	$1658m	$7.3bn
1988 Spitak Earthquake	ARM	$1150m	$6885m	$4.1bn
1990 Iran Earthquake	IRN	$3200m	$6146m	$7.8bn
1907 Karatag Earthquake	TJK	$8m	$92m	$1.8bn
1991 Racha Earthquake	GEO	$1700m	$11.09bn	$3.1bn
1956 Afghan Earthquake	AFG	$25m	$421m	$2.06bn
1887 Alma-Ata/Verny Earthquake	KAZ	$1.93m	$365m	$1.0bn
1911 Pamir Earthquake	KGZ	$0.3m	$63m	$204m
1911 Kemin Earthquake	KAZ	$0.7m	$71m	$287m
1902 Shemakha Earthquake	AZE	$0.23m	$21m	$95m

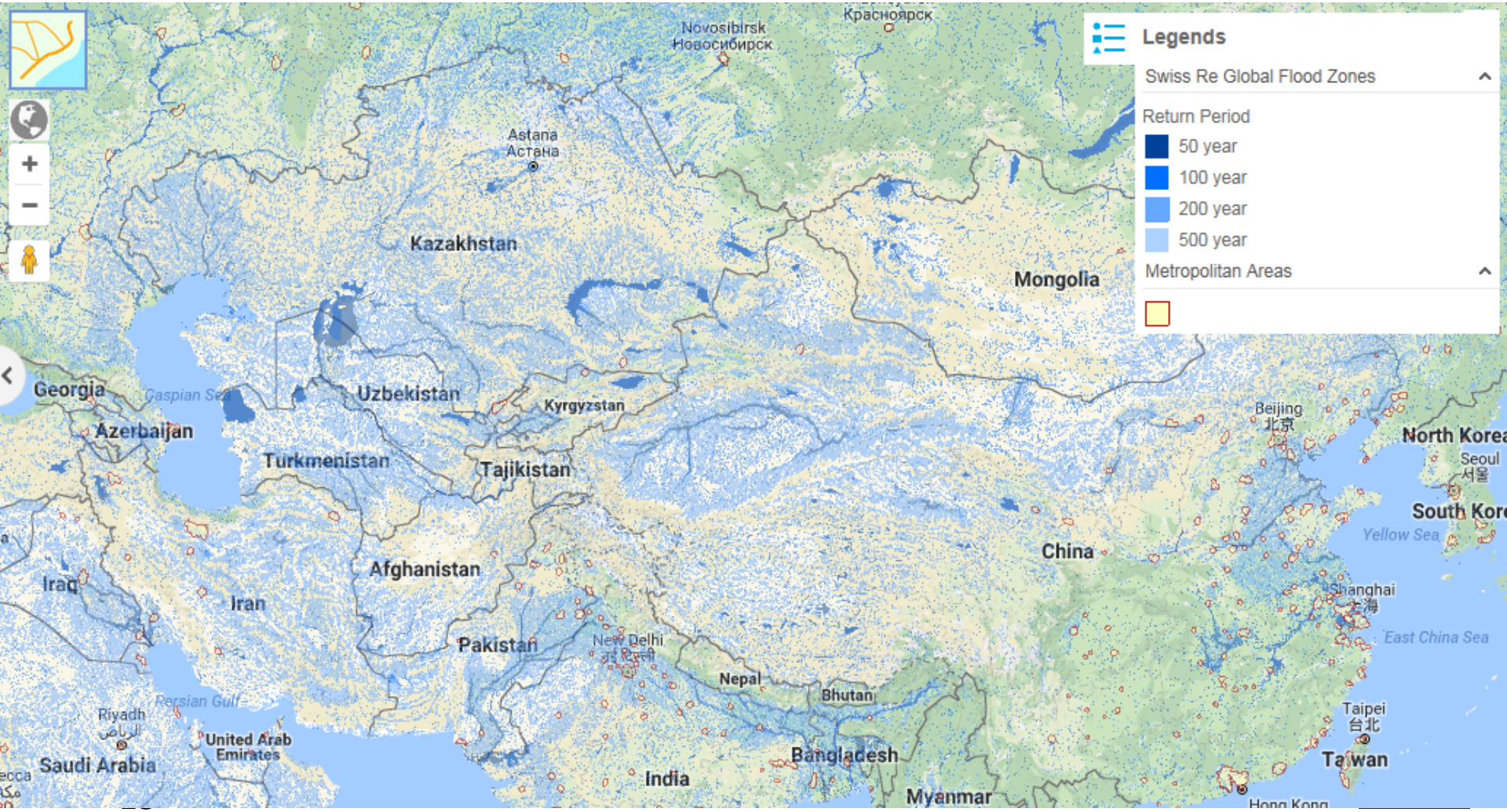
Source: Karlsruhe Institute of Technology / Chaucer

Expected annual loss *for e.g. Afghanistan, Azerbaijan, Georgia, Kazakhstan, Kyrgyz Republic, Tajikistan, Turkmenistan, Uzbekistan, Mongolia =* ***USD 2.8bn***

Disaster Risk Hazards in the CAREC region

Flood: high frequency / high severity

Flood Zones map



Source: Swiss Re Cat Net

Disaster Exposure

Assets at risk threatens national and regional economic growth

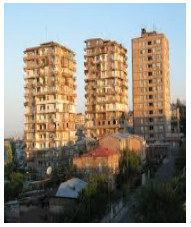
Public fiscal budget at central, provincial and municipal level

Industrial sites

Public Infrastructure e.g. roads, buildings, schools, hospitals

Agriculture sector and its value chain

Commercial establishments incl. SMEs



Rural and urban residential dwellings and most vulnerable population

Main insurance instruments

- Direct sovereign disaster risk transfer
- Agricultural insurance
- Property catastrophe risk insurance
- Disaster microinsurance

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Disaster Risk Initiatives in the region

The level of Disaster Risk management activities differs from country to country and all would benefit from a regional coordination

Various regional initiatives

- GFDRR Central Asia Earthquake Risk Reduction Forum (2015)
- GFDRR Central Asia Centre for Emergency Situations and Disaster Risk Reduction, Almaty, 2016
- UNDP Meeting of Disaster Management Authorities of Central Asian countries in Almaty, 2018
- UNDP Workshop on Disaster Risk Reduction Financing, Istanbul, 2018
- ADB Special DRFI session CAREC NFPs' meeting, Ashgabat, 2018

National Disaster Risk Management Initiatives

- Specific Country risk profile studies are being supported by various IFIs
- Various Disaster Risk Reduction policy measures and investments are being developed and implemented
- Disaster Insurance instruments are generally not well known and legal and regulatory framework is not developed yet

ADB Disaster Risk Finance Activities

A two-tier approach

Strengthening the enabling environment

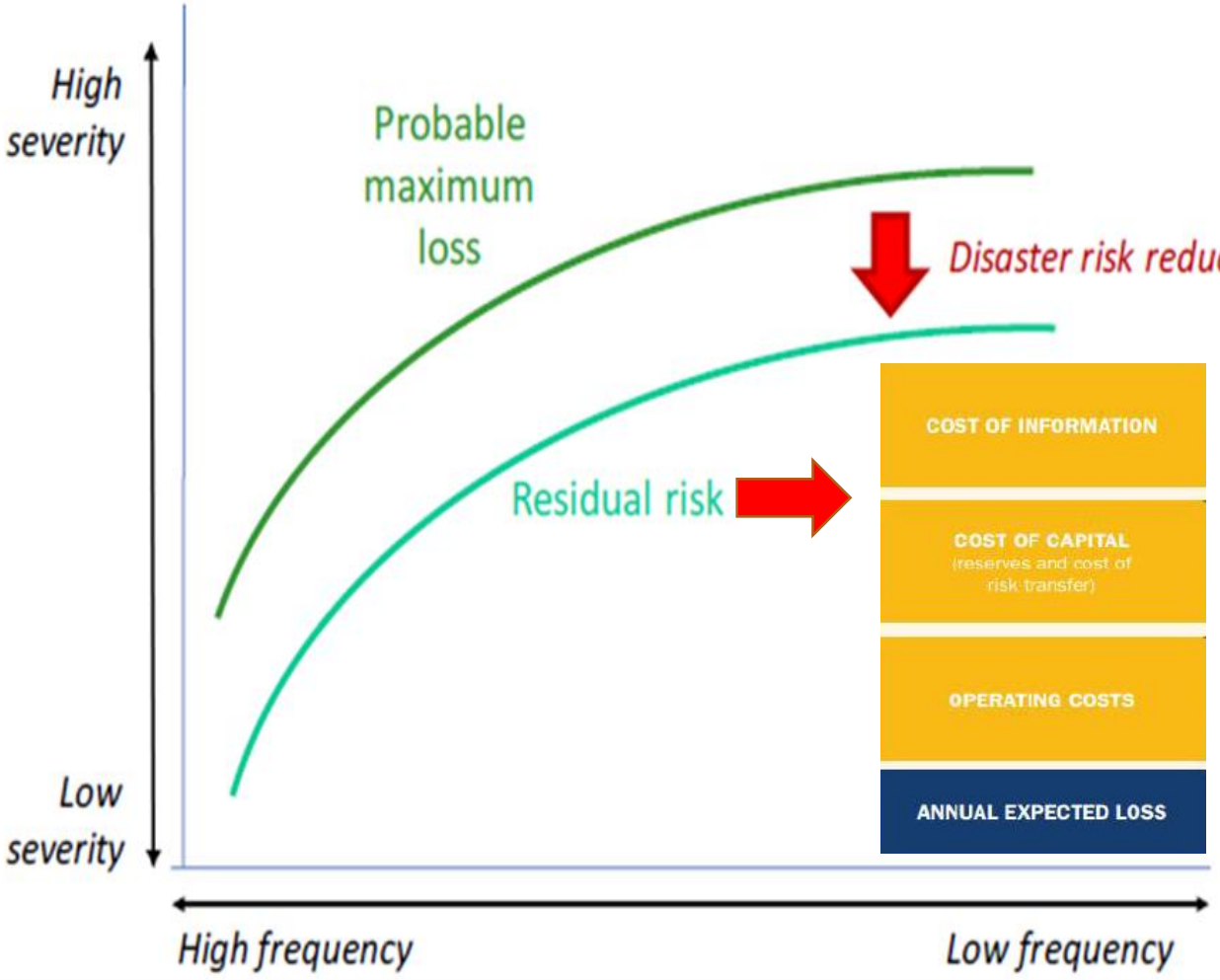
- Assessments of disaster risk, associated fiscal burden and funding gaps
- Development of comprehensive national disaster risk financing strategies
- Strengthening technical knowledge and understanding
- Leveraging funding (ACliFF)
- Strengthening insurance supervision and local insurance industry

Development of individual products

- Contingent disaster financing
- Establishing risk pools
- Piloting weather-index crop insurance
- Microfinance-linked products
- Developing Knowledge Products leveraging insurance for more bankable investments into sustainable infrastructure

Costs of Disaster Reduction and Response

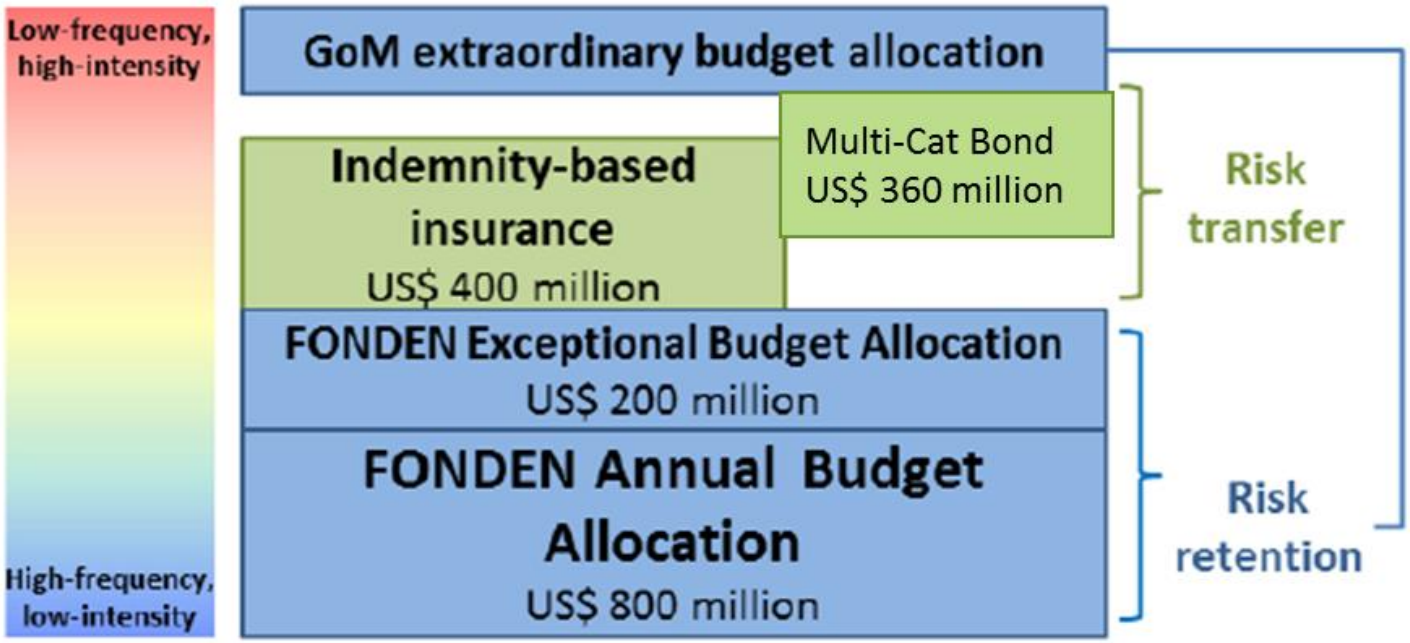
Reduce risk to the point where it is no longer Cost efficient to reduce it any further



Cost of disaster and climate resilient measures

Example – Fonden Mexico

- Founded in 1996 for post-disaster relief, rehabilitation, and reconstruction of public infrastructure such as roads, hospitals, and schools.



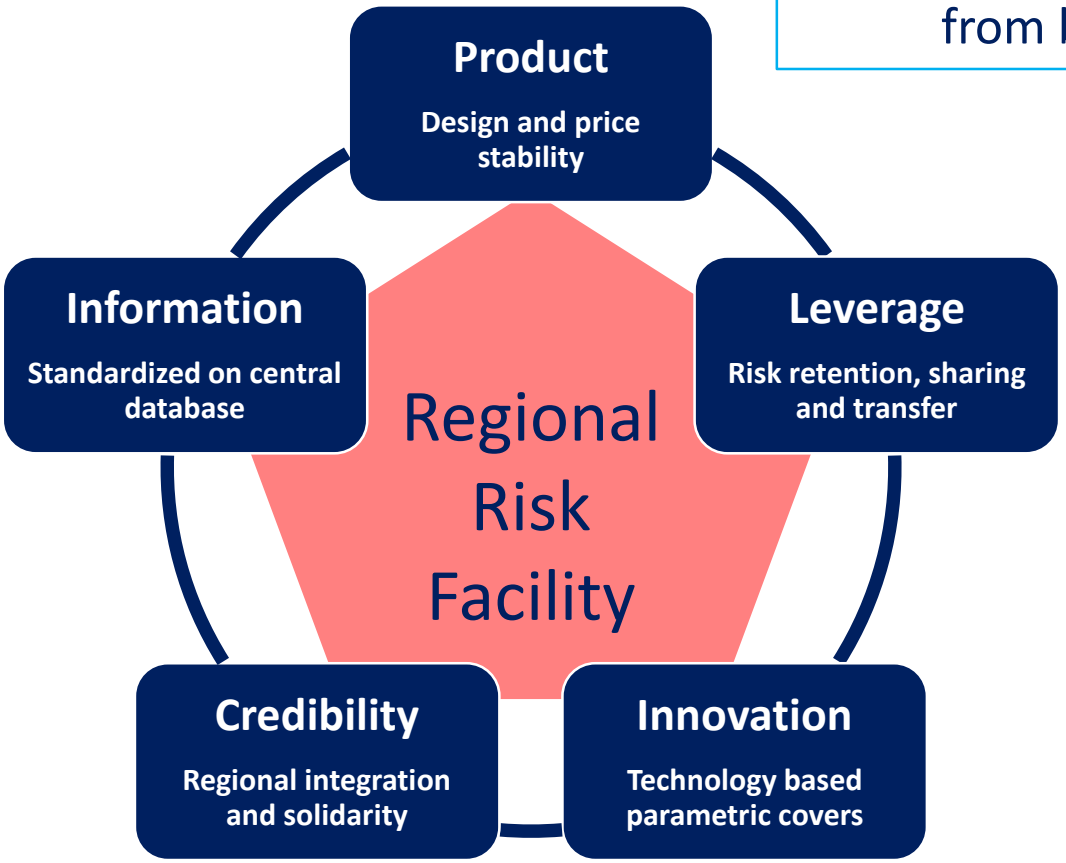
- Mexico joined IBRD Earthquake Cat Bond issuance in 2018 with another US$ 260 mio. jointly together with Chile (US$ 500 mio.), Colombo (US$ 400 mio.) and Peru (US$ 200 mio.).

Preconditions for the establishment of Regional Disaster Risk Insurance Schemes

Regional Disaster Risk Insurance Facility

The benefits

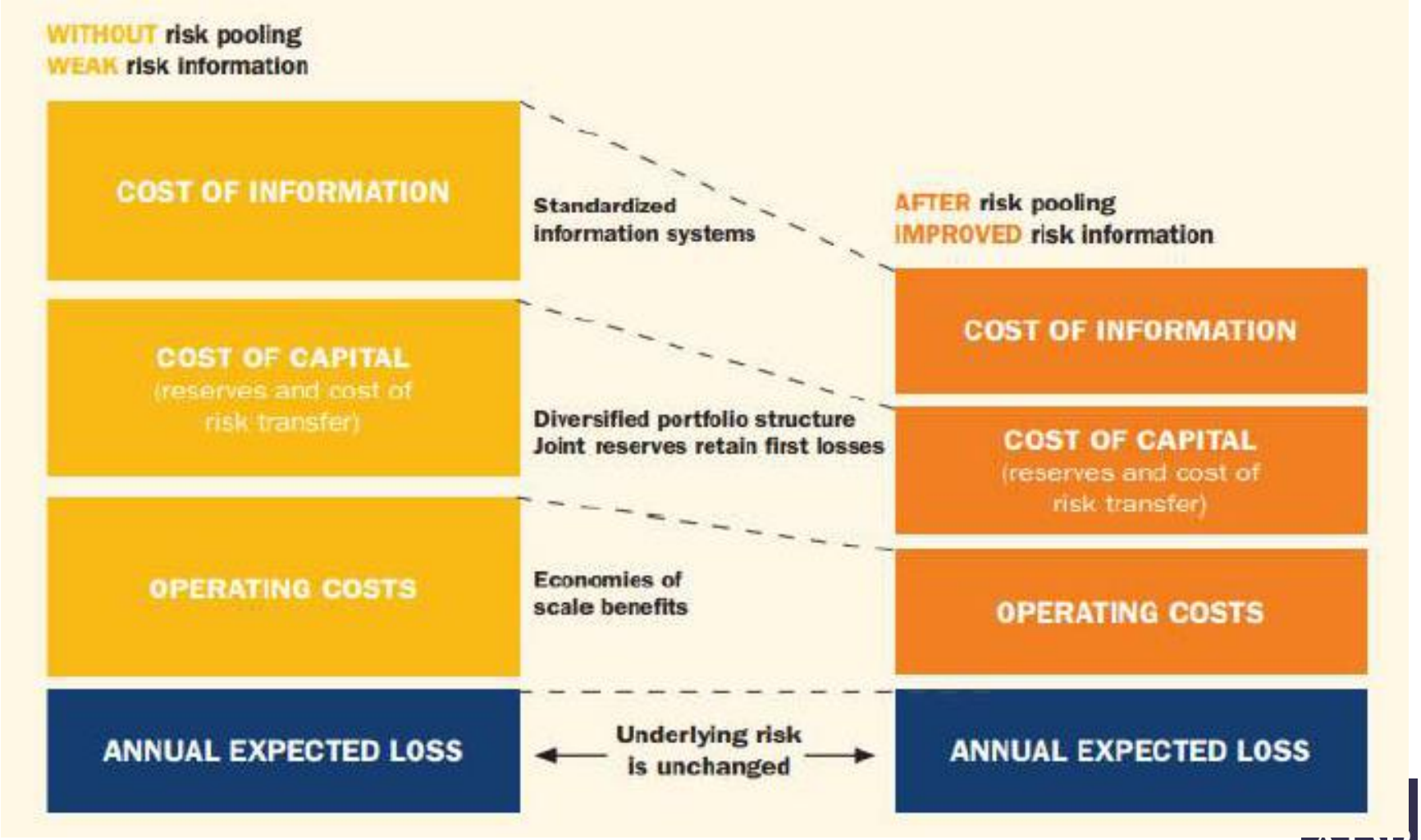
Regional Risk Facility complements national disaster risk financing schemes and benefit from broader risk diversification



- Rely on strong member State support
- Strengthen disaster preparedness and crisis response
- Foster policy dialogue on risk management and risk ownership
- Maximize impact by developing pre-agreed disaster response plans
- Create public goods
- Offer cost-effective insurance solutions
- Part of a comprehensive financial protection strategy
- Facilitate a shift toward proactive risk management

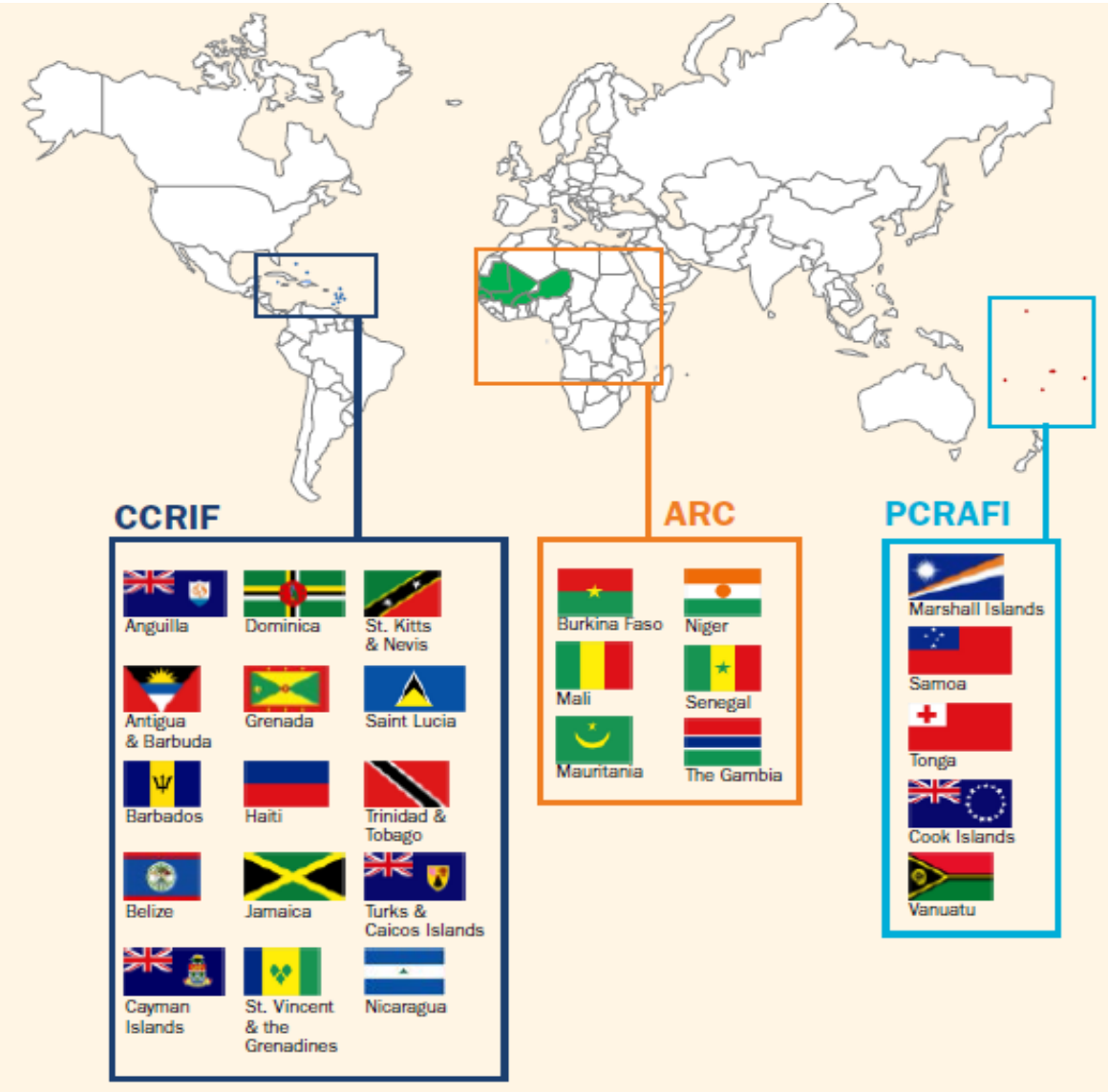
Regional Disaster Risk Insurance Facility

Benefits: the price impact



Regional Disaster Risk Insurance Pools

Examples worldwide



Regional Disaster Risk Insurance Pools

Lessons Learned

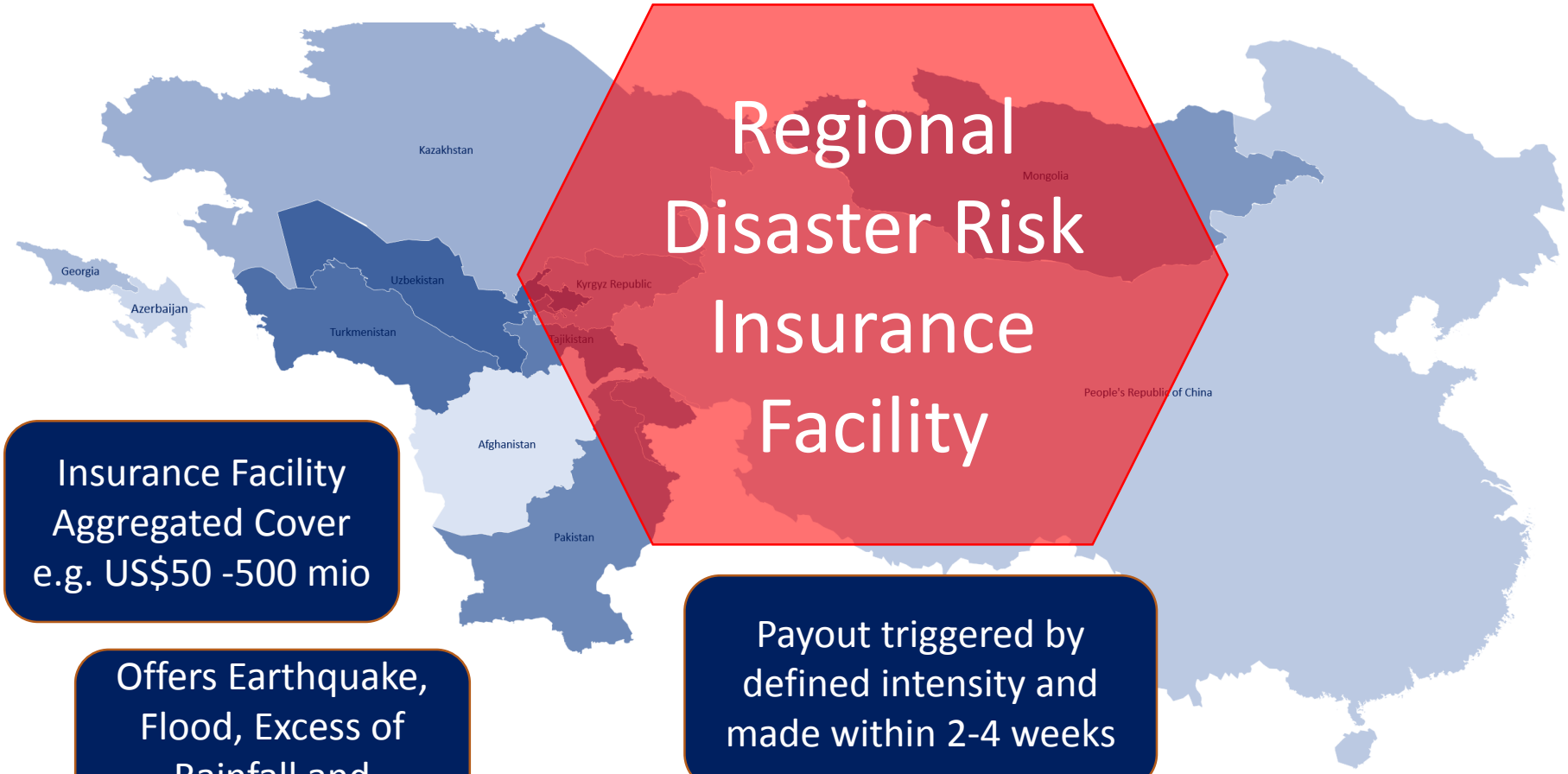
1. Disaster risk pooling can
   - generate savings due to cost-efficiency: the African Risk Capacity, shows that for each US$1 of insurance pay-out US$4.4 of international aid can be foregone.
   - providing immediate emergency liquidity: : the Caribbean Catastrophe Risk Insurance Facility after the earthquake in Haiti paid US$8 million to the government within two weeks of the disaster.

2. Need to communicate the benefits as well as limitations of insurance: Pacific Catastrophe Risk Assessment and Financing Initiative pilot after a magnitude 8.0 earthquake and subsequent tsunami that hit the Solomon and Santa Cruz Islands did not result in triggering of a claim.

3. Developing catastrophe risk information systems and capabilities for disaster rapid impact assessments help refine the models and enhance their credibility and attractiveness to the private sector.

Regional Disaster Risk Insurance Facility

The Mechanism



Insurance Facility Aggregated Cover e.g. US$50 -500 mio

Offers Earthquake, Flood, Excess of Rainfall and Drought cover

Payout triggered by defined intensity and made within 2-4 weeks

CAREC countries can chose perils and amount of cover

Payment used for emergency relief, rehabilitation and reconstruction

Regional Disaster Risk Insurance Facility

The benefits for member countries with national disaster risk financing facilities

- Members' risk to join is minimal
- Allows for total segregation of risk
  - ✓ Insurance offered through several segregated portfolios (e.g. segregated portfolio pooling earthquake, flood and drought risk)
  - ✓ Accumulated capital reserves will be kept legally separate from the new members' capital reserves and risk.
- Every Member State is assessed as to its own individual risk level and this is the basis for pricing of the insurance product.
- Policies are based on individual country hazard assessments.
- For a given set of coverage conditions and given exposure and vulnerability, the premium will be lower if their risk is lower.
- No cross-subsidization of premium in the pool

Regional Disaster Risk Insurance Pool

The Preconditions

- Strong political commitment at the national and regional level
- Availability of reliable data on risks and vulnerability.
- Comprehensive national disaster risk management strategies/programs.
- Operations plan and a final implementation plan indicating how pay-out would be utilized in a specific situation.
- Supporting regulatory framework, existence of service providers, and access to regional or international reinsurer markets

Regional Disaster Risk Insurance Pool

The Preconditions

- Costs related to the setting-up of the scheme and the payments for the initial capitalization.
  - Caribbean Catastrophe Risk Insurance Facility:
    - 16 governments contributed resources ranging from US$200,000 to US$4,000,000 depending on the exposure of their respective countries to earthquakes and hurricanes.
    - Initial funding by development partners was provided to match governments' own contributions.
  - African Risk Capacity
    - Established as a Specialized Agency of the African Union.
    - A total of US$150 million earmarked by the US, Germany, France, Canada and the UK for the capitalization
- Sustainable only with more formal and predictable approaches to premium financing

Regional Disaster Risk Insurance Facility

Options for its operationalization

1. Multi-Country Trust - Finance Facility, i.e. virtual facility without separate legal personality:

   - ADB acting as a host entity with treasury and asset management functions
   - Governance organ may include a “steering committee” for the facility
   - Beneficial as ADB can permit ODA donor/dev-capital provider participation
   - Beneficial as ADB is also capable of risk transfer transactions with international markets on behalf of the States participating as potential beneficiaries in the facility

2. New Entity (created in a Member or Third-Party State) by treaty or by charter

Regional Disaster Risk Insurance Pool

The way forward

What ADB can offer:

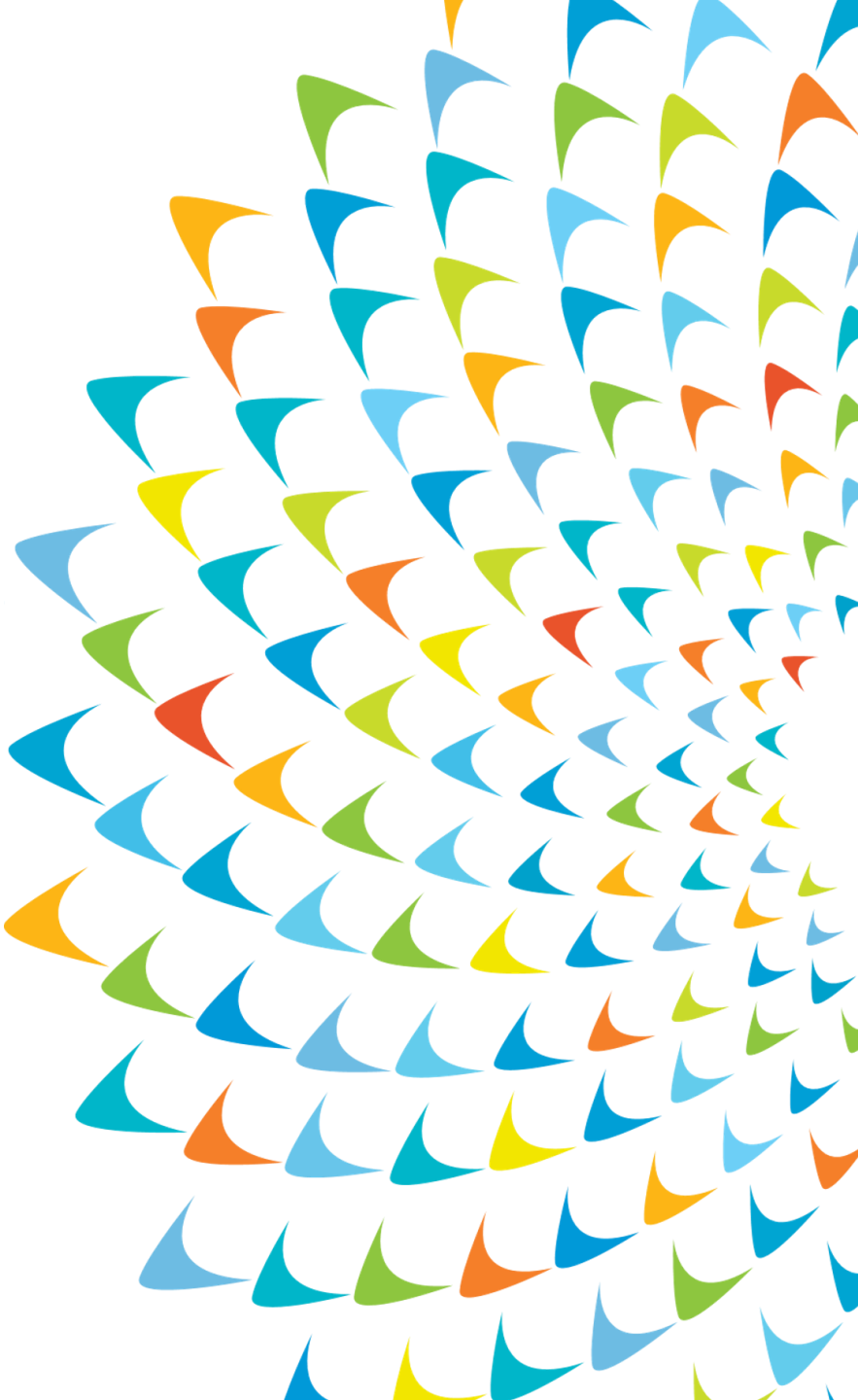
- prepare technical assistance to assess DRF needs of interested countries and design the regional disaster risk insurance facility
- seek validation of TA concept from interested countries
- identify interested donors for co-financing of capitalization, operating costs, and premiums
- identify ways of involving the private sector (insurance, reinsurance and capital markets) in the operation and financial management of the regional pool

What is required from interested countries:

- express –in principle- interest to participate in a regional disaster risk insurance pool
- identify lead agency for the TA implementation
- provide relevant information and data to facilitate the design of a regional facility tailored to countries' needs

ADB

Thank you.



Appendix

Pakistan Disaster Risk Finance Strategy