

# **10 LESSONS FOR POLICY MAKERS TO BRING CATASTROPHE RISK POOLS TO SCALE**

Disaster Risk Financing  
& Insurance Program



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# SOVEREIGN CATASTROPHE RISK POOLS AROUND THE WORLD

**Over the past 10 years, 26 countries in three regions**—Africa, the Pacific, and the Caribbean and Central America—have joined sovereign catastrophe risk pools. They have purchased parametric catastrophe risk insurance for an aggregate coverage of US\$870 million and an aggregate premium volume of US\$56.6 million (2016/17), backed by more than 30 reinsurance companies. The three pools have so far made payouts for a total of just over US\$105 million.



# Sovereign catastrophe risk pools help access financial solutions for rapid response financing



**3**  
Pools

**26**  
Countries

**\$57M**  
Annual premium

**\$870M**  
Annual coverage

**\$105M**  
Insurance payouts

**\$105M**  
Insurance payouts

**30+**  
International  
reinsurers

# Pools can succeed only with **strong** **political commitment** at the national and international level

Sovereign catastrophe risk pools require **strong political momentum and coordination** among participating countries, especially during the design and preparation stage. A strong regional organization is often critical to facilitate the political and policy coordination needed between participating governments.

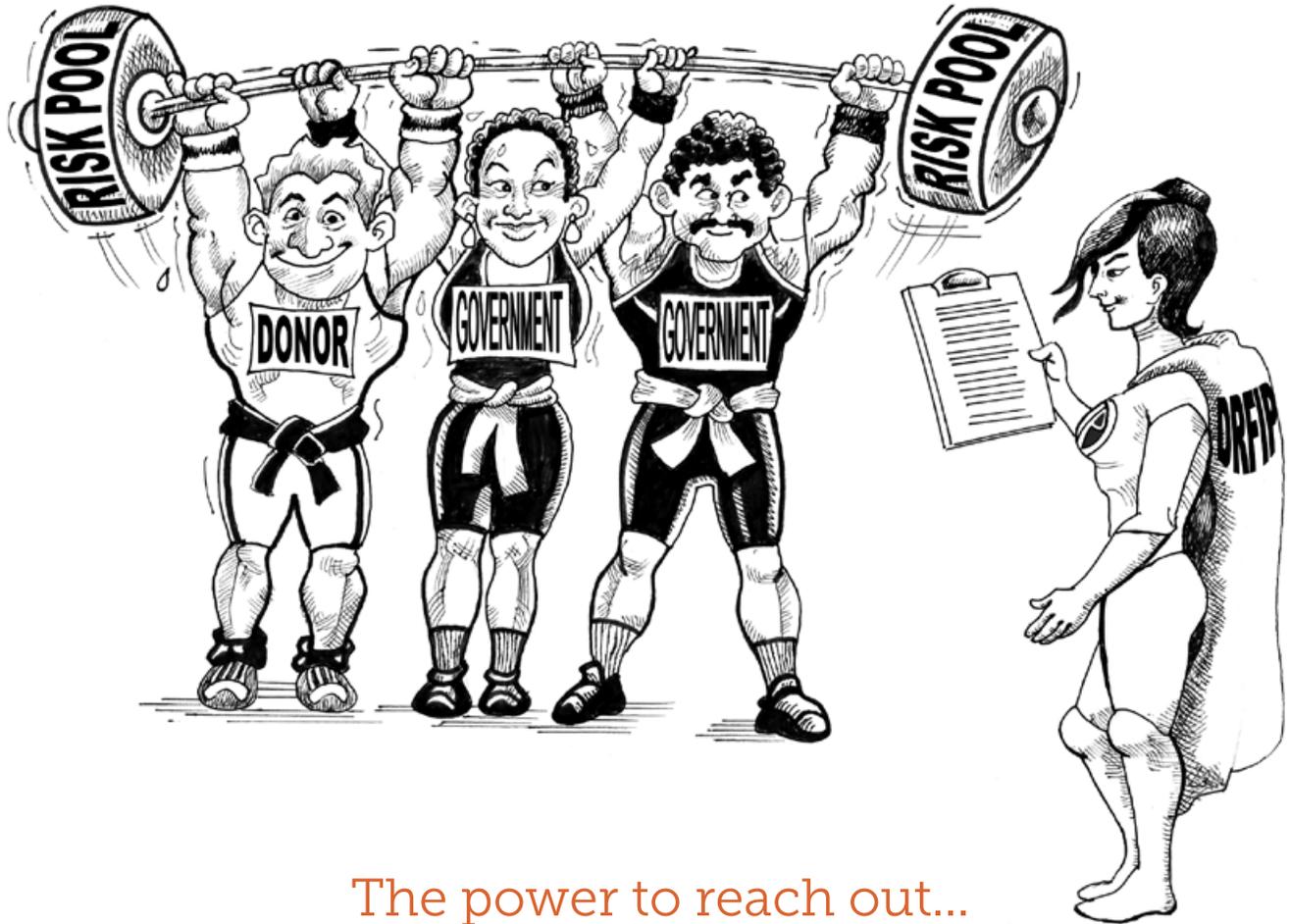


Creating a winning team...



# Pools often rely on **strong donor support**

Humanitarian and development donors have a role to play in creating incentives for investments in pre-agreed risk management and risk financing solutions (both at the country level and within donor organizations), and in **reducing reliance on unpredictable and uncertain post-disaster humanitarian assistance**. Concessional financing from donors or multilaterals may be necessary to create the enabling environment and incentives for systematic adoption of disaster risk finance and insurance solutions, including catastrophe risk pools.



The power to reach out...

# Pools can strengthen disaster preparedness and crisis response

Catastrophe risk pools are part of a comprehensive approach to disaster risk management and play a key role in efforts to strengthen preparedness and crisis response. Not all disasters and crises can be prevented. **Governments need to be ready to manage the impacts** of such residual risks through pre-agreed post-disaster plans, backed by pre-planned financing. The process of developing such post-disaster actions plans and identifying related costs can also generate risk information and create incentives to step up investments in prevention and adaptation to reduce risks in the first place.

# POOL



Preparing to meet challenges...



# Pools can foster policy dialogue on risk management and risk ownership

In addition to offering financial protection, **catastrophe risk pools can facilitate regional policy dialogue and improved collaboration** between participating countries and donors on risk reduction and risk management. They offer a vehicle to anchor (i) financial planning (with participation in a risk pool an integral part of a more comprehensive disaster risk financing strategy that brings together various financial instruments); (ii) contingency planning; (iii) ownership of and collaboration on the climate risk management agenda between and within countries; and (iv) risk-informed investments in risk reduction through the pricing of climate and disaster risks.

In addition, pools help clarify who “owns” the risk and encourage countries to plan for disaster response. Many developing countries still rely on appeals-based mechanisms and seek donor assistance to help fund relief and response activities following a shock. Although it may come at no cost to the recipient country, such aid is unpredictable and uncertain, and often takes time to materialize.



Shouldering collective responsibility...



# Pools can maximize impact by developing pre-agreed disaster response plans

Pre-agreed disaster response plans ensure a timely, transparent and efficient use of funds in the aftermath of a disaster, thereby maximizing the impact of rapid cash injections. Linking financial instruments, including risk pools, to pre-agreed post-disaster programs, can help ensure that funds are efficiently channeled to support targeted post-disaster responses.

For example, payouts from risk pools could potentially be used to scale up support from existing national safety net programs to poor and vulnerable household in the event of a disaster. Likewise, pre-agreed response plans can help identify critical infrastructure to prioritize in the aftermath of a disaster. However, **response plans should always allow for some flexibility** to ensure they can address unexpected expenses.

By engaging a wide range of stakeholders, including civil society members, the process of developing such plans can also contribute to raising awareness of the benefits offered by risk reduction and financial protection.

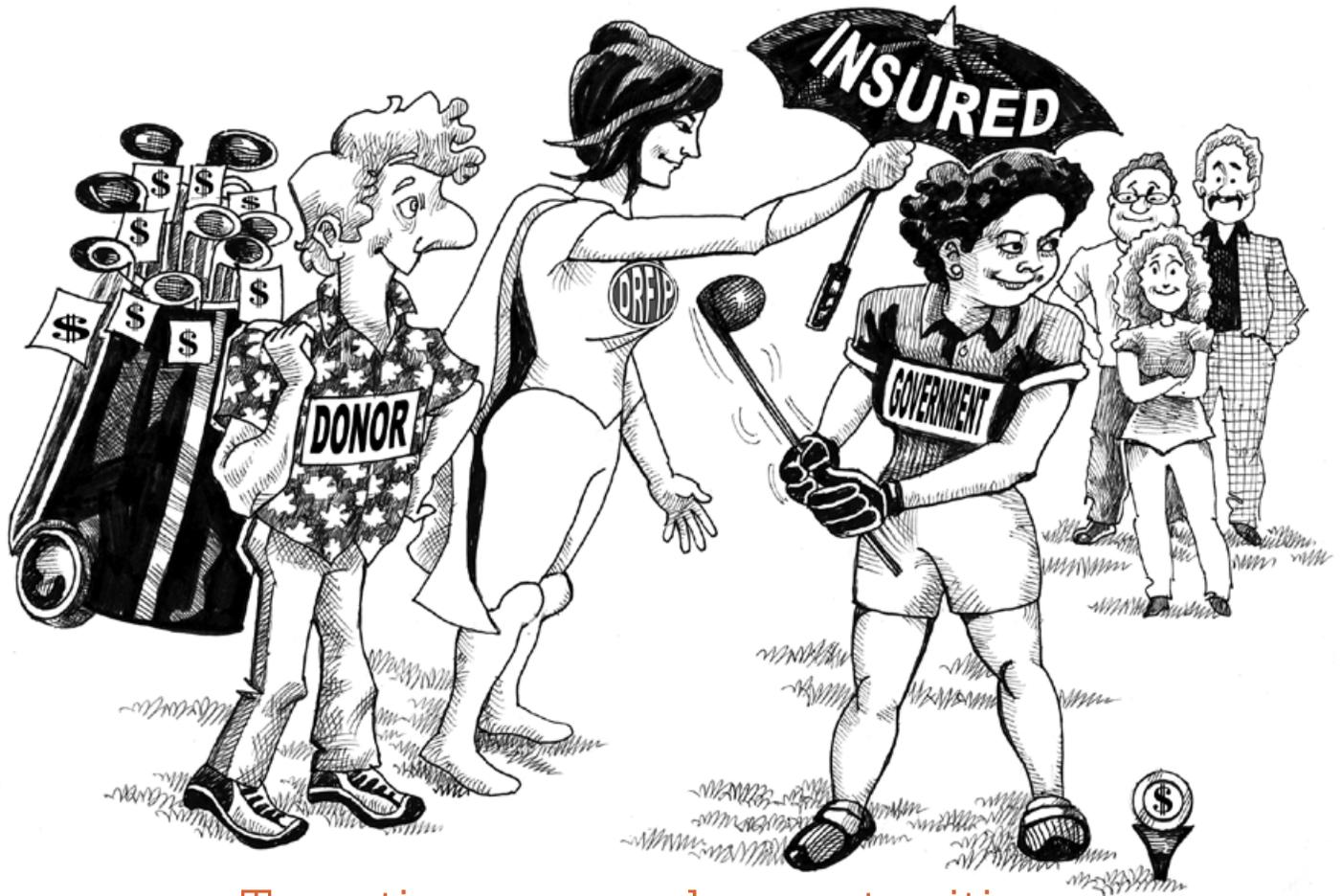


Defining the goal...



# Pools can create public goods

**The creation of risk pools has driven the development of catastrophe risk models** and other public goods (such as improved insurance literacy, institutional capacity, and disaster risk data and modeling capacity) that have proved to be valuable in multiple areas. For example, the Pacific Risk Information System (a platform that includes an exposure database of over 4 million assets in the region) and its associated catastrophe risk model have been used by domestic insurers and brokers to inform their underwriting and pricing decisions. In Fiji, the model was used to inform the provision of catastrophe risk insurance for hotels and resorts. The model has also been used to explore the feasibility of crop insurance in some Pacific islands. Another example is offered by Africa RiskView, the in-house modeling platform of African Risk Capacity (ARC), which estimates drought impacts in terms of population affected and response costs. This information can be used by member states as an early warning tool and to inform financial planning.



Targeting renewed opportunities...

# Pools can offer cost-effective insurance solutions

**Pools can make risk transfer more cost-effective** by helping to (i) diversify risk across multiple countries with different risk profiles; (ii) establish joint reserves to selfinsure a part of the risk managed by the pool; (iii) facilitate access to international reinsurance and capital markets; (iv) share operational costs, such as program development and day-to-day back office operations; and (v) build up a better foundation of risk information.

By helping countries develop standard products based on their respective needs, and structuring a portfolio of diversified country risks, risk pools offer larger transaction sizes that are more attractive to global reinsurance and capital markets. In addition, risk pools can reduce premiums by reducing the cost of capital, operating costs, and the cost of risk information. Pools cannot reduce the underlying climate and disaster risks countries face. But they can create incentives for risk reduction measures by putting a price on risk.



# Pools are part of a comprehensive financial protection strategy

The parametric insurance products offered by risk pools provide rapid (but limited) liquidity in the immediate aftermath of infrequent and severe disasters. Other financial instruments, such as contingency funds and contingent loans, can be used to finance recovery and reconstruction efforts, as well as the cost of more frequent disasters.

**Governments can strengthen financial resilience by combining financial instruments that address different needs and have different cost implications.** For example, insurance may provide cost-effective cover against severe events, while budget reserves or contingent credits may be more cost-effective for addressing more frequent and less severe events. Since climate change may over time affect a country's risk profile by potentially increasing the frequency and intensity of such hazards, the combination of financial instruments used to address disaster impacts will also need to evolve to account for changes in risk and other considerations beyond pure financial aspects.

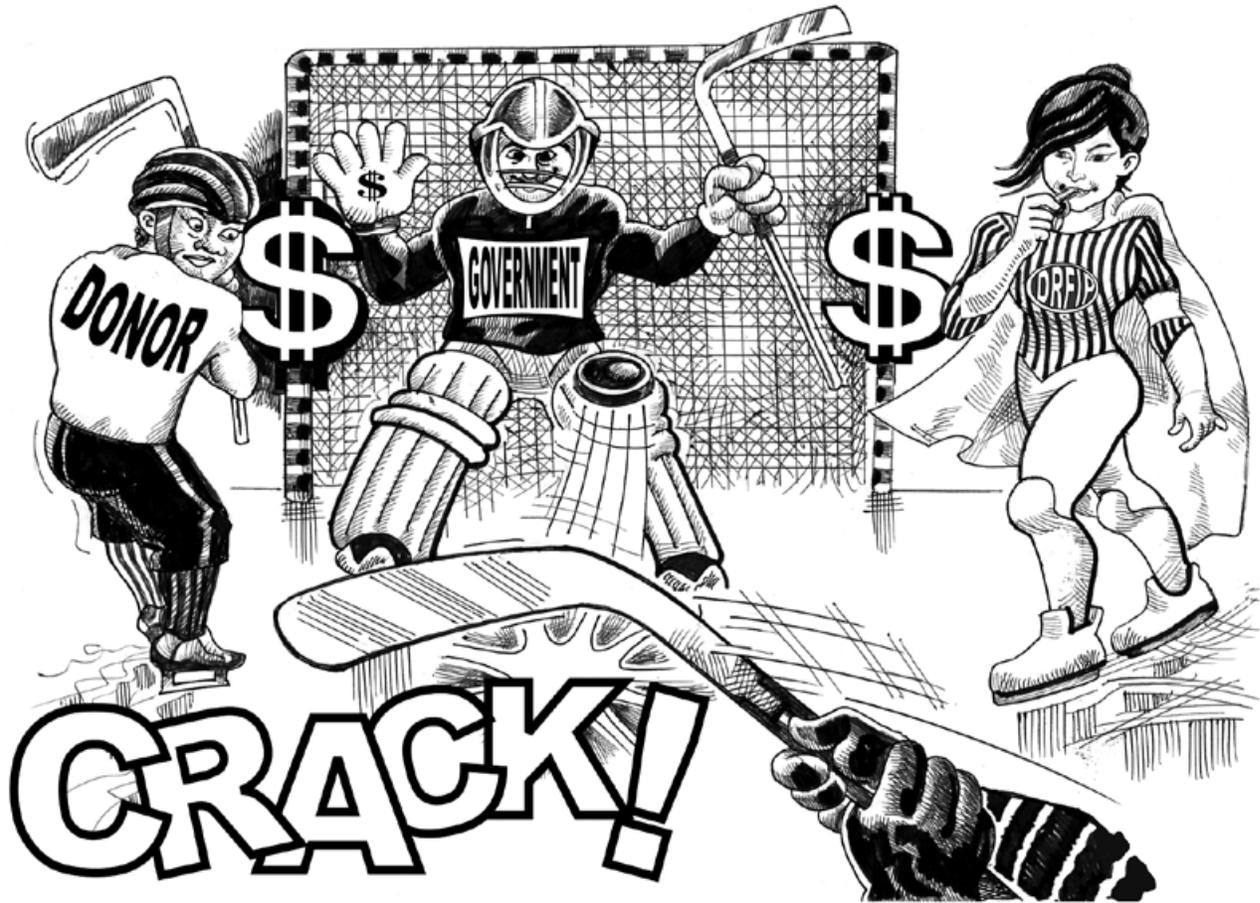


Success comes through team work...



# Pools require up-front payment of an insurance Premium, facilitating a shift toward proactive Risk management

**Catastrophe risk pools require participating countries to pay up front an insurance premium** that reflects actual risk exposure in exchange for the insurance coverage, thereby shifting payment so it takes place in predictable installments before disaster strikes. It may be challenging for countries that previously relied on donor support to start paying for climate and disaster risks with national resources through an insurance premium. However, moving in this direction, even partially, can provide the right incentives for proactive planning and risk-informed investments in risk reduction



Saving the situation with foresight...

# Pools can be sustainable only with more formal and predictable approaches to premium financing

One of the main challenges affecting the sustainability of sovereign catastrophe risk pools is a lack of certainty about payment of insurance premiums from year to year. By definition, insurance premiums present an up-front cost, which may not produce a financial return in the near (or even medium) term. Governments can face public and political pressure where payments for premiums on high-profile sovereign insurance do not yield a payout in the event of a disaster that does not meet the preagreed criteria for a payout. At the country level, allocating budget for the payment of premiums is generally not a permanent part of budgetary processes and the expenditure is still treated as atypical.

Concessional insurance (through targeted premium subsidies or concessional loans) can help countries secure premium financing for several years while they progressively include premiums as a budget item in their national budget. In addition, **building the capacity and awareness of decision makers** on the benefits of risk management for financial and humanitarian resilience can help increase ownership and commitment.



Succeeding in the long run...



These cartoons are based on the technical report entitled Sovereign Climate and Disaster Risk Pooling prepared by the World Bank Disaster Risk Financing and Insurance Program (DRFIP), drawing on inputs from internationally renowned experts, at the request of the Federal Ministry for Cooperation and Development of Germany (BMZ) to inform discussions on disaster risk financing and pooling with the G20 member countries.

The Disaster Risk Financing and Insurance Program (DRFIP), established in 2010, helps countries ensure that their populations are financially protected in the event of a natural disaster. Currently, DRFIP works in more than 60 countries and protects over 360 million people through World Bank contingent financing. A joint initiative of the World Bank Group's Finance and Markets Global Practice and the Global Facility for Disaster Reduction and Recovery (GFDRR), DRFIP partners with countries to develop and implement tailored financial protection strategies, which bring together sovereign disaster risk financing, agricultural insurance, property catastrophe risk insurance, and scalable social protection programs. These tools help to promote quicker and more resilient disaster response by national and local governments, homeowners, businesses, agricultural producers, and low-income populations.

More information: [www.worldbank.org/drfi](http://www.worldbank.org/drfi)

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These cartoons were prepared by Xtempo Communications, Chennai, India.