Building a Disaster Risk Insurance Programme and the role of Public Private Partnerships

Table - Top 2
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The lifecycle of a Disaster Risk Insurance Programme

	a	b	
1 **Product**	Strategy for the scheme - Product offering - beneficiary, assets and perils covered, coverage limits, premium assessment, and requirement to insure and take-up of coverage	Decision-makers	Table-Top 1 - Risk Modelling and Analysis
2 **Operational**	Premium collection, Underwriting and claims management	Risk management and transfer, including how to engage with and mobilise private capital	Table-Top 2 Design and Development
3 **Enabling the environment**	Financial relationship with government	Governance and oversight of scheme, and how the scheme can evolve over time	Table-Top 3 Underwriting and Claims Management

Design and Development

Key Table-Top Discussion Questions

1

Identify three key considerations about the product design critical for your country

2

What are the key operating decisions that are critical for design and development of Public-Private Insurance Partnership in property insurance?

3

What are key policy and institutional decisions for design and development of Public-Private Insurance Partnership in property insurance?

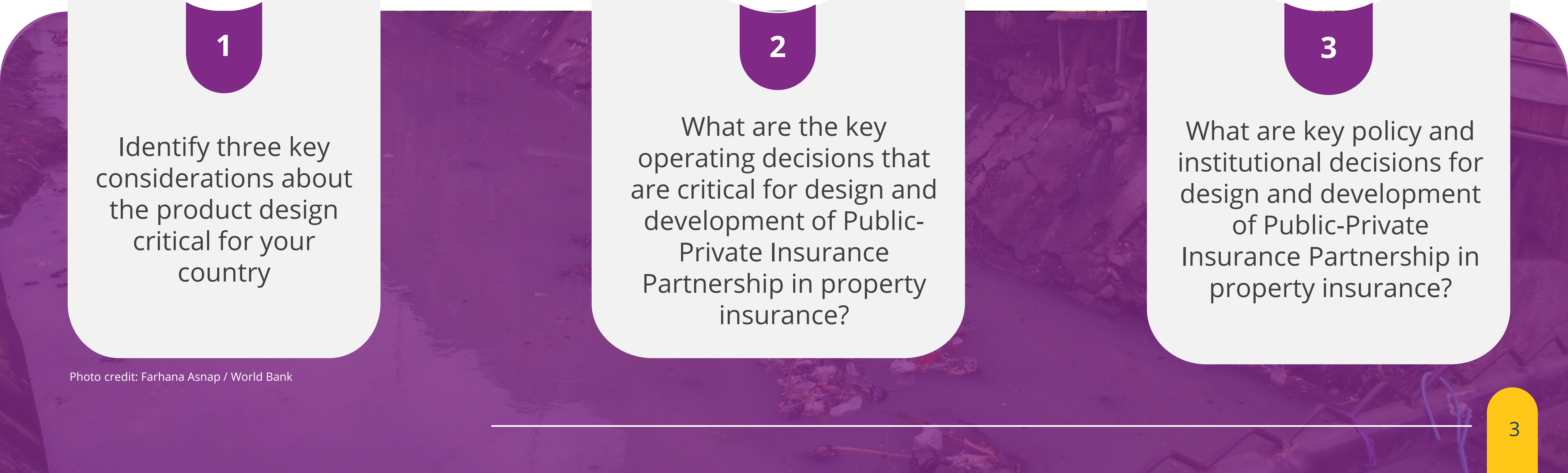

Photo credit: Farhana Asnap / World Bank

Product Development

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Product Requirements Strategy

Policy and Product

Policy Design

- Who do I want to be protected?
- Who are the beneficiaries?
- What are the Perils being insured against?

Policy and Product

- What is the legal and commercial construct?

Product Design

- What are the risks the Scheme is covering?
- What is the probable loss modelled for each peril?
- What is the worst case exposure scenario for the Scheme across all Perils?
- What long term risk measures are there to reduce risk of where to build and how to build?
- What are the Product options?
- What is the financial basis behind the Product Options?
- What is the Premium required to fund each option?
- What is the chosen Product and why?

Risk Financing Design

- What is the Risk Financing Strategy to support the chosen product?

Operating Model

Implement the Policy and Product Design

- How will the funds reach beneficiaries?
- How the Services will be delivered?
- Where and how is the Operating Model defined?
- What is the role the State Insurance Supervisor and where and how is it mandated?
- What is the Technical solution to enable implementation and how does it support entities?
- What is the Audit Programme and how does it operate?

Monitoring and Evaluation

Product Development – Design

Beneficiaries

Define the individuals, groups or corporates that would be protected by the scheme when they purchase products offered by the scheme and thus become insureds of the scheme.

Beneficiaries are those who are likely to suffer significant financial loss at the occurrence of an event and lack the means to compensate for that loss at the occurrence of an event resulting in a significant decrease in their quality of life, livelihood or ability to continue operating.

Perils Covered

Perils can be both natural and climate related.

Specific types of natural disaster or perils that are likely to result in financial losses and would be eligible for compensation under the scheme.

They are typically relatively low frequency, but high severity events that are otherwise unmanageable without risk transfer, but Parametric insurance which can cover more frequent and low severity events are growing particularly to protect farmers in developing countries where the impact of a drought/flood can lead to a humanitarian disaster.

Coverage Limits

The types of financial loss covered is dependent on the type of beneficiary but is normally commensurate with the cost of replacing the damaged asset limited to specified maximum amount (the Cap).

For individual homeowners and subsistence farmers this could be the loss or damage to dwellings, crops and/or livestock. For businesses and local and central governments this could include commercial property, utilities, public infrastructure and assets (hospitals and schools).

Certain losses may be excluded from the scheme, such as land reinstatement.

Scheme could set a minimum deductible amount to avoid very small claims to reduce administration and reinsurance costs.

Premium Assessment

Payable by beneficiaries to be insured under the products of the scheme and adjusted to ensure self sustainability of the scheme.

Requires a balance between what is required for the financial obligations of the scheme and ensure the products are available and affordable to those customers targeted by the scheme.

The premiums can be charged on attributable risk or a flat premium (solidarity) basis with the latter providing cross-subsidisation to those in higher risk areas.

Operating Model

Photo credit: Farhana Asnap / World Bank

Operating Model

Premium Collection

Who directly collects the Premium is normally driven by whoever distributes the policy.

Premium collection can either be direct or through a third party such as the private insurer on the basis of a legal agreement which would also detail the information that is to be shared between parties.

Claims Model

Can be resourced and managed in different ways: through in-house employees and contractors; outsourcing activities to the private sector, such as private insurers; hybrid model which splits activities between in-house and the private insurers.

Details of the claims management functions are covered under a separate Table-Top discussion.

It is important to minimise duplication in functions such as loss adjusting as availability of resources will be at a premium post disaster.

Public Relations and Education

At the initiation of the scheme, public relations and education programme is required to increase awareness of the availability of products from the scheme and to explain to potential customers the costs and benefits of such products.

Public education can also raise the awareness of the importance of insurance and the resilience measures individuals and organisations can take to mitigate their risk. (A simple example is removal of chimneys in high-risk earthquake areas)

Data Collection and Use of technology and Digitisation

The scheme should incorporate the collection of data from the insureds at the sale of products and the payment of claims and the use of technology and information systems to securely store and analyse such data.

Digital technologies enable the faster and simpler sharing of data which can benefit post event recovery and resilience decision making at local and national government.

All collection and use of data needs to comply with the relevant privacy laws.

Investment

The scheme should invest surplus funds to continue to grow the capital of the scheme while ensuring it is able to pay all valid claims quickly..

The investment strategy is complementary to the Risk Insurance strategy and should be based around the National governments risk appetite.

Institutional and Policy

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Institutional and Policy Considerations

Mandating to insure and take up

Can be Mandatory to ensure high take up of the scheme and accelerate long-term sustainability or Voluntary which tends to provide greater opportunity for the private market but result in lower insurance penetration.

Governance and legal

Schemes can have a variety of governance structures, with a combination of directors / commissioners appointed from government officials and the private sector, often sitting within public bodies or having a dedicated governing board.

Legal framework are critical: e.g., in Türkiye TCIP resources can be law be only used for payouts, reinsurance, administration costs, commission to the pool administrator, scientific studies, claims management, etc. Laws for enforcement are critical.

Legal structure can be non-for-profit or profit making

Day-to-day

Can be a dedicated company or a third-party operator.

In Turkey, when the TCIP was established, the government engaged Milli Reasürans as the operational manager of the scheme between 2000-2005.

Risk management

Risks within the scheme should be managed via a combination of risk retention and risk transfer mechanisms. Such mechanisms can include reserves for low intensity events, private capital through reinsurance and capital markets.

In New Zealand, Toka Tū Ake - Natural Hazards Commission entered the catastrophe bond market for the first time in 2023, to expand and diversify its sources for risk capital and to reduce reliance on government top-up.

Any risks that are not transferred or financed will ultimately remain with the government.

Government role

Schemes can be guaranteed by the government such that if the scheme does not have sufficient funds to make payouts the relevant government agree to top-up the schemes funding to ensure claims are paid. Government Guarantees are a strong signal the reinsurance market of the long-term solvency of the scheme.

Governments can fund the establishment and initial capital and operating costs of the scheme

To supervise, monitor the scheme and create adequate enabling environment

Risk management

No single Financial instrument can address all risks

Hazard Type	Financing instrument		
Low Frequency/ **High** Severity	Market-Based Instruments	**Risk Transfer**	Risk transfer for assets such as property insurance or agricultural insurance and risk transfer for budget management like parametric insurance, cat bonds/swaps
	Contingent Financing	**Contingent Credit**	Financial instruments that provide liquidity immediately after a shock
High Frequency/ **Low** Severity	Budgetary Instruments	**Budget Reserves/ Reallocations**	Reserve funds specifically designated for financing disaster related expenditures, general contingency budgets, or diverted spending from other programs

International Assistance (uncertain)

Three-Tiered Risk Layering Strategy for Government

Combining different perspectives

Regarding insurance, consumers are looking for…	From the government's perspective, catastrophe insurance should…	From the insurer's perspective, such insurance program should…
Highest possible pay-out after a disaster at the lowest possible product price.	Be sustainable and have low credit risk because insolvent insurers will not pay any claims.	Be able to avoid adverse selection, fraud and a high concentration of risk.
Fastest possible claims assessment.	Cover many households.	Be able to secure mass participation in the program and continuous growth.
Transparency of insurance pay-outs	Not represent high financial responsibilities to the government (with most programs across the world having some sort of government support to offer affordable and high-quality products).	Make a profit. Therefore an insurer should be able to charge actuarially sound insurance rates for the insurance policy that would cover administrative costs, the costs of capital and reinsurance, and at least allow for a small profit margin.

Key Decision Makers

Decision-makers	Role and Responsibilities	Constraints and Dependencies
Senior Government Minister, for example, Prime Minister or Minister of Finance, and their corresponding government departments (such as the Ministry of Finance or Treasury)	Mostly policy decision-making: Sponsors the broad design of the scheme and the government's financial relationship with the scheme and decides whether to submit the proposed scheme to the country's lawmakers	Requires approval of the scheme by Parliament or its equivalent before the scheme can be established at law
Parliament or its equivalent	Mostly policy decision-making: Enacts laws to establish the scheme	Requires laws for the proposed scheme to be submitted by the relevant government Minister for approval by Parliament or its equivalent - Parliament or its equivalent does not design the proposed scheme
Insurer / scheme, and its governing body	Mostly technical decision-making: Decides how the scheme will be operated and managed, including whether the scheme will transfer (some of) its risks to one or more third parties	Role is dependent on the establishment of the scheme by law, and is constrained by the laws of the scheme, including as enforced by the relevant regulator
Insurance sector regulator	Mostly technical decision-making: Regulates and enforces the law relating to the operation and management of the scheme	The regulator's scope of enforcement and powers are set by laws, and regulatory oversight and enforcement will require a close and transparent working relationship with the scheme
Insured	Unless the scheme is mandatory, decides whether to purchase the insurance products offered by the scheme and upon the occurrence of an event, makes claims against the scheme	Scheme products will need to be affordable to ensure uptake, irrespective of whether participation is mandatory or not. Affordability may be dependent on the scheme's financial relationship with the government, the scheme passing on risk to third parties and the scheme being managed in a financially efficient and prudent manner.