Southeast Asia Disaster Risk Insurance Facility

PROTECT THE GREATEST HOME OF ALL:

OUR COUNTRIES

SEADRIF is a regional platform to provide ASEAN countries with financial solutions and technical advice to increase their financial resilience to climate and disaster risks.
Information requirements for public asset disaster risk financing and insurance

Facilitator: Benedikt Signer

Speakers:
Dr. Nicola Ranger | Atty. Beng Palanca | James Allchorne | Djoko Trenggono
Objectives of the factsheets and webinar

- **Why** should governments develop a financial protection strategy for public assets?
- **When** can insurance be a good option for the financial protection of public assets?
- **Who** are the key stakeholders (both external and internal) that play roles in each stage of the insurance development process?
- **What** are the most important step-by-step considerations involved in the development of a strategy for public asset insurance?

**INTENDED OUTCOME:**
Government officials to develop strong understanding of the steps required to design, develop, deliver and operate effective financial protection of public assets, particularly through risk transfer and insurance.
Structure of Webinars

- 90 minute webinar for each factsheet
- Different guest speakers
- Live polls: Please participate
- Poll results will be included in final outputs
- Please share questions via Q&A function
Roles and responsibilities for the government officials within an internal insurance program, the associated stakeholders, including auditing, compliance and governance, supervisory.

Multi year aspects such as renewals and re-assessment of exposures.

Review of procurement considerations

Dealing with claims management

Incorporating innovations and technologies

FACTSHEETS 7 and 8

Roles and options available to construction of cost-effective insurance, including common insurance structures and case studies, their pros and cons against considerations of budgets, risk appetites, and government priorities

Introduction of pooling and mutualization of large scale public assets insurance programs

Insurance/reinsurance concepts of retention, deductible and exclusion

FACTSHEETS 5 and 6

Development of an implementation roadmap for a public asset financial protection program

How governments can agree objectives and build consensus around priorities

How to develop internal governance and oversight functions, and ownership at each level of the insurance program

How risks are allocated across asset owners and operators

FACTSHEETS 1 and 2

The importance and development of Public Assets Registries, and associated Enterprise Asset Management systems.

How to assess and quantify asset exposure, sources of data, requirements for insurance transactions

Introductions to the use of catastrophe analytics, burning cost / technical and market rates, tariff structures, risk based pricing methods, and underwriting.

FACTSHEETS 3 and 4

Overview of the Knowledge Series

Operations and Management

Policy, Institutions and Regulations

Access to domestic and international markets

Data, Information and Analytics

Operations and Management

Policy, Institutions and Regulations

Access to domestic and international markets

Data, Information and Analytics

Operations and Management

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Access to domestic and international markets

Data, Information and Analytics
Use of data throughout the stages of public assets risk financing programs

Dr. Nicola Ranger
Senior Consultant, World Bank Group
Stages of Public Asset Risk Financing Programs

**Design**
- Location of main assets
- Types of buildings

**Development**
- Building design
- Business continuity planning
- Protective equipment
- Building materials
- Contents

**Delivery**
- Public asset registries
- Catastrophe models

**Renewal**
- Change

**What types of data?**
- Government stakeholders
- Risk modelers
- Brokers or Underwriters

**Who uses the data?**
- Risk modelers
- Brokers or Underwriters

**Tools and analytics**
- Public asset registries
- Catastrophe models
Example: FONDEN in Mexico

Reconstruction cost incurred on calendar year (in US$ million)

- Share of state governments
- Share of federal government

Source: Authors, from FONDEN (2011)
Example: Catastrophe Risk Modeling in the Philippines

Modeled Loss in PHP (billions) Manila

<table>
<thead>
<tr>
<th>Scenario</th>
<th>Typhoon</th>
</tr>
</thead>
<tbody>
<tr>
<td>AAL</td>
<td>57.9</td>
</tr>
<tr>
<td>RP10</td>
<td>168.6</td>
</tr>
<tr>
<td>RP20</td>
<td>295.8</td>
</tr>
<tr>
<td>RP50</td>
<td>365.2</td>
</tr>
<tr>
<td>PR100</td>
<td>514.5</td>
</tr>
</tbody>
</table>

Typhoon Emergency Losses
1-in-100 Year Loss (PHP)
- < 100M
- 100M to 250M
- 250M to 500M
- 500M to 1,000M
- 1,000M to 2,500M
- 2,500M to 5,000M
- > 5,000M

SEADRIF
SOUTHEAST ASIA CATASTROPHE RISK INSURANCE FACILITY
Data Requirements per Stage

### Design
- Detailed public asset register
- Catastrophe modelling analysis
- Analysis of government natural disaster contingent liabilities
- Analysis of legislative and regulatory constraints/dependencies
- Analysis of approaches adopted by other jurisdictions

### Development
- Up to date detailed public asset register
- Up to date catastrophe modelling analysis to ensure all relevant agencies and assets are covered
- Engineering/resilience surveys for key/critical assets
- Summaries of asset risk management practices
- Summaries of improved resilience investments
- Summaries of planned infrastructure/asset upgrades
- Records of past natural disaster claims/losses

### Delivery
- Detailed public asset register
- Catastrophe modelling analysis
- Current contingent funding arrangements
- Current legislative and regulatory constraints/dependencies
- Comparisons with other jurisdictions

### Renewal
- Historical and financial impacts of natural disasters on public assets – historical, financial, social and economic
- Current contingent funding arrangements
- Comparisons with other jurisdictions

### Data Requirements per Stage
- Engineering/resilience surveys for key/critical assets
- Summaries of asset risk management practices
- Summaries of planned infrastructure/asset upgrades
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For the next few minutes…

Four quick questions

30 seconds to respond to each question!

PLEASE GET READY!
Which of these assets do you think will have a higher exposure to natural disasters or have a higher financial impact?

- A power plant close to a river
- A children library 100m above sea level
Which of these assets do you think will have a higher exposure to natural disasters or have a higher financial impact?

- A power plant close to a river at risk of flash flooding
- A bridge over a floodplain
- A desalination plant close to a sea at risk of typhoons
Which of these information below do you think is the **least useful** for a broker/underwriter when **developing** an insurance offer?

- Location of assets
- Construction materials of assets
- Age of assets
- Proximity of assets to trees
- Water consumption of assets
Which of these information below do you think is the **least useful** for a broker/underwriter when **renewing** an insurance offer?

<table>
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<tr>
<td>Refurbishment and renovation of the asset</td>
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<tr>
<td>Recent disasters and damage suffered</td>
</tr>
<tr>
<td>Change of the use of asset</td>
</tr>
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<td>Replacement of light bulbs in the asset</td>
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- Replacement of light bulbs in the asset
- Change of management team
Perspectives from the Philippines

Attorney Beng Palanca
Former Senior Insurance Executive, Philippines & Senior Consultant, World Bank Group
Perspectives from the Philippines

What is your experience with data to insure public assets? What challenges have you faced? What were your priorities?

How did you go about consulting relevant government departments to collect data and what challenges did you have to overcome?

How did the information requirements, including asset data but also loss data and risk models, evolve over time?
Perspectives from the Philippines

Atty. Beng V. Palanca
2 July 2020
Government Service Insurance System (GSIS) as the insurer of government properties and interests

Republic Act No. 656 – (16 June 1951) – Property Insurance Law

Established a Property Insurance Fund (now known as the General Insurance Fund), administered by the Government Service Insurance System (GSIS), in order to indemnify or compensate

- Insured: Government – national government agencies, local government units and government corporations
- Properties insured: Properties and assets where government has insurable interest
- Perils: Fire, Earthquake, Storm and other casualty
- Insurance lines offered: Property, Motor, Marine, Engineering, Surety, Personal Accident, Aviation, Liability
Challenges

1. **Uninsured**
   
   **Issues:** Not updated inventory of properties of government
   Limited understanding of the risks and the effectiveness of insurance by government agencies

   **Action taken:** Meetings with nonlife insurance staff in branch offices
   Workshops/seminars with uninsured agencies
   Commission on Audit circulars on inventory and insurance
   Administrative Order No. 4 – Inter agency committee on government property insurance

2. **Underinsured**
   
   **Issue:** Valuation of government assets – use of book value as sum insured

   **Action taken:** Commission on Audit circulars on appraisal of assets

3. **Adequate Rate/Pricing**
   
   **Issue:** Condition of risks/properties
   Database of losses (historical losses)

   **Action taken:** Risk surveys with recommendation on loss prevention measures
   Revisited claim files and prepared summary of claims
   Use of geocoding
Recent issuances to address the challenges:

Administrative Order No. 4 (7 August 2017)
Created an Inter-agency Committee with GSIS as member, to formulate necessary policies, rules and regulations to ensure that key properties, assets and other insurable interests of government are adequately and comprehensively insured.

Commission on Audit Circular No. 2018-002 (31 May 2018)
Prescribed the Property Inventory Form to be submitted by all government agencies as basis for assessment of insurance coverage.

Required information:

1. Type of property whether building, motor vehicle, machinery and equipment, or others
2. Description such as classification of construction, make, model
3. Nature of occupancy for buildings
4. Location
5. Date of construction, acquisition
6. Valuation – acquisition cost, appraised value and date of appraisal
Other government efforts to improve protection of government assets against natural catastrophe risks

1. Parametric Insurance (July 2017- July 2018; December 2018 December 2019)

2. National Indemnity Insurance Program (NIIP) for school buildings of the Department of Education and roads and bridges of the Department of Public Works and Highways – work in progress
Perspectives from an Underwriter

James Allchorne
Underwriter, London Insurance Market
W**hat** data does an underwriter expect in terms of data for indemnity public assets insurance? *What* are the minimum requirements? *What* happens if data is missing or lower quality?

**How** do you use this data to make decisions about accepting and pricing risk?

**How** do you work with clients to improve data?

**Where** does catastrophe modeling come in?

Is there any other type of client information that adds value to your considerations?
Valuation methodology
- Basis of reinstatement: replacement cost value (RCV) versus Actual Cash Value (ACV)
- Evidence that value per square foot is adequate for occupancy type and in line with current building code costs.
- Evidence that inflation is being considered year on year

Schedule of values
- Location Name
- Each location geocoded to street address (at least 90% of schedule)
- Total Insured Value at each location split at high granularity (i.e. physical property, contents, stock, hardware/software, fine art, business interruption)
- Occupancy at each location
- Number of Buildings
- Primary modifiers to include construction, year asset built and number of stories of the building
- Square Footage of Location

Loss experience
- Date of Loss
- Cause of Loss (Peril)
- Location of Loss
- Gross total incurred loss to asset
- Deductible applicable to loss
- Net loss payable by insurers
- Status of Claim (open/closed)
- 5-year average claim experience by year

Schedule of values
- Major Renovation Information
- Protection details: sprinkler systems, security (Alarms, Security Staff etc.), other additional protections
- Basement/Parking Information
- Catastrophe Zone of each location (For Flood, Earthquake and Typhoon)
- Secondary Modifiers collated from building diagrams. These may include EQ resiliency such as base isolation, cladding type, foundation information, pounding, bracing.

Loss experience
- Detailed description of loss outlining sequence of events (generally only necessary for meaningful loss amounts and not small losses)
- Mitigation steps taken by client to prevent future similar losses.

Valuation methodology
- Appointment of professional appraisal firm to value all assets on the schedule on a rolling 3-5-year basis.
Building
The World Bank Group

Street, ZIP/Postcode
High Street NW DC 20433

District
Foggy Bottom

City
Washington DC

State/Province
Washington DC

Country
United States of America

Lower resolution | Lower overall confidence | Higher uncertainties on risk profile
Perspectives from Indonesia

Pak Djoko Trenggono
Former COO
Perspectives from Indonesia

What have been your experiences in putting in place systems to support public assets insurance?

On claims management, what are common challenges in terms of data quality and what actions can governments take ahead of time to ensure this process is as smooth as possible?
COMMON ISSUES IN RESPECT OF DATA QUALITY OF INSURANCE FROM CLAIMS PERSPECTIVE

If the quality of insured data does not meet the insurance requirements, the following claims situation could happen:

1. **Delay in Claims Process and Settlement**
   - Unclear or misdescription of the location of the insured object (for instance, machinery located in building A but written in building B)
   - Unclear or misdescription of the insured object (for instance, its serial number or type)
   - Incomplete supporting claims document, such as the unavailability of the design document of the damaged/destroyed building or no certification document for valuable items.

2. **Inadequate Claims Settlement Amount**
   - The sum insured of the insured object is below its actual value → under-insurance condition whereby the claims payment will be made on a pro-rata /average basis.
   - The sum insured of the insured object is above its actual value → over-insurance condition whereby the insured would suffer from over payment of premium.
   - The insured item that is to be specified, usually valuable ones, unintentionally be put as unspecified item → payment of claim will be capped as per limit of unspecified item (for instance: computer/laptop, handphone, camera, jewelry)
   - The insured item is not updated (laptop, handphone, camera) → claims will be deducted by betterment factor.

3. **Claims Rejection & Dispute**
   - Unclear or misdescription of the location of the insured object → misrepresentation of fact
   - Unclear or misdescription of the insured object → misrepresentation of fact
   - Alteration of the insured object (usually building) which is not informed to the Insurer, particularly if the alteration is increasing the risk, for instance from one storey to two storeys
   - Alteration of the function of the insured object (for instance, building) i.e from office function to become a warehouse
   - Non-disclosure of previous loss experience, eventhough this is unintentionally made.
   - The inadequate claims settlement could also create a dispute between the Insured and the Insurer.
SOME RECOMMENDATIONS:

1. Be clear and correct when making description of the insured item/object, usually proposal form will guide the Insured to fill in the data as per requirement of the insurance company.
2. Keep trying to update the Underwriter /Insurer of any change or alteration of the insured object, including its function particularly if the risk related to the insured object would increase.
3. Keep trying to update the underwriter /Insurer when changing the insured item, such as laptop, camera or mobile phone or other electronics with the new model.
4. Be transparent when applying for insurance coverage, including previous loss experience, if any.
5. Be prepared to keep the supporting data of the insured object /item, particularly the valuable ones.
6. Attach an ‘Average Relief Clause’ to the policy to minimise or reduce the risk of under-insurance.
7. Attach an ‘Error and Omission Clause’ to the policy to minimise the risk of misdescription of the insured item /object.
8. Attach an ‘Alteration Clause’ to the policy to cover alteration of insured assets that could increase the risk → usually will be charged additional premium.
Questions and Answers

USE THE Q&A FUNCTION
Thank you
Stages of Public Asset Risk Financing Programs

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