

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



Poll results will be included in final outputs



Live polls: Please participate



Please share questions via Q&A function



Overview of the Knowledge Series

- O 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
- O Dealing with claims management
- Incorporating innovations and technologies

FACTSHEETS 7 and 8

- Roles and options available to construction of cost-effective insurance, including common insurar 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

Operations and Management

Access to domestic and international markets

Policy, Institutions and Regulations

Data, Information and Analytics

- O Development of an implementation roadmap for a public asset financial protection program
- O How governments can agree objectives and build consensus around priorities
- O How to develop internal governance and oversight functions, and ownership at each level of the insurance program
- O 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 5 and 6



FACTSHEETS 3 and 4

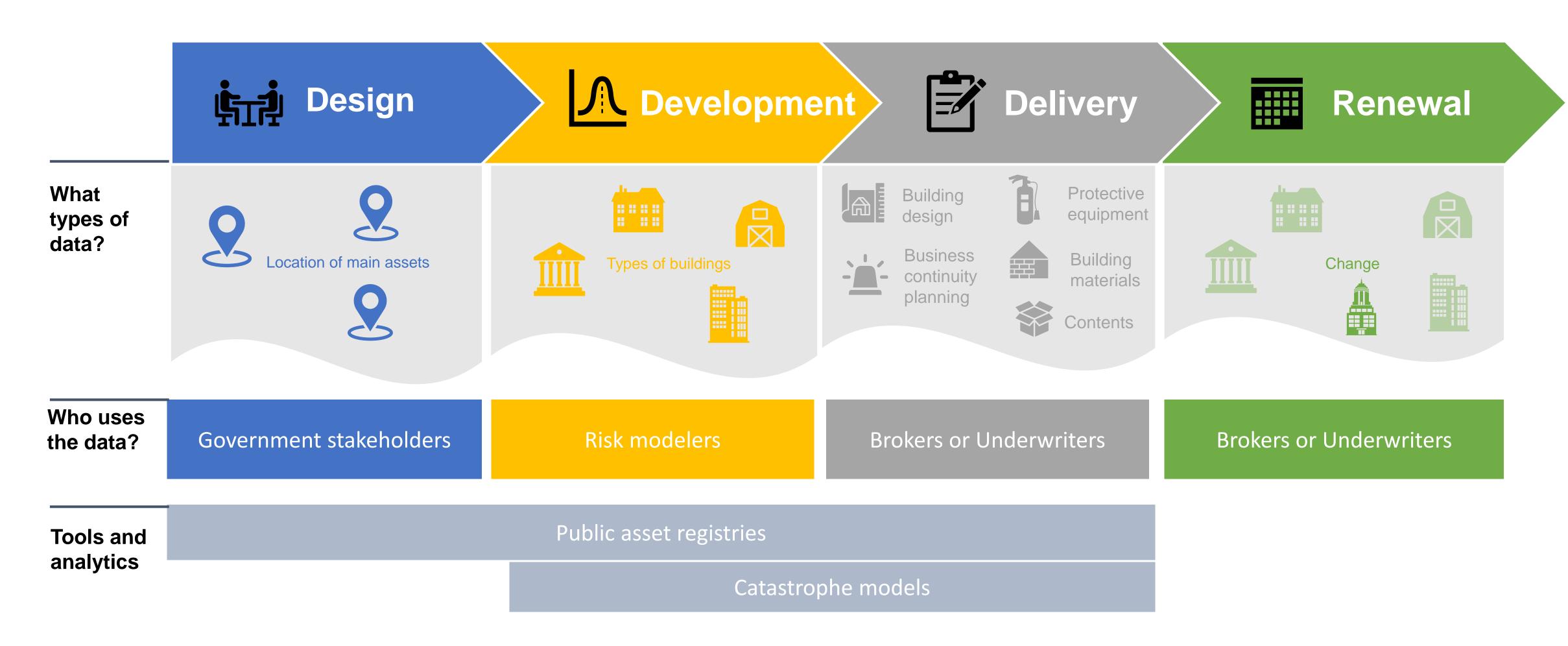
Use of data throughout the stages of public assets risk financing programs

Dr. Nicola Ranger

Senior Consultant, World Bank Group



Stages of Public Asset Risk Financing Programs



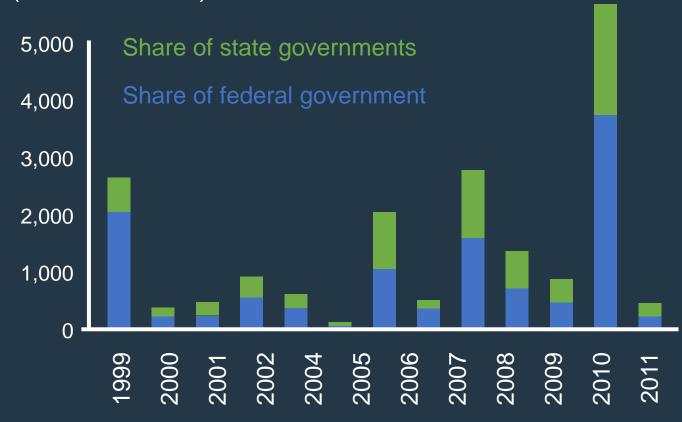






Example: FONDEN in Mexico

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



Source: Authors, from FONDEN (2011)







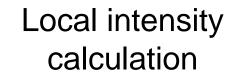
Hazard model

Engineering

Financial









Exposure data

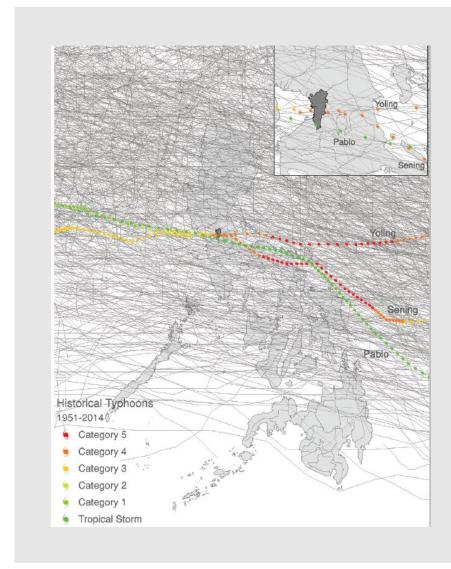


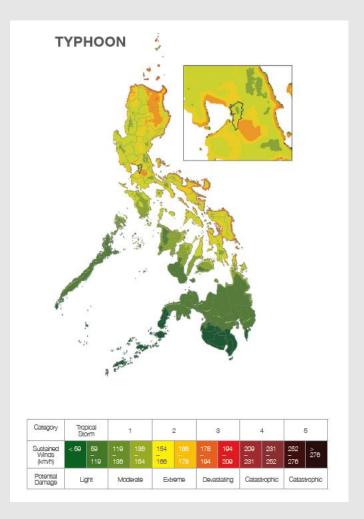
Damage estimation



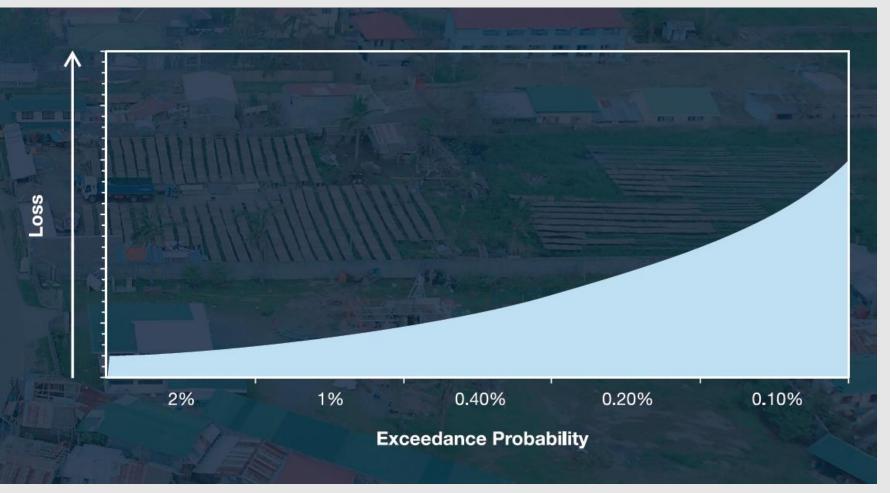
Insured loss calculation











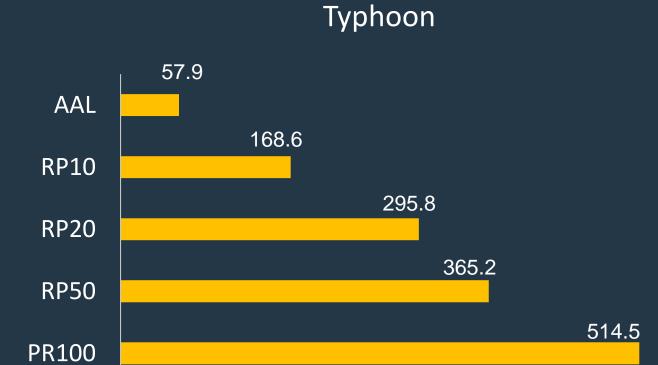


Development

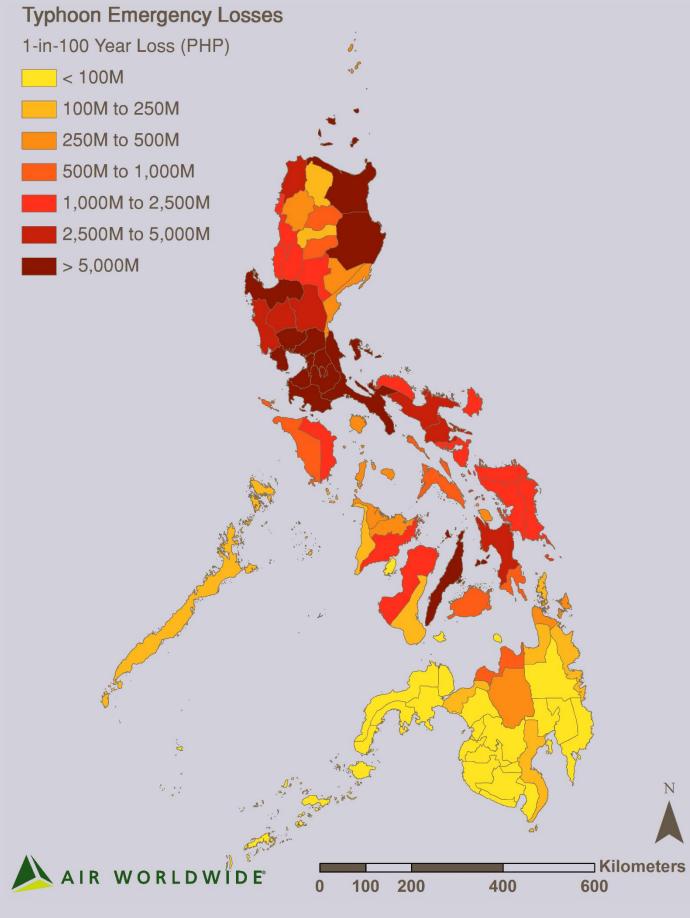


Example: Catastrophe Risk Modeling in the Philippines

Modeled Loss in PHP (billions) Manila









Data Requirements per Stage



- Historical and financial Impacts of natural disasters on public assets – historical, financial, social and economic
- Current contingent funding arrangements
- Current legislative and regulatory constraints/dependencies
- Comparisons with other jurisdictions



- Detailed public asset register
- Catastrophe modelling analysis
- Engineering/resilience surveys for key/critical assets
- Summaries of asset risk management practices
- Summaries of planned infrastructure/asset upgrades
- Records of past natural disaster claims/losses

Design

(less detail)

Development

(more detail)

Delivery

(details to meet private sector needs)

Renewal

(ongoing data development and QM)

- 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



- 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







SNAP POLLS

For the next few minutes...

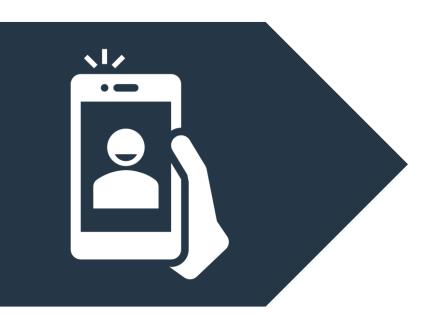
Four quick questions



30 seconds to respond to each question!

PLEASE GET READY!





SNAP POLL
(1)

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





SNAP POLL
(2)

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





SNAP POLL
(3)

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





SNAP POLL
(4)

Which of these information below do you think is the **least useful** for a broker/underwriter when **renewing** an insurance offer?

- Refurbishment and renovation of the asset
- Recent disasters and damage suffered
- Change of the use of asset
- Replacement of light bulbs in the asset
- Change of management team



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

SNAP POLL (1)



- 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

SNAP POLL (2)





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

SNAP POLL (3)



renewing an insurance offer?

- Refurbishment and renovation of the asset
- Recent disasters and damage suffered
- Change of the use of asset
- Replacement of light bulbs in the asset
- Change of management team

SNAP POLL (4)





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)
- 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



Perspectives from an Underwriter

What 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?





Minimum standard

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

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

- 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

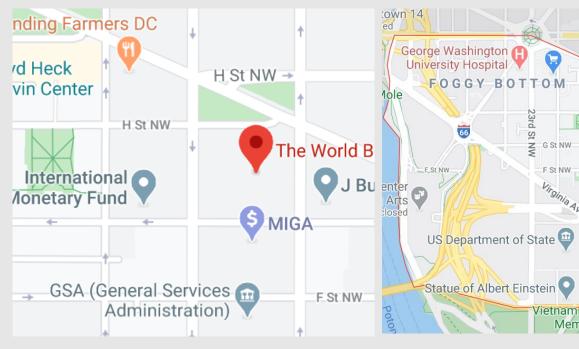
 Appointment of professional appraisal firm to value all assets on the schedule on a rolling 3-5-year basis.

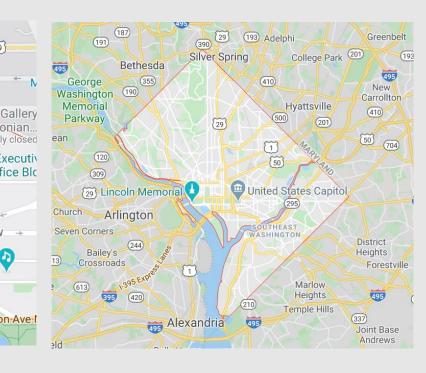


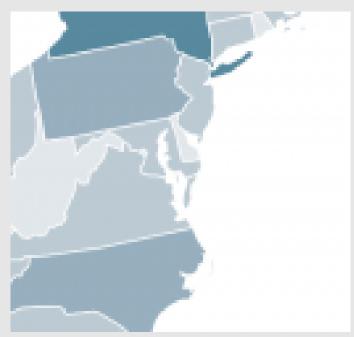
High Quality

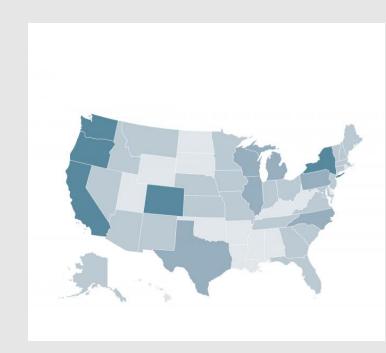












Building
The World
Bank Group

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.

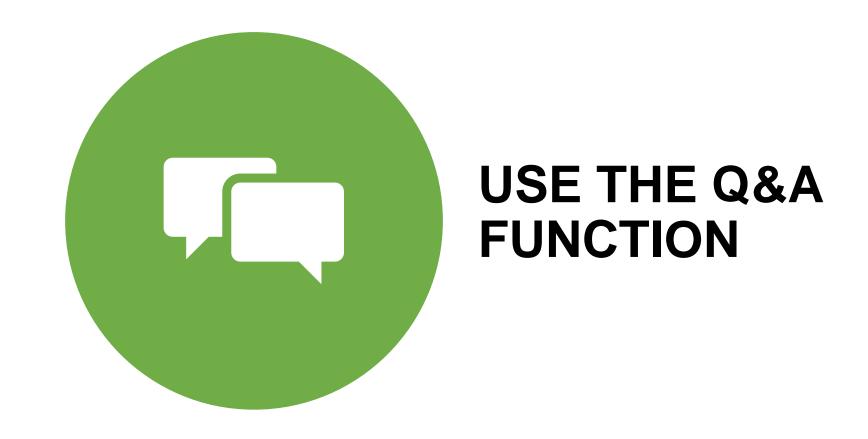


SOME RECOMMENDATIONS:

- 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 Ommission 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







Stages of Public Asset Risk Financing Programs



Design





Delivery



Renewal







- Historical and financial Impacts of natural disasters on public assets – historical, financial, social and economic
- Current contingent funding arrangements
- Current legislative and regulatory constraints/dependencies
- Comparisons with other jurisdictions



- 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



Building design

Business

planning



Protective equipment



Building materials



Contents



- Detailed public asset register
- Catastrophe modelling analysis
- Engineering/resilience surveys for key/critical assets
- Summaries of asset risk management practices
- Summaries of planned infrastructure/asset upgrades
- Records of past natural disaster claims/losses

- 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