

Knowledge Exchange Series on Building Sovereign Financial Resilience in Middle Income Countries

Data and Information for Sovereign Disaster Risk Financing

February 10, 2022

**Disaster Risk Financing
& Insurance Program**



Schweizerische Eidgenossenschaft
Confédération suisse
Confederazione Svizzera
Confederaziun svizra

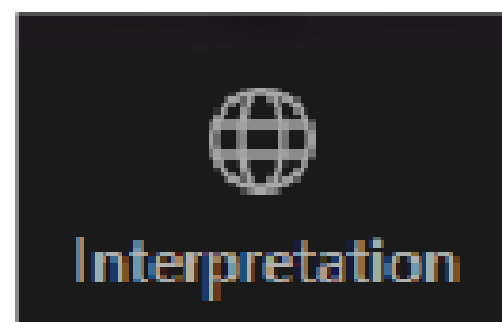
Swiss Confederation

Federal Department of Economic Affairs,
Education and Research EAER
State Secretariat for Economic Affairs SECO

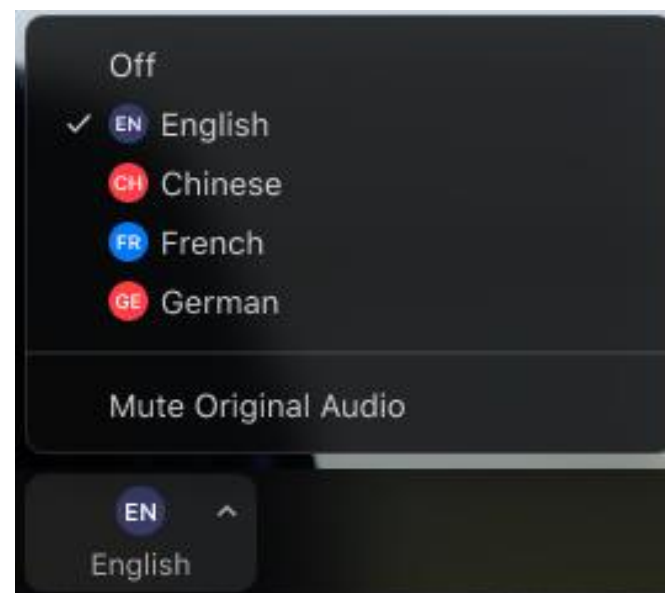
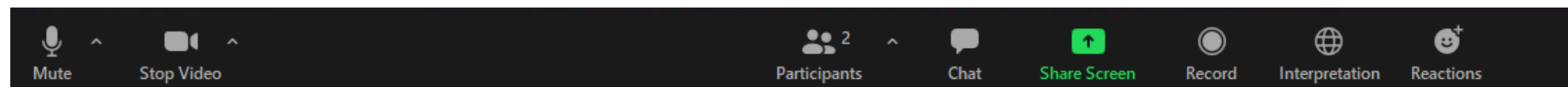


Simultaneous Interpretations

How to listen to Albanian, English, and French



Step 1. In your meeting/webinar controls, click Interpretation



Step 2. Click the language that you would like to hear.

Additional Step - (Optional) To hear the interpreted language only, click **Mute Original Audio**.





Opening Remarks

Djibrilla Adamou Issa

Practice Manager, Finance, Competitiveness & Innovation (FCI), Middle East North Africa (MENA), World Bank Group (WBG)

Overview

Middle-income countries face fiscal challenges in effectively responding to disasters, with many governments primarily relying on (short term) international support to fund disaster response.

Since 2012, Switzerland's State Secretariat for Economic Affairs (SECO) and the World Bank's Disaster Risk Financing and Insurance Program (DRFIP) have developed a joint program to support middle-income countries (MICs) in building their financial resilience against natural disasters. The Sovereign Disaster Risk Financing and Insurance Program for Middle-Income Countries (the Program) is one component of a broader WB-SECO partnership on fiscal risk management for MICs.

This webinar series, as part of the Program, aims to:
assist governments with developing and implementing more effective and cost-efficient financial protection strategies to better manage government disaster related contingent liabilities; and bring countries together to share knowledge, experiences and good practices on disaster risk financing.

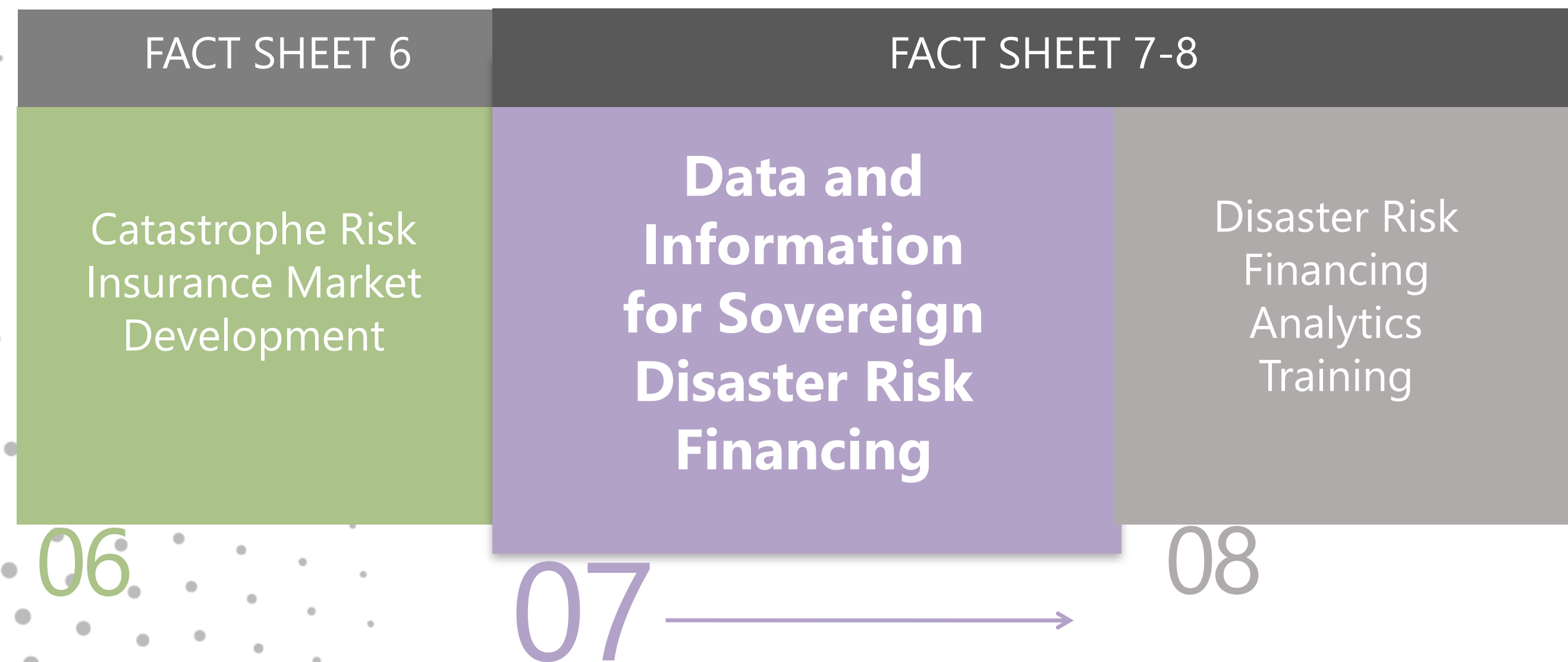
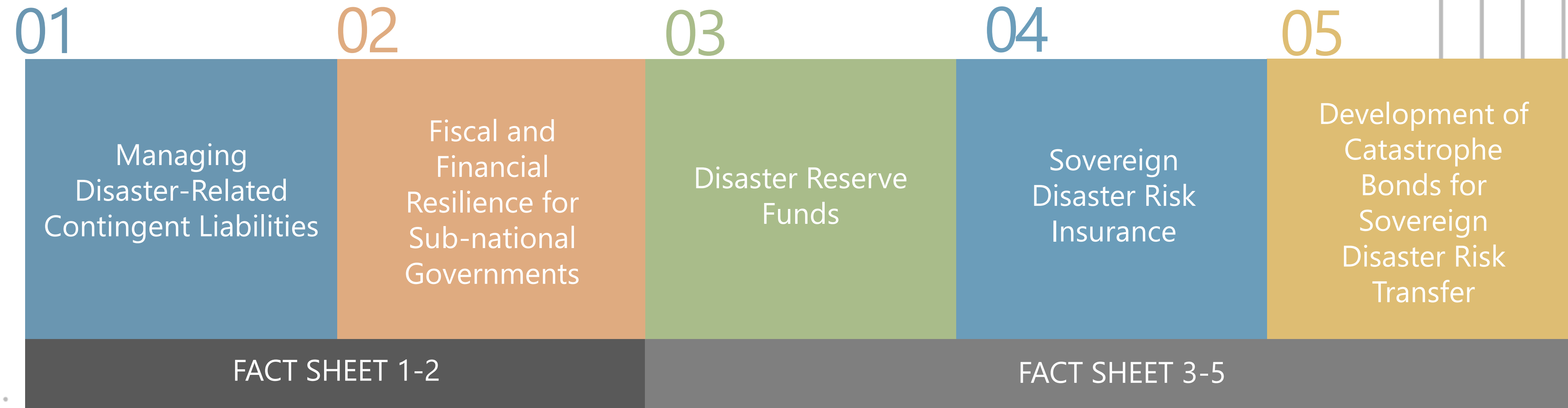




Webinar Series

- 1-2 Policies and frameworks for managing disaster related contingent liabilities**
Webinar 1: Managing disaster related contingent liabilities
Webinar 2: Fiscal & financial resilience for subnational governments
- 3-5 Instruments for financial management of disasters**
Webinar 3: Disaster reserve funds
Webinar 4: Sovereign disaster risk insurance
Webinar 5: Development of Catastrophe Bonds for Sovereign Disaster Risk Transfer
- 6 Market development for disaster risks**
Webinar 6: Catastrophe risk insurance market development
- 7-8 Data and Information for sovereign risk financing**
Webinar 7: Data and information for sovereign DRF
Webinar 8: DRF analytics training

Next Webinar



Structure of Webinars



Total of 8 Fact Sheets & 8 webinars



Different guest speakers



Live audience polls: Please participate



Q&A: Please share your questions via chat box (If possible, please indicate which speaker(s) to address your question(s))



Simultaneous interpretation:
Albanian, English, and French
Please be patient with interpreters
when lag time occurs!



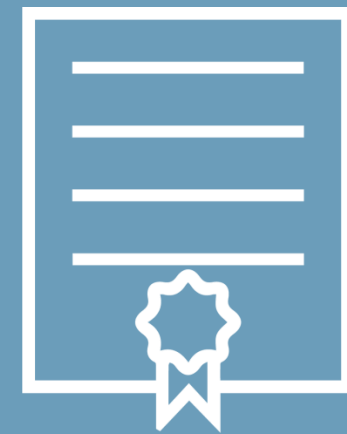
Certificate of Participation

Certificate of Participation

Participants will have an opportunity to obtain certificate(s) on successful completion of following criteria:



Certificate of Participation: Participants need to attend 4 out of 5 webinars and complete a short survey



Certificate of Completion: Participants need to attend 7 out of 8 webinars and complete a short survey

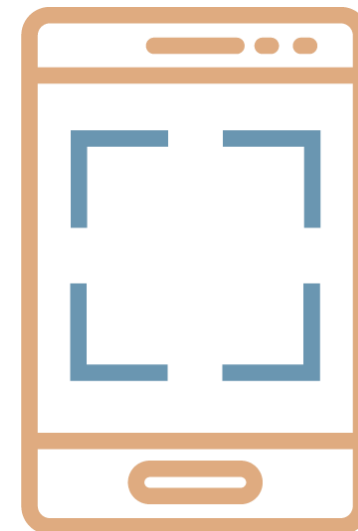


Word Cloud : Where are you currently based?



Option 01

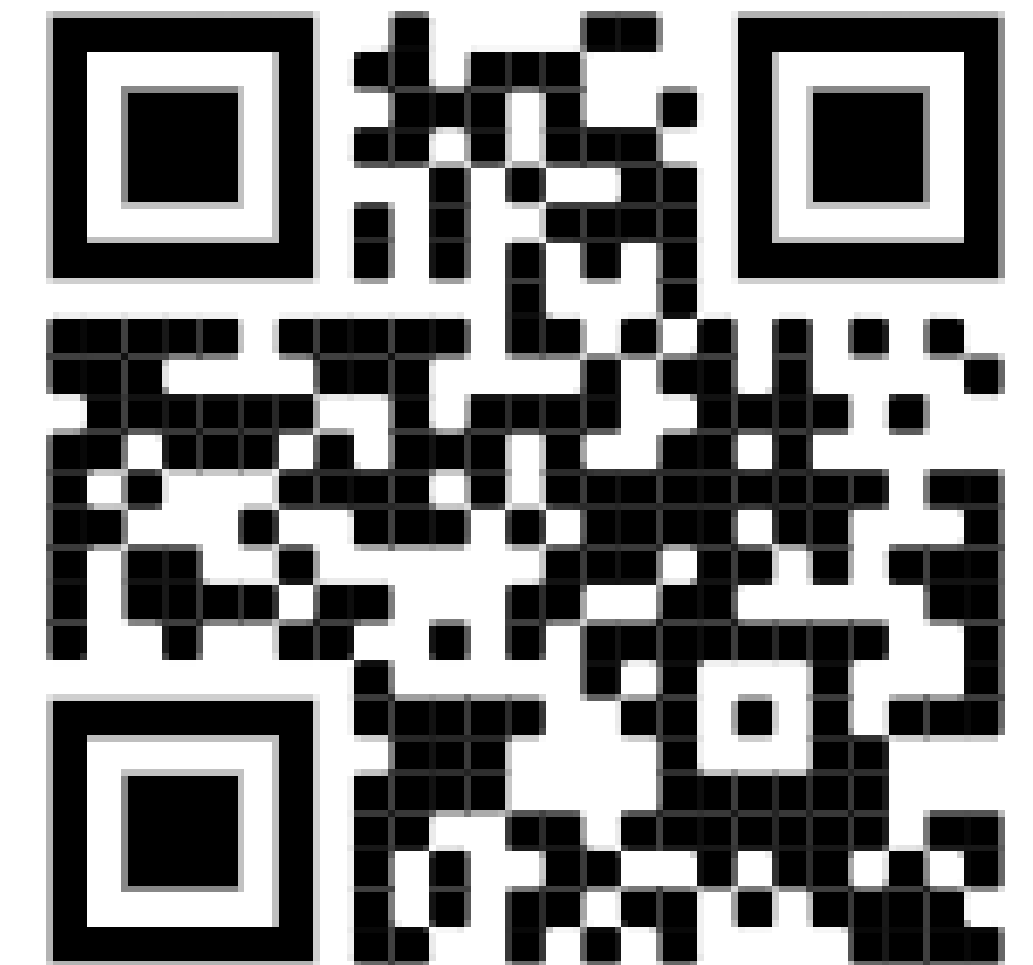
Go to www.menti.com



Option 02

Scan the QR Code →

Use Code: 7506 3823



Poll 1 : Recap

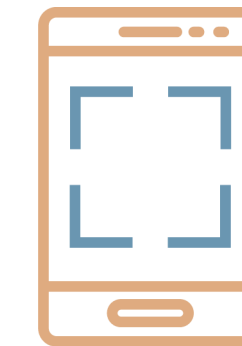
What was the last Webinar about?

- Catastrophe insurance and its role after disasters
- Key considerations in implementation of catastrophe insurance
- I did not attend the previous webinar – this is my first time
- I don't remember



Option 01 –

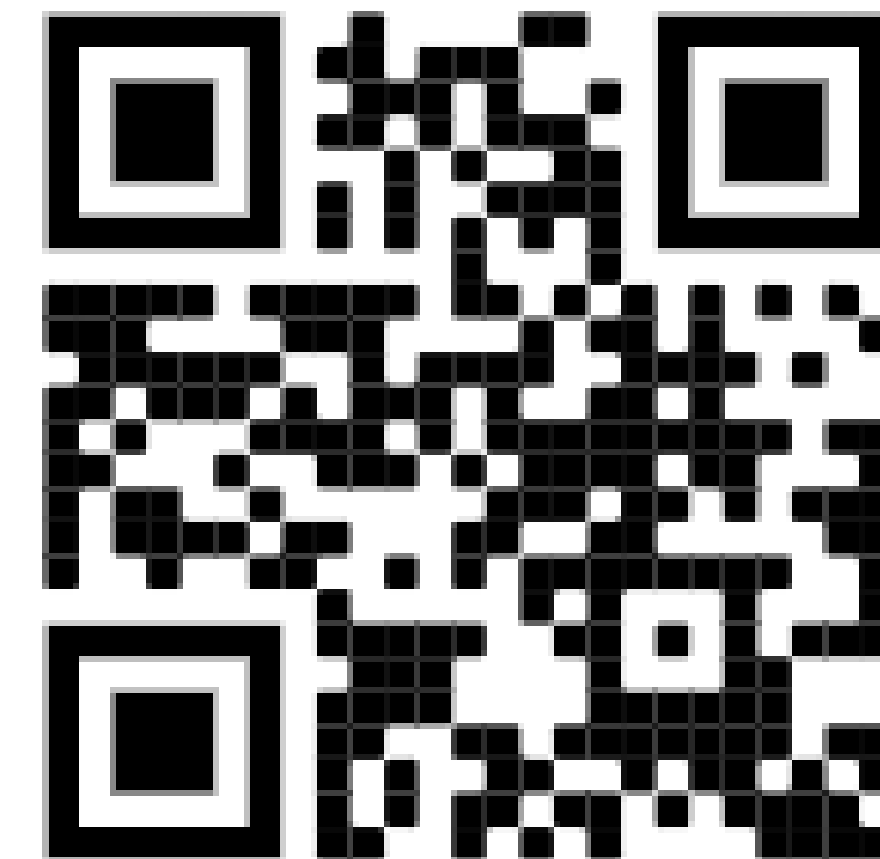
Go to www.menti.com



Option 02 –

Scan the QR Code

Use Code: 7506 3823



Data and Information for Sovereign Disaster Risk Financing

Framing Presentation

Antoine Bavandi

Senior Financial Sector Specialist, FCI, Crisis
and Disaster Risk Finance (CDRF), WBG

**Disaster Risk Financing
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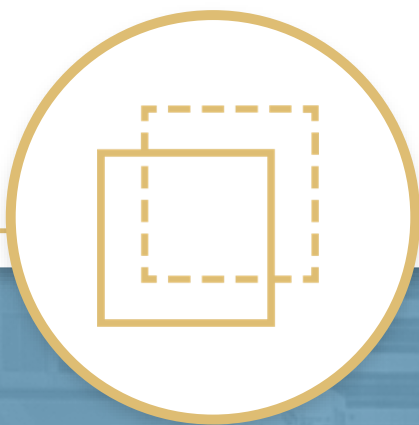


Why Risk Data & Analytics?

Interpret data & understand fiscal/financial exposure



Transparent & open decision-making process



Appraise, evaluate & monitor DRF decisions (evidence-based and value-for-money)



Communication tool to gain common understanding amongst different stakeholders



DRF analytics empowers stakeholders to take risk-informed financial protection decisions, based on sound financial and economic analyses

Answering questions such as:

1

Should we seek to establish a line of credit, which can immediately be drawn upon if a disaster were to occur?

2

How can we evaluate proposals for risk transfer products such as disaster insurance or catastrophe bonds?

3

How do I estimate my fiscal exposure in the event of a disaster?

4

Should we set aside funds in a reserve fund, and how large should this reserve fund be?

5

What is the financial cost of scaling up an existing social protection program?

Data



Risk/Loss



Macro-economic

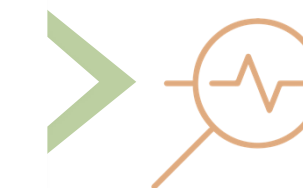


Fiscal/Financial

Analytics



Financial capacity building tools



Financial impact analysis



Economic, fiscal evaluation

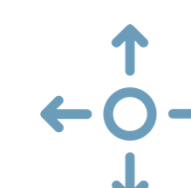
Information



For decision making

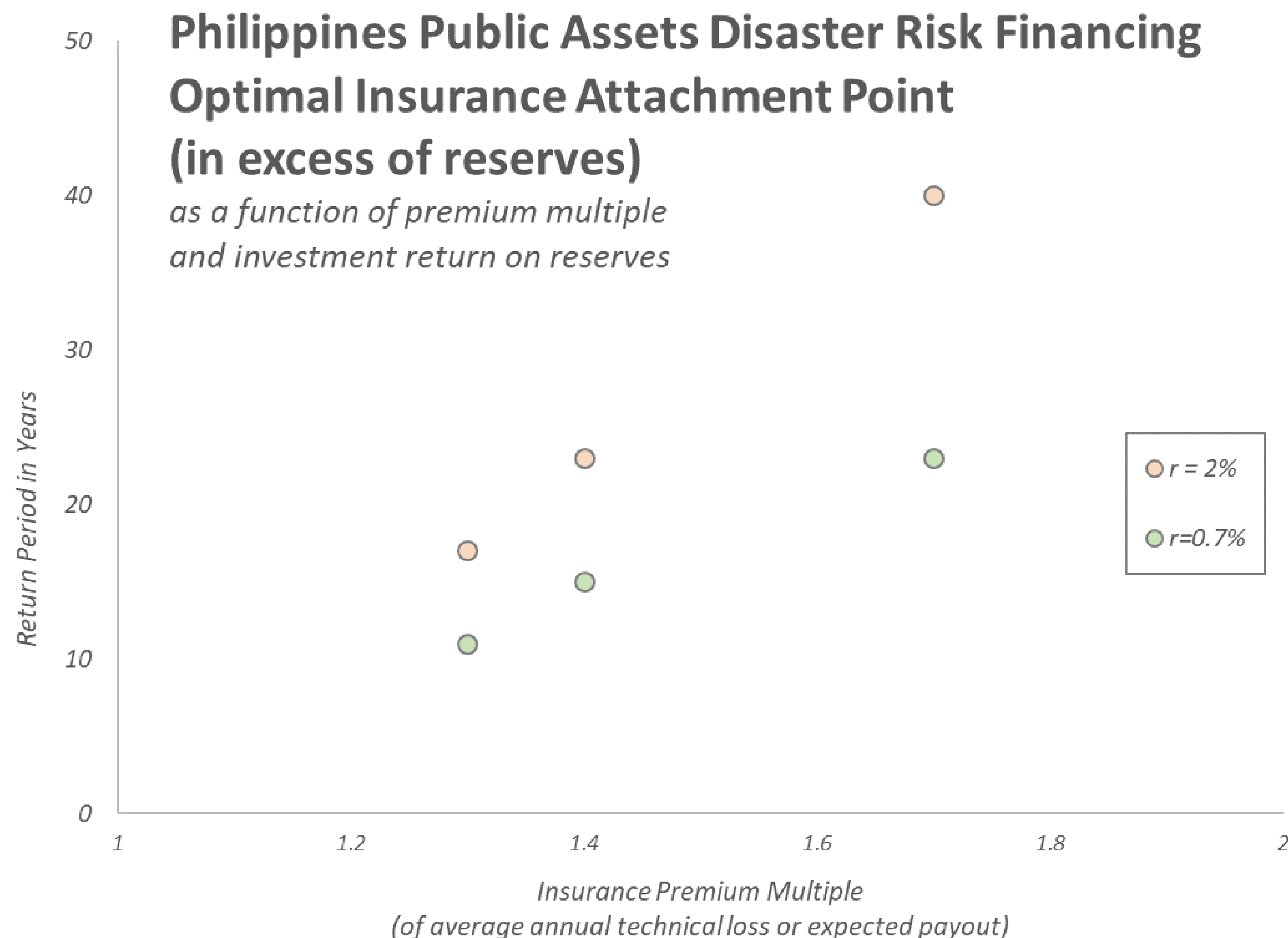


For monitoring & evaluation



For capacity building

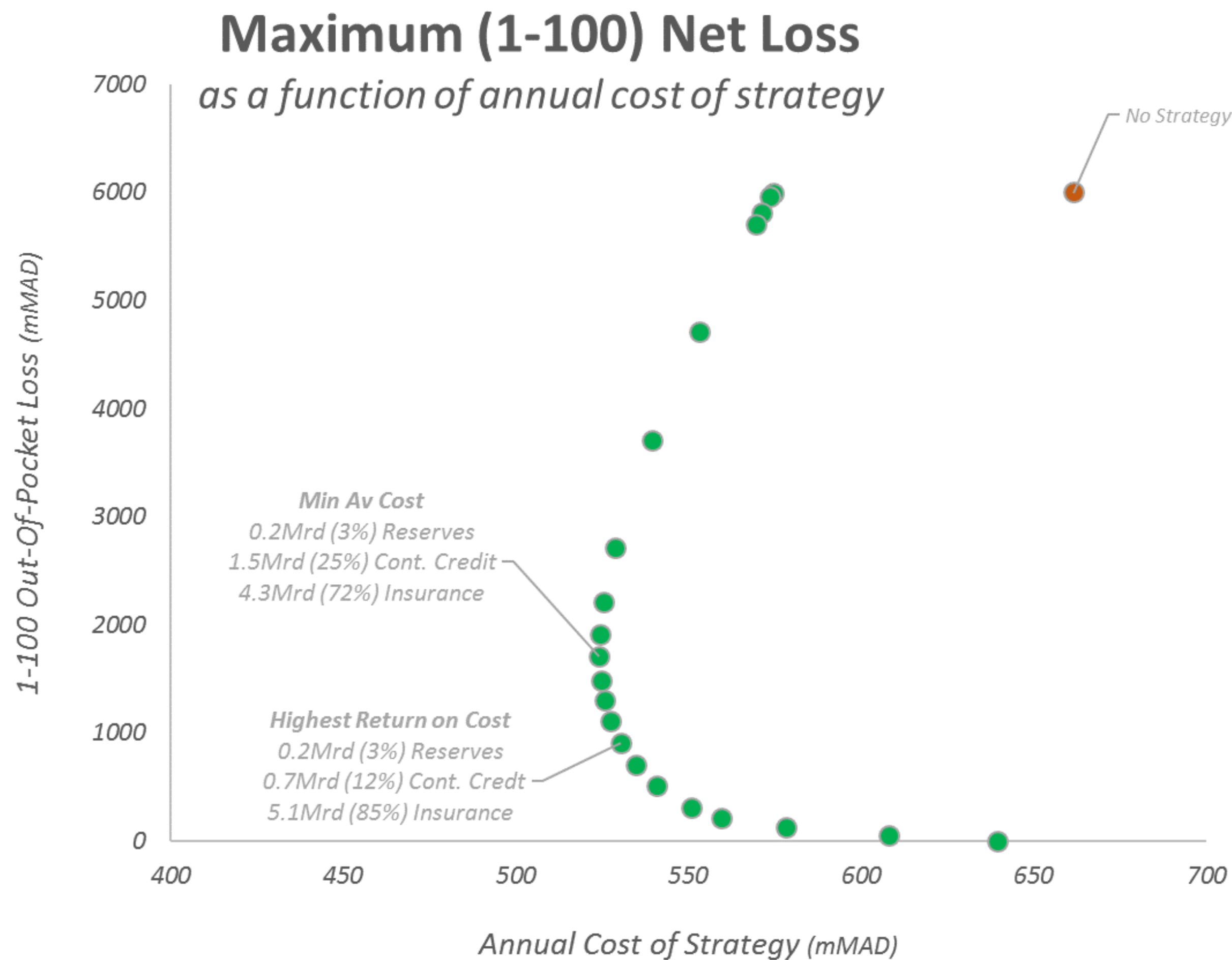
Philippines : Supporting DRF Strategy development



Example of Public Assets DRF Strategy design for the Philippines, supporting decision-making on optimal use of market-based capacity

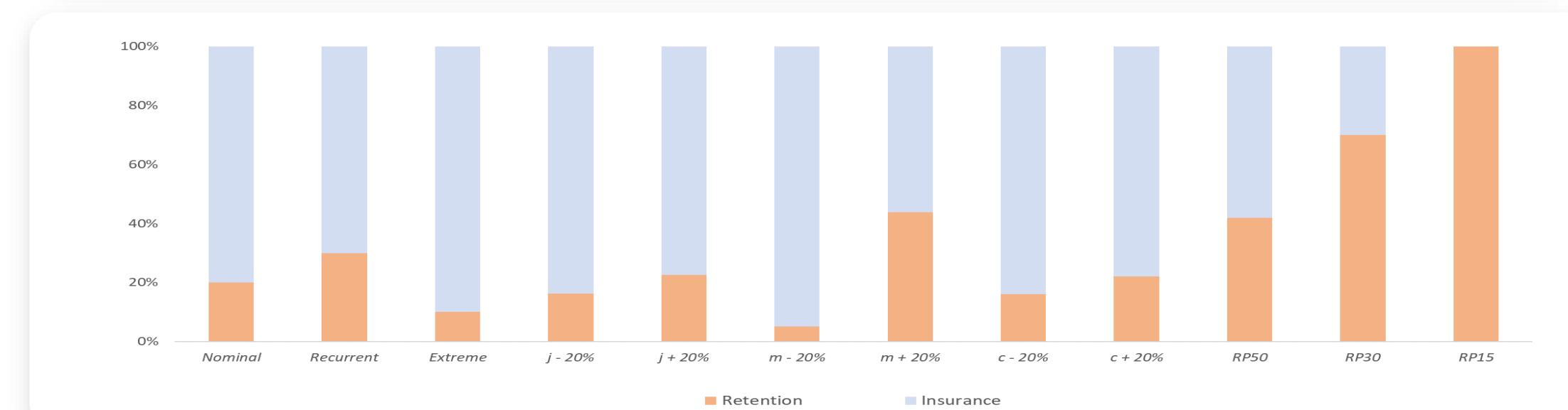
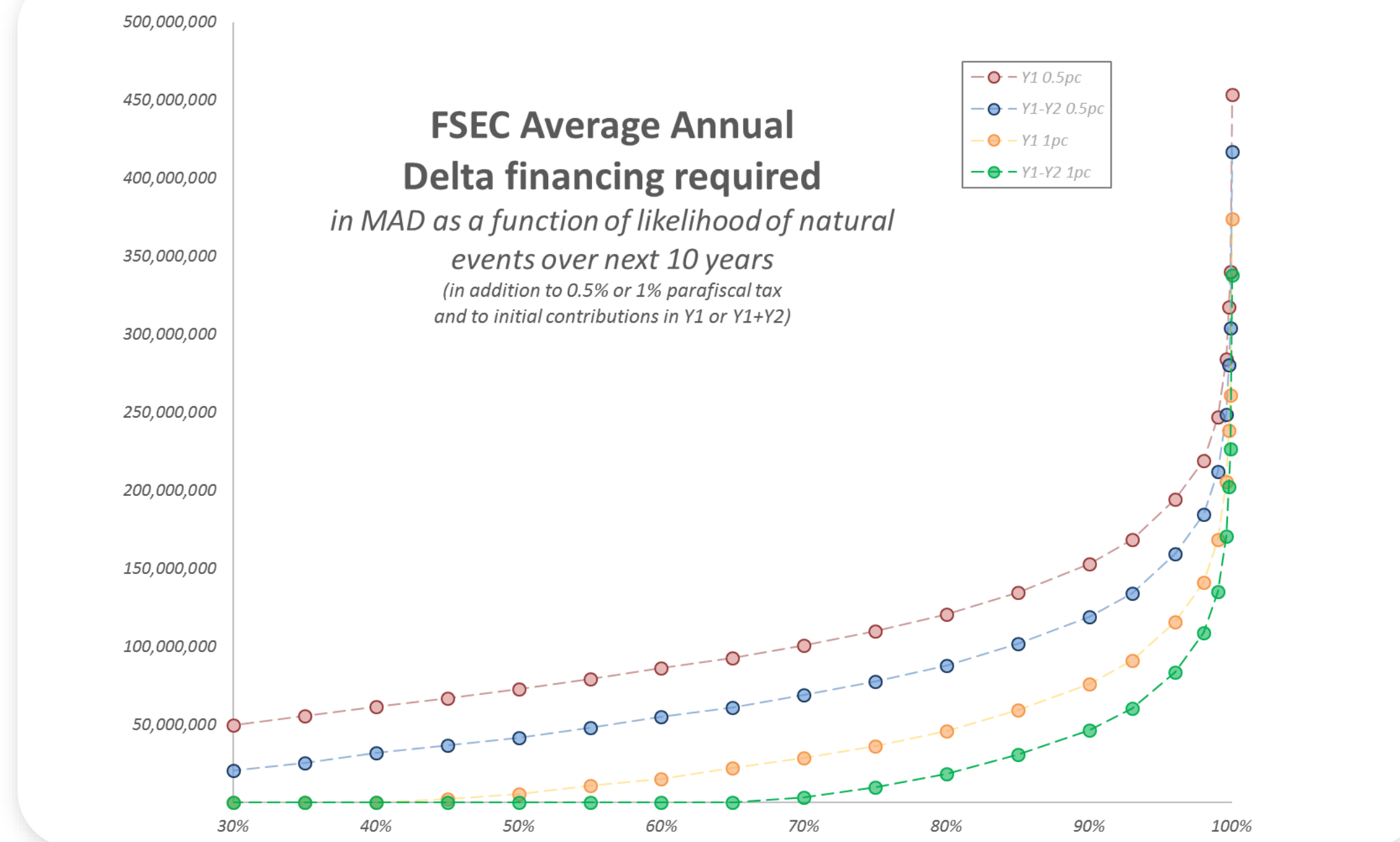
Morocco: Comprehensive Financial Risk Management

Optimal retentions for various net-risk-to-average-cost strategies



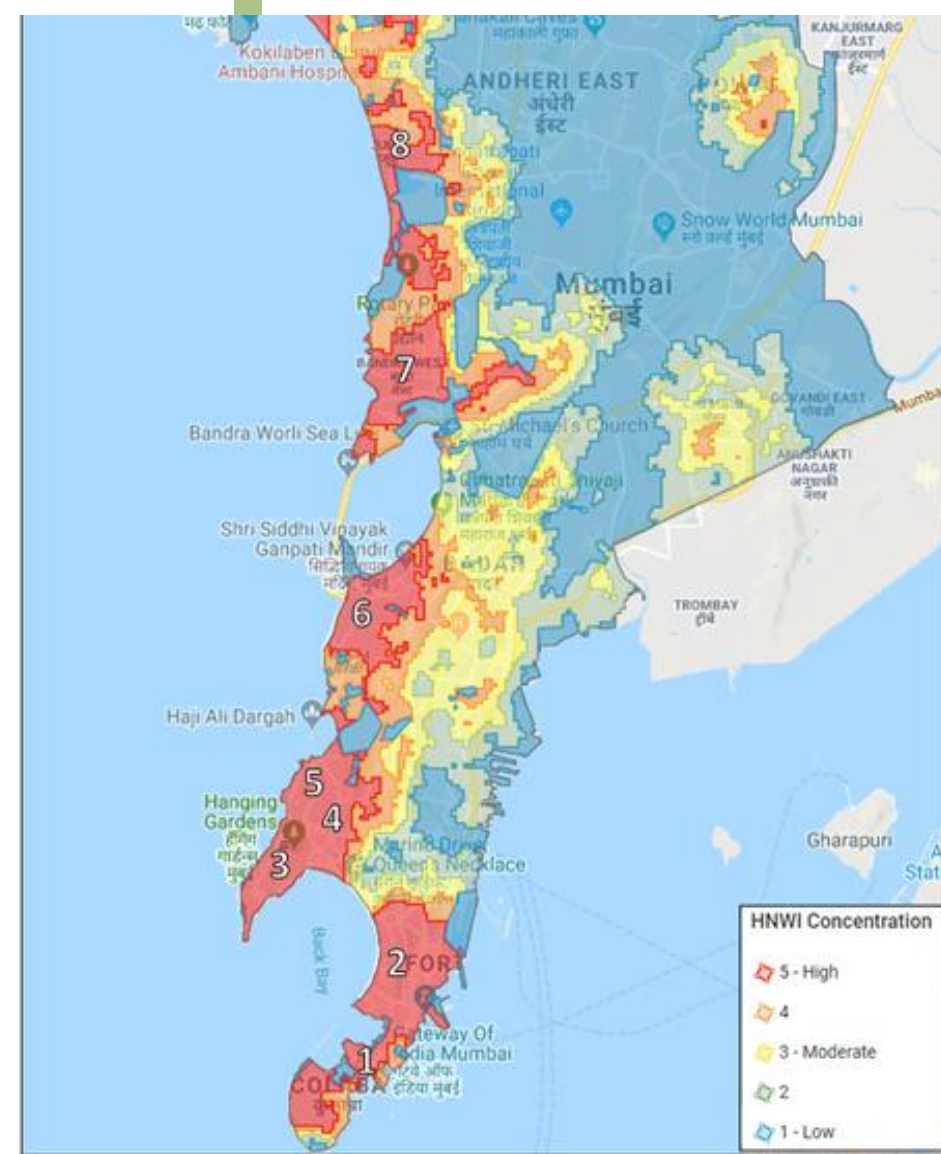
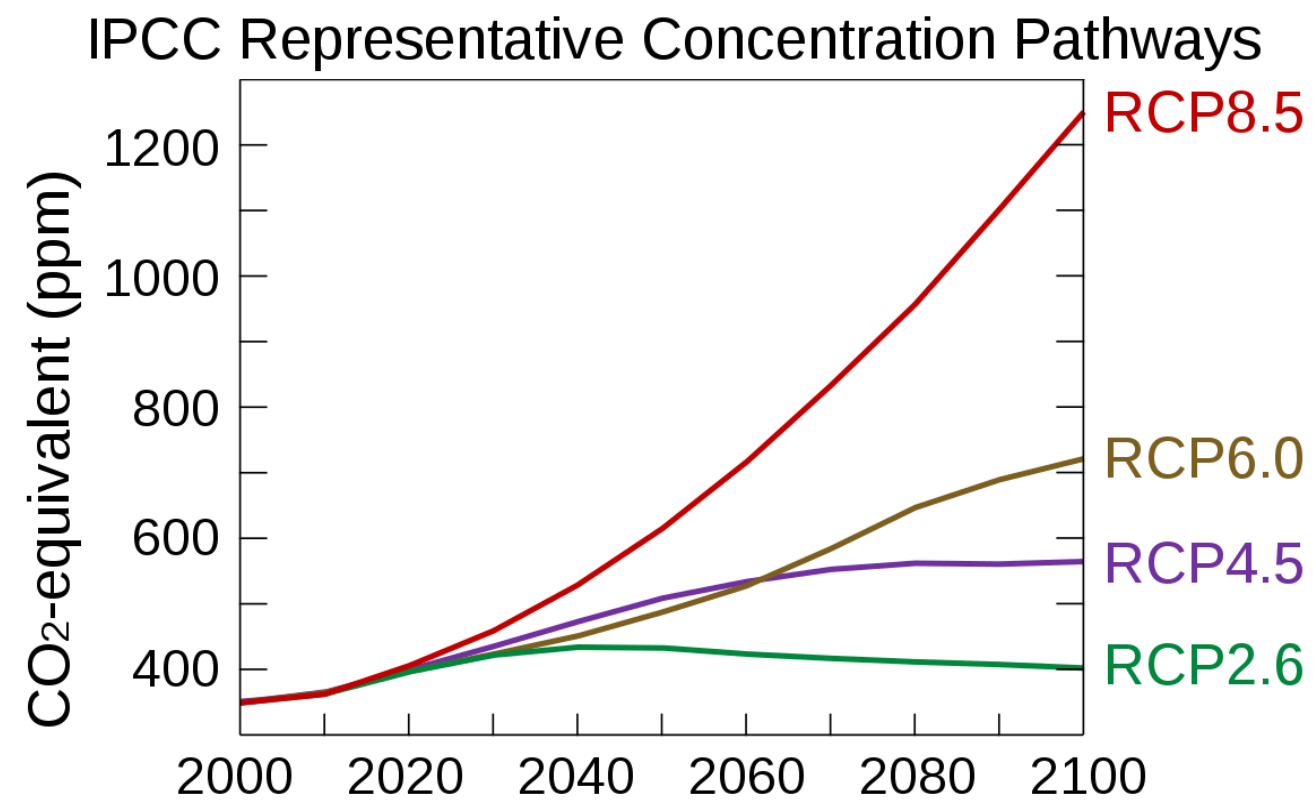
DRF analytics is supporting all aspects of a sovereign insurance programme : political, legal, governance, technical, operational

Identifying insolvency risk



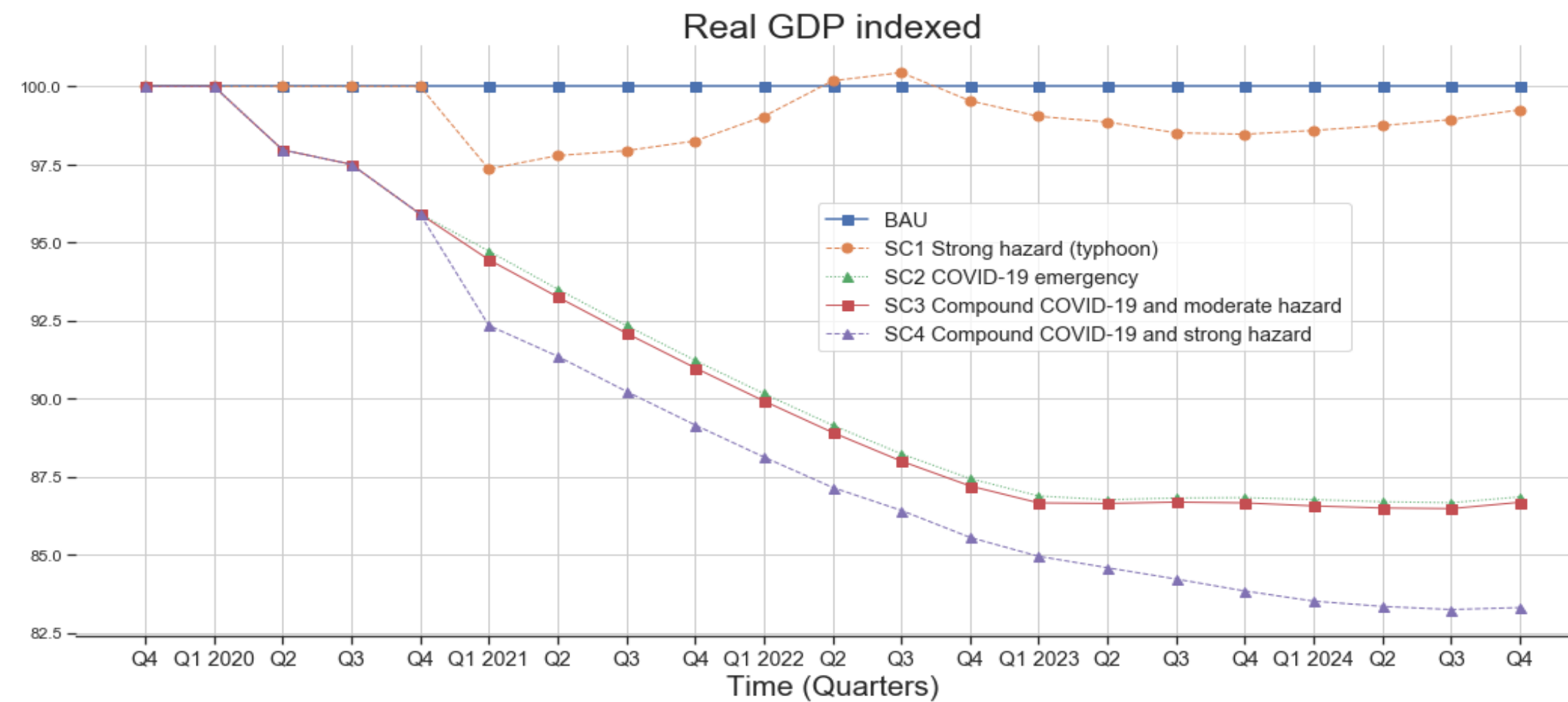
Optimization retention vs insurance

Climate Physical Risk Assessment



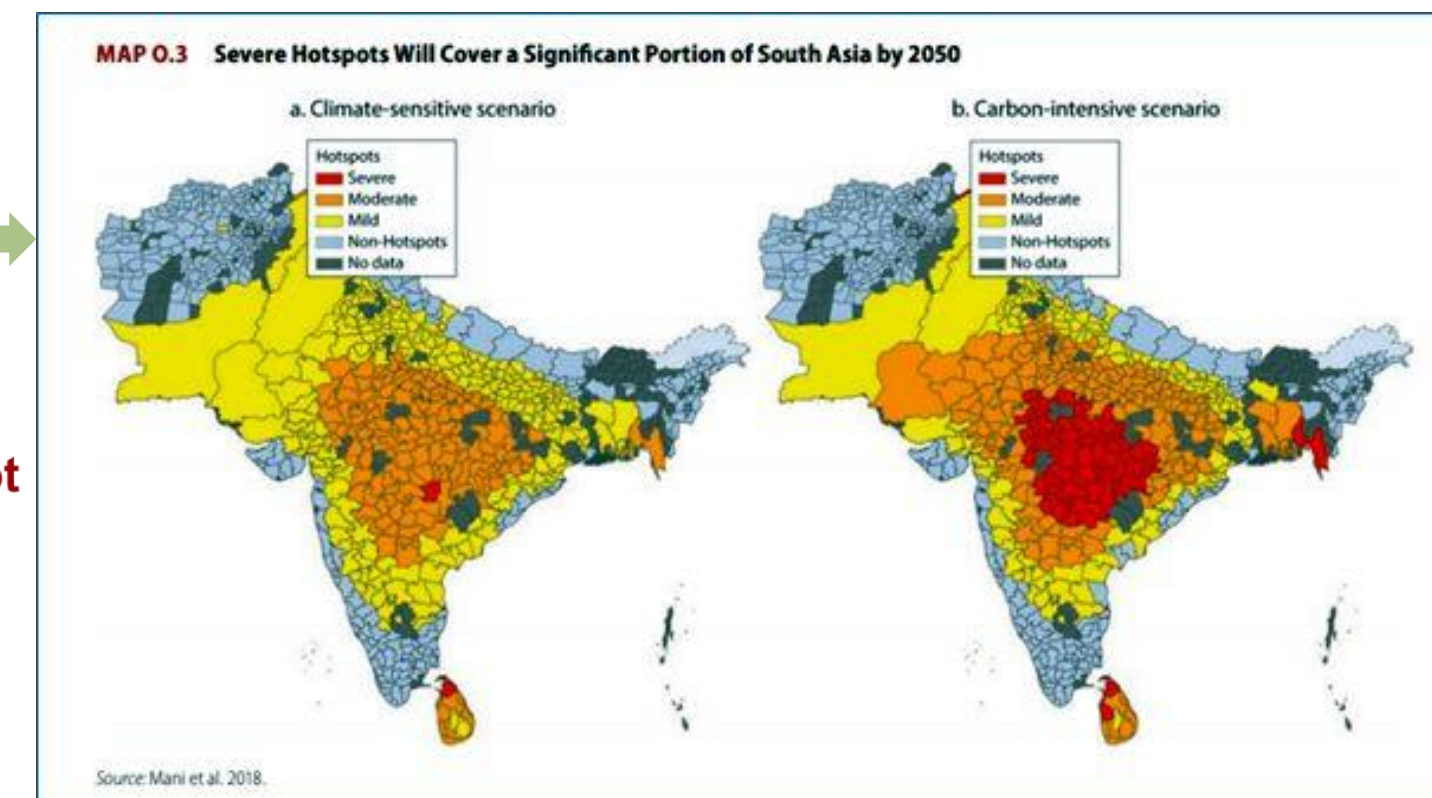
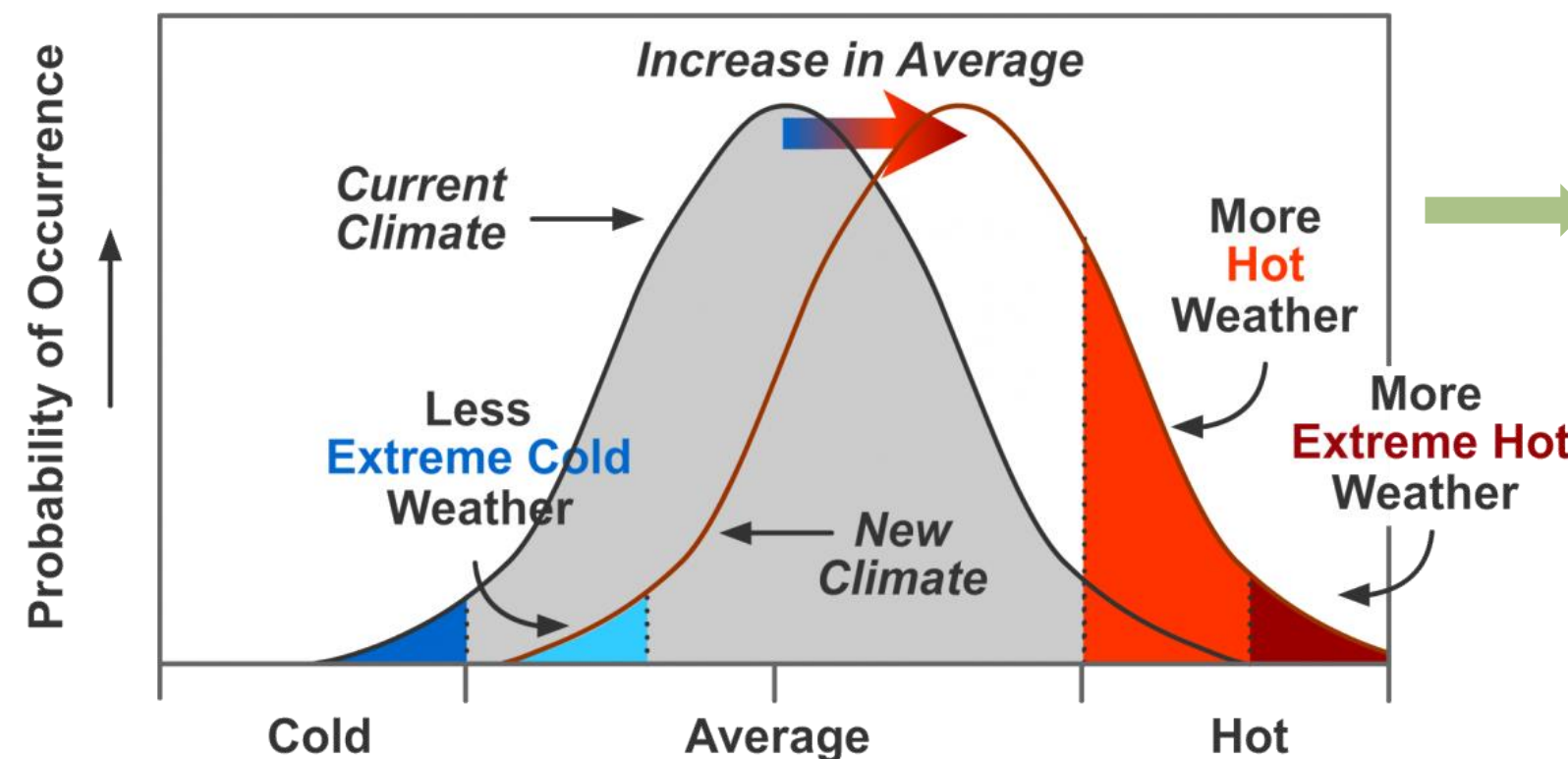
Financial exposure mapping of financial sector

Macro-Financial Impacts



Climate Change Environment by 2030

Climate Scenarios



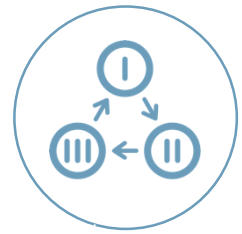
APPLICATIONS

Financial risk management strategy, policy & instruments (e.g., insurance)

Financial stability (e.g., credit risk evaluation)

DRF Analytics: Summary

The development of data & analytics capability helps:



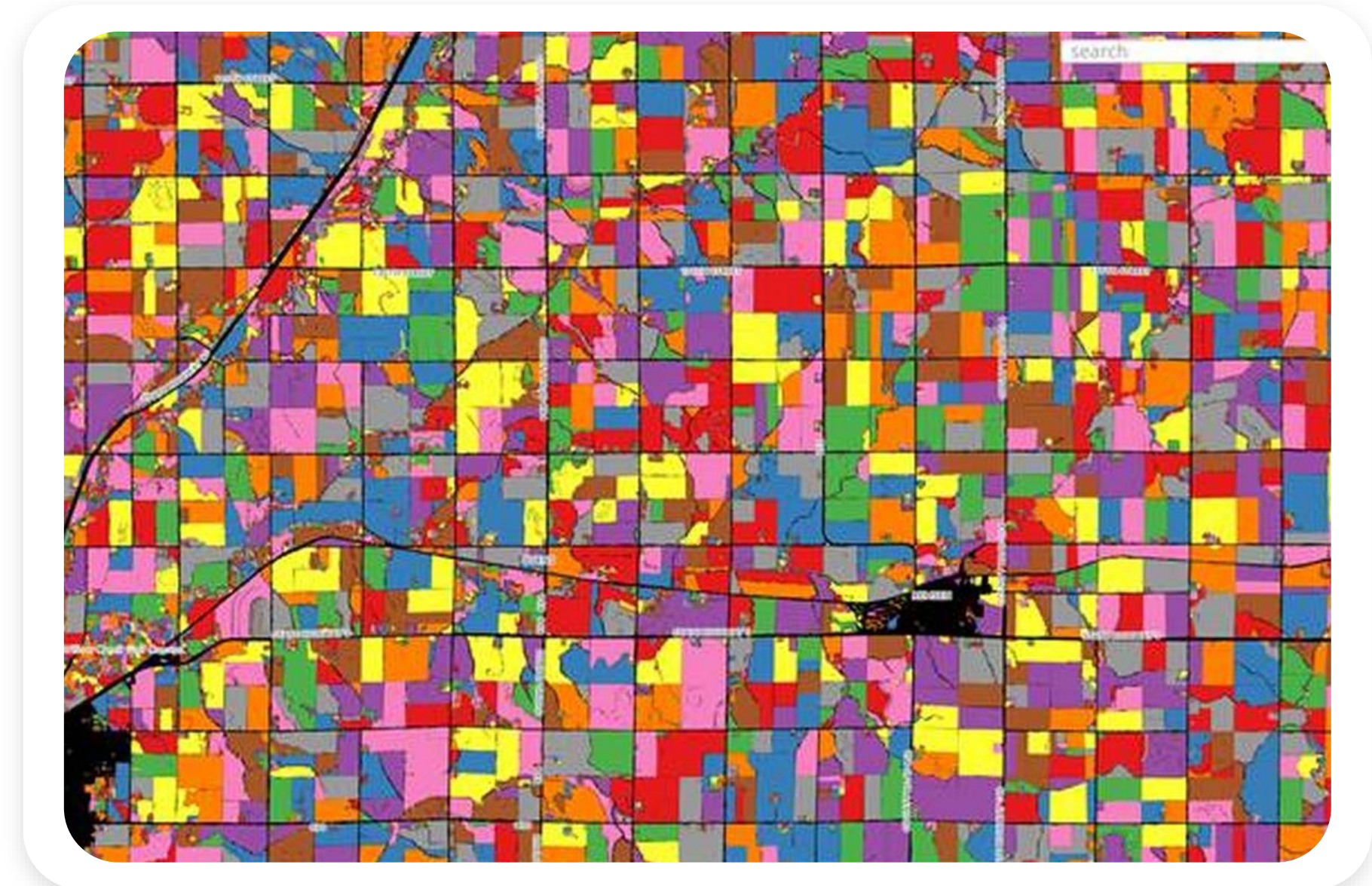
Support a **coordinated plan** for post-disaster action agreed in advance



Enable a fast, evidence-based **decision-making process**,



Arrange **pre-planned financing** to ensure plan can be implemented



Leveraging satellite technology to better understand and map areas affected by drought through imagery processing and artificial intelligence

Key lessons learned to date are:



Necessity of **in-depth country engagement** to develop relevant, for informed decision-making;



Importance of **tailor-made capacity development** programmes to inform design and accompany development and delivery phases; and



Importance of **M&E framework**, as part of continuous analytics tools / financial instruments enhancement

PROPERTY ASSET REGISTER

Property Directorate of the Republic of Serbia

Republic of Serbia



Dragana Gođevac Obradović

Acting Assistant to the Director, Property Directorate,
Government of the Republic of Serbia

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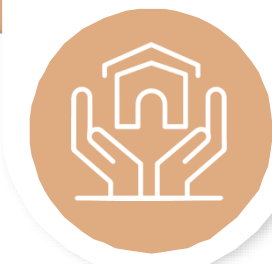


Republic of Serbia
**PROPERTY DIRECTORATE OF
REPUBLIC OF SERBIA**





The Republic Directorate for Property keeps a record of public real estate and records of certain movable properties owned by the Republic of Serbia



World Bank technical mission provided technical assistance on disaster risk finance (DRF) as part of Swiss Government (SECO) financed Disaster Risk Financing and Insurance Program



Technical support is provided for the development of a comprehensive public asset registry which could strengthen risk management for public assets



Establishment of a register of assets of interest to the Republic of Serbia



Downloading data from the Republic Geodetic Authority – Cadastre



Spatial referencing - GIS component integration



Providing advanced data analysis searches



Keep data up to date and synchronized

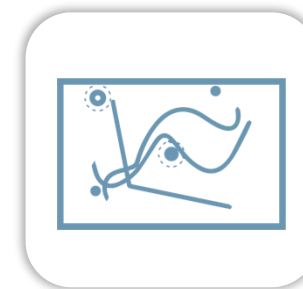


What is the PROPERTY ASSET REGISTER?

Web application based on GIS technology that integrates:



Alpha-numerical data
of the real estate
cadastre



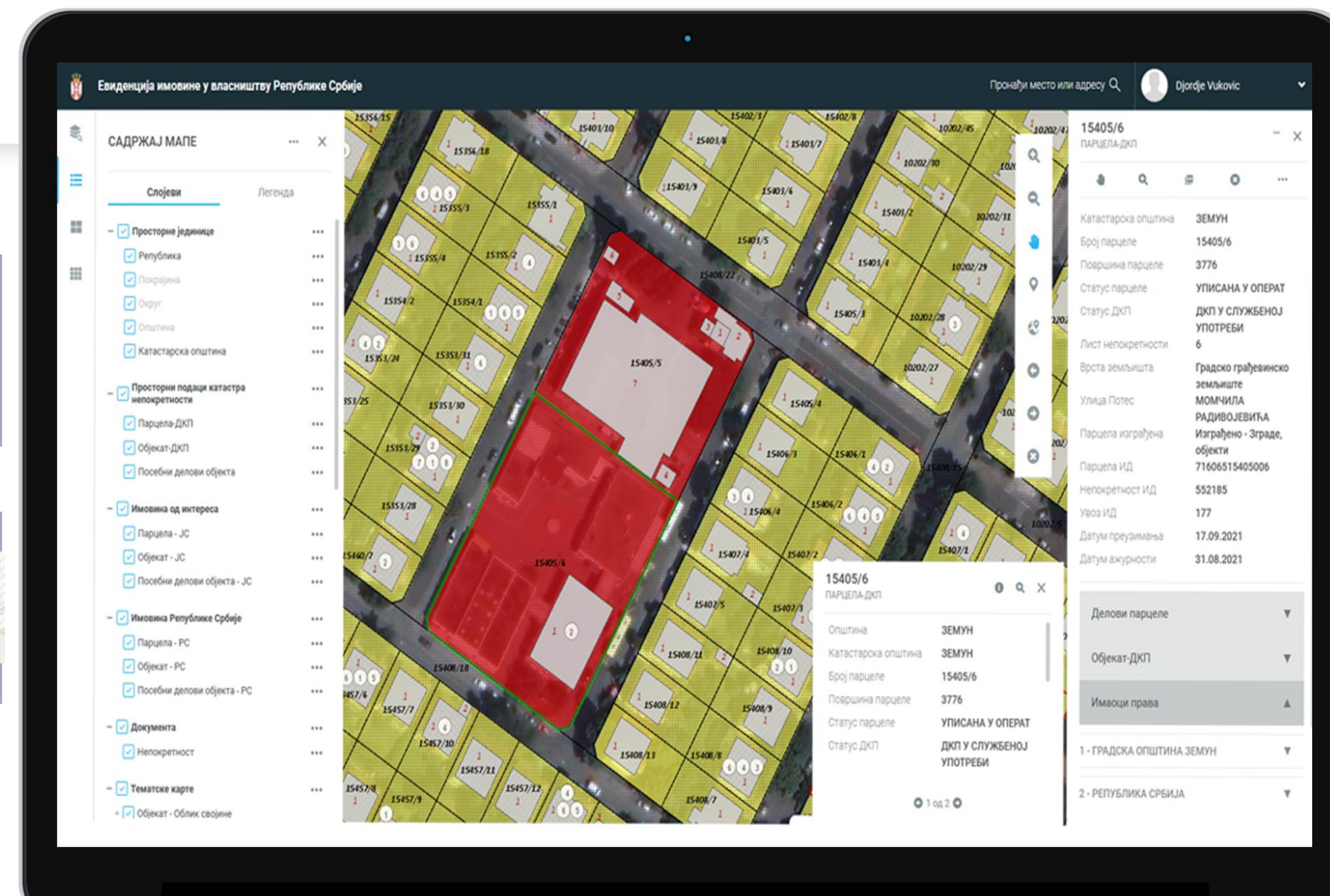
Spatial data of the real
estate cadastre



Data from the contracts
related to real estate of
interest to the Republic

Developed in collaboration
with PD and RGA

РЕПУБЛИКА СРБИЈА
РЕПУБЛИЧКИ ГЕОДЕТСКИ ЗАВОД



GIS Technology

Application Modules



System Modules

- Data download and synchronization module
- Alpha-numeric data management module
- GIS Module
GDi Ensemble Smart Portal
- Statistical module - control panel
ESRI ArcGIS Server Enterprise
Dashboard



GIS Component GDI Smart Portal



GIS data visualization
and content
management



Advanced searches
and analyses of GIS
and related data



Identification of
objects on the map,
Urban analyses



Connecting external
data and services



Adding
background maps

- Округ
- Општина
- Катастарска општина
- Просторни подаци катастра непокретности
 - Парцела-ДКП
 - Објекат-ДКП
 - Посебни делови објекта
- Имовина од интереса
 - Парцела - ЈС
 - Објекат - ЈС
 - Посебни делови објекта - ЈС
- Имовина Републике Србије
 - Парцела - РС
 - Објекат - РС
 - Посебни делови објекта - РС
- Документа
 - Непокретност
- Тематске карте



Статус ДКП	ДКП У СЛУЖБЕНОЈ УПОТРЕБИ
Лист непокретности	6
Врста земљишта	Градско грађевинско земљиште
Улица Потес	МОМЧИЛА РАДИВОЈЕВИЋА
Парцела изграђена	Изграђено - Зграде, објекти
Парцела ИД	71606515405006
Непокретност ИД	552185
Увоз ИД	177
Датум преузимања	17.09.2021
Датум ажураности	31.08.2021

15405/6	
ПАРЦЕЛА-ДКП	
Општина	ЗЕМУН
Катастарска општина	ЗЕМУН
Број парцеле	15405/6
Површина парцеле	3776
Статус парцеле	УПИСАНА У ОПЕРАТ
Статус ДКП	ДКП У СЛУЖБЕНОЈ УПОТРЕБИ

Делови парцеле

Објекат-ДКП

Имаоци права

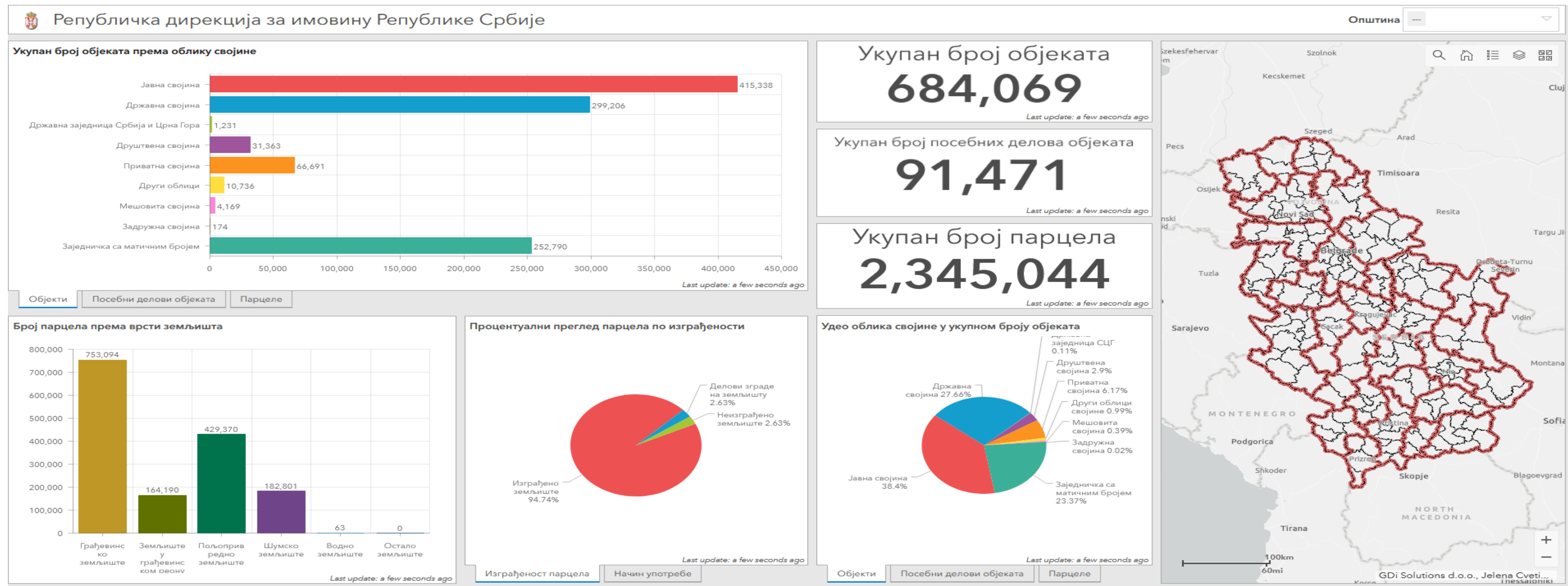
1 - ГРАДСКА ОПШТИНА ЗЕМУН

2 - РЕПУБЛИКА СРБИЈА



Republic of Serbia
PROPERTY DIRECTORATE OF
REPUBLIC OF SERBIA

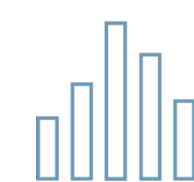
Statistics Control Panel



Statistical presentation of data



Ability to display statistics according to defined and added criteria



Visual display of data (bar, pie)



Interactive map



Data and Information for Sovereign Disaster Risk Financing

Republic of Tunisia



Jaweher Ben Amor
Ministry of Finance

Imen Hamila
Insurance Authority-CGA

February 10, 2022
Tunisian Experience

Disaster Risk Financing & Insurance Program



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الهيئة العامة للتأمين
Comité Général des Assurances



Plan

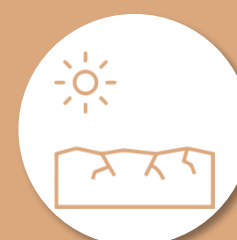


I. Current status of disaster risk management in Tunisia

MAJOR NATURAL HAZARDS



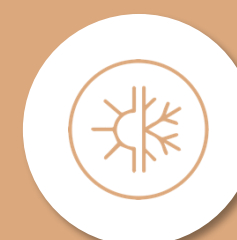
Floods



Droughts



Earthquakes



Cold & heat waves



Forest fires

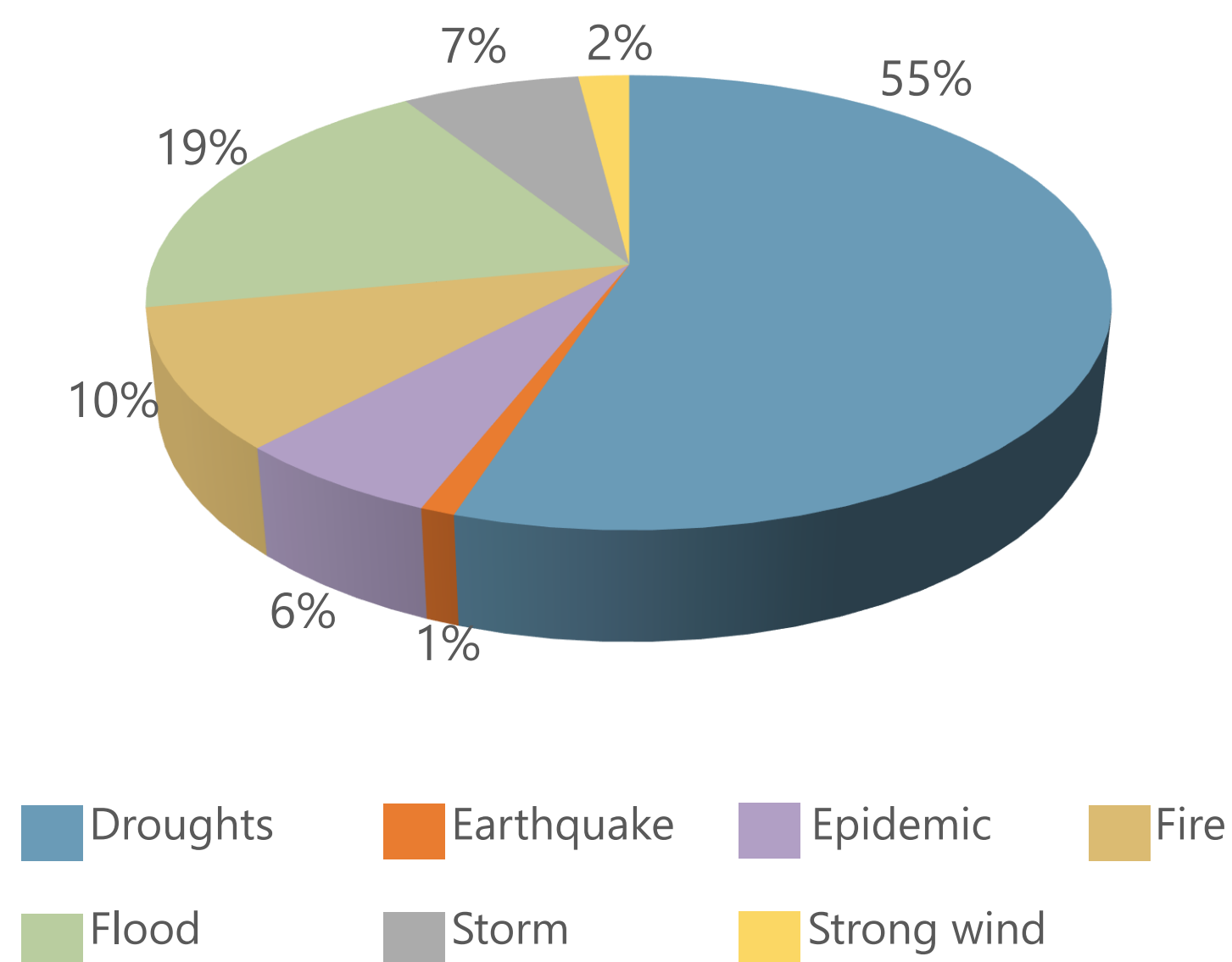


Storms



Strong wind

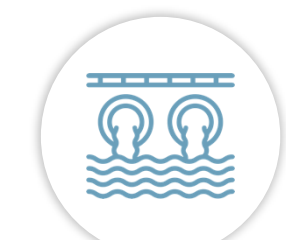
NUMBER OF REPORTED EVENTS



AMPLIFYING FACTORS AND VULNERABILITIES



Rapid urbanization, construction in hazardous areas, building standards



Drainage infrastructure failures



Pockets of poverty



Economy centered on agriculture and tourism



Environmental degradation and desertification



Climate change



In Tunisia, there is no national disaster risk financing strategy that defines policies and financial instruments to ensure financial resilience.

But.....

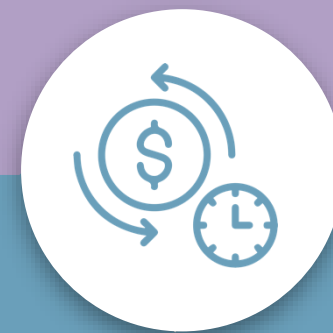
Preventive mechanisms



Legislative and institutional framework focused on response

An early warning and monitoring system

Ad-hoc or short-term mechanisms



Budgetary mechanisms (reallocation, contingency, funds,...)

Ex-post mechanisms



Conduct of major infrastructure projects

Official request to the World Bank for technical and financial support in the area of natural disaster risk management was made in **January 2019, following the 2018 Flood, in Cap Bon**



II. Disaster risk financing strategy & prerequisites

Tunisian government priorities



Design a national disaster risk financing strategy to increase financial resilience for national and local structures, businesses, households, farmers, and most vulnerable populations

Implementing sustainable and cost-effective financial protection policies and operations.



However

Institutional and technical weaknesses (weak risk understanding and available data amongst other things) combined with low insurance penetration (2.1%)

III. Approach

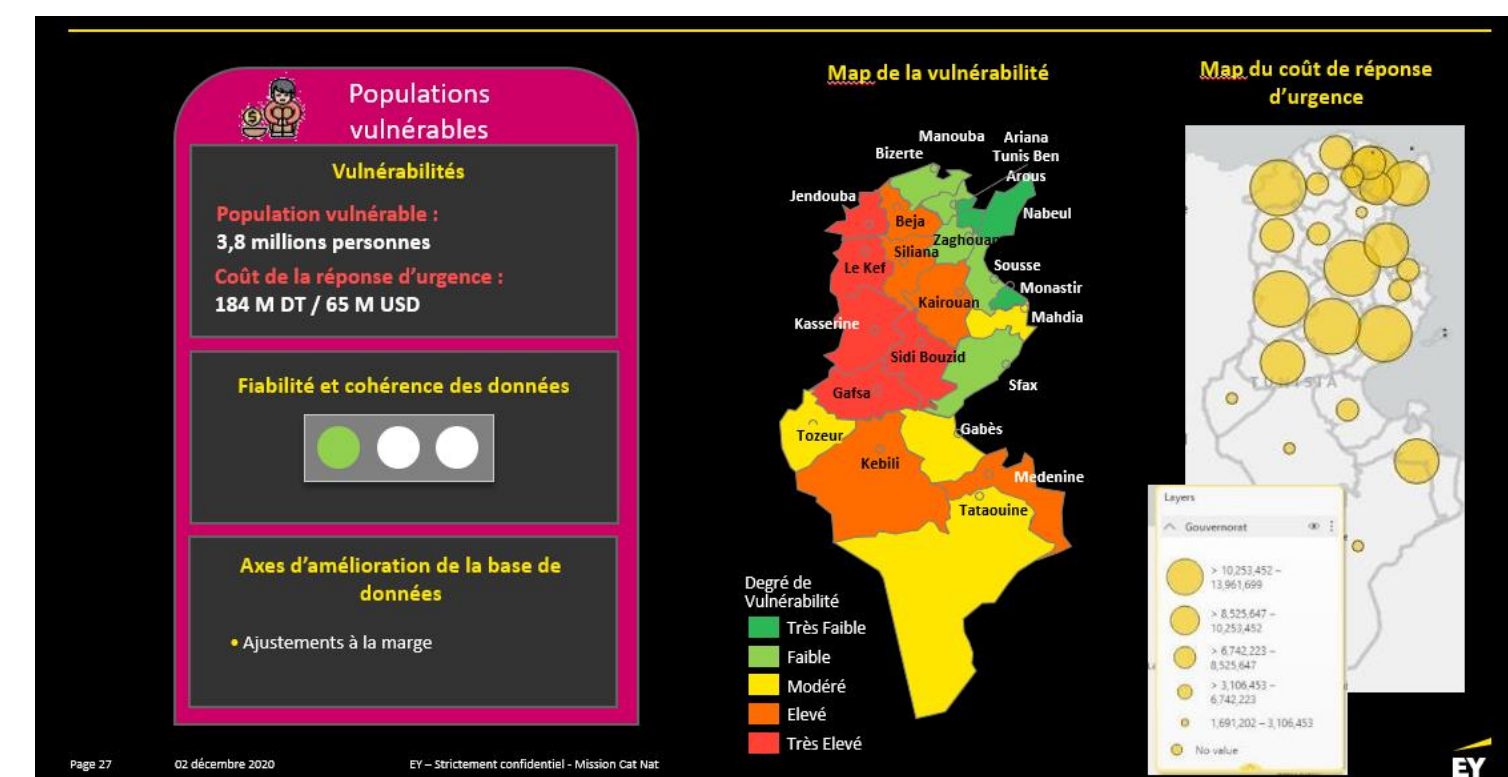
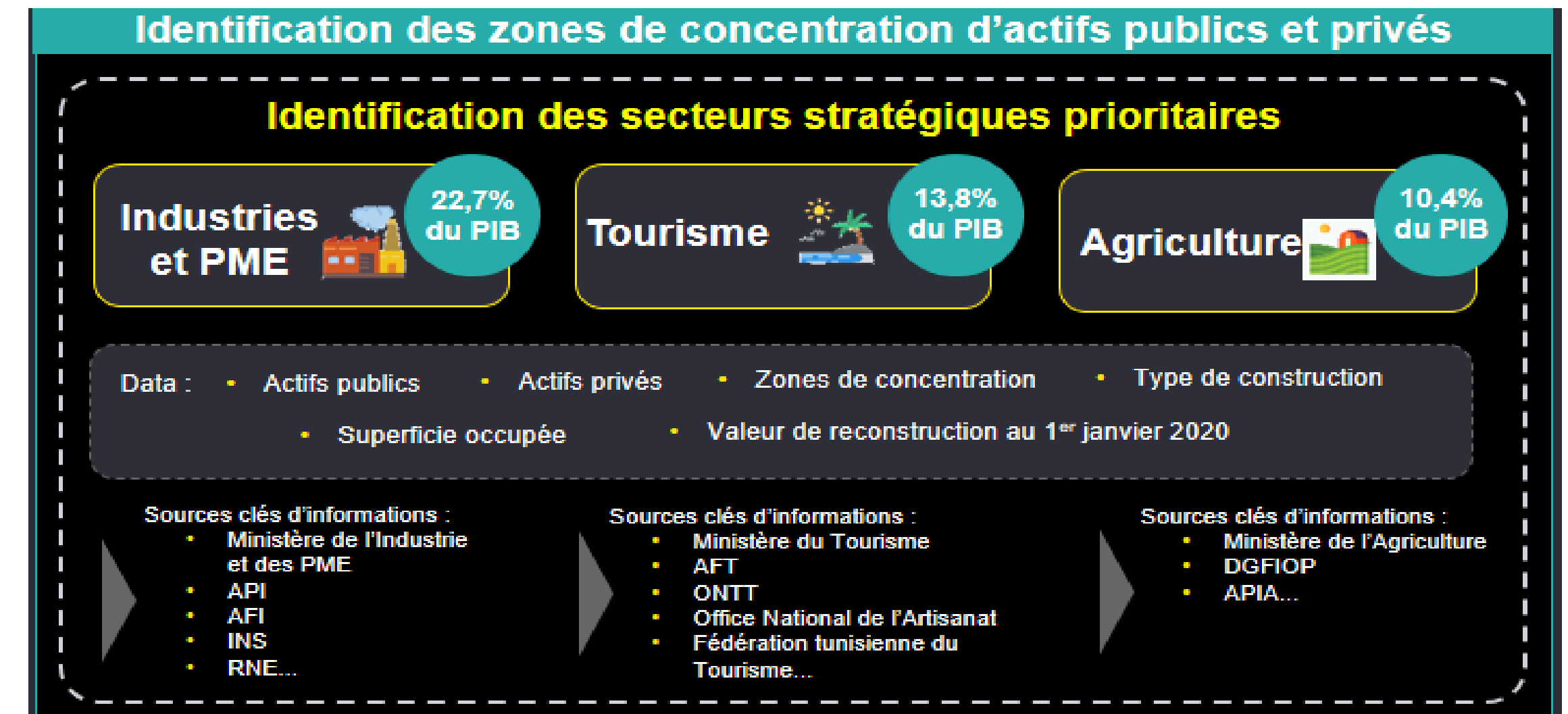
First steps toward building the DRF strategy and designing the sovereign instrument

Better understanding of financial risk and the vulnerability of populations and public and private assets

Diagnosis of existing resources and instruments

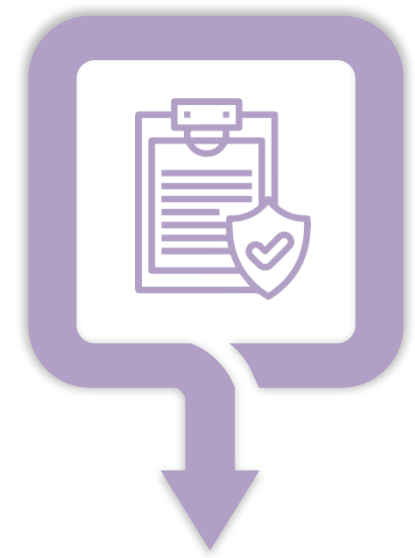
Construction of a database and sustainability of the data collection exercise

Construction of exposure maps by categories and geographical areas



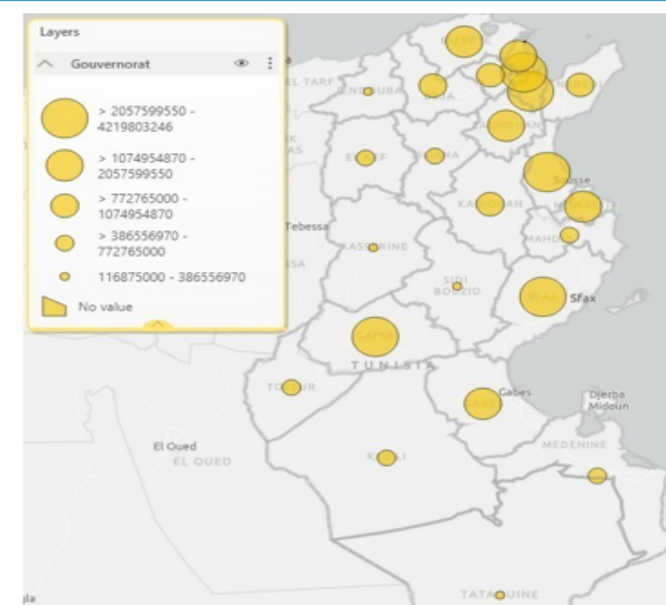
III. Approach

First steps toward CAT NAT insurance in Tunisia



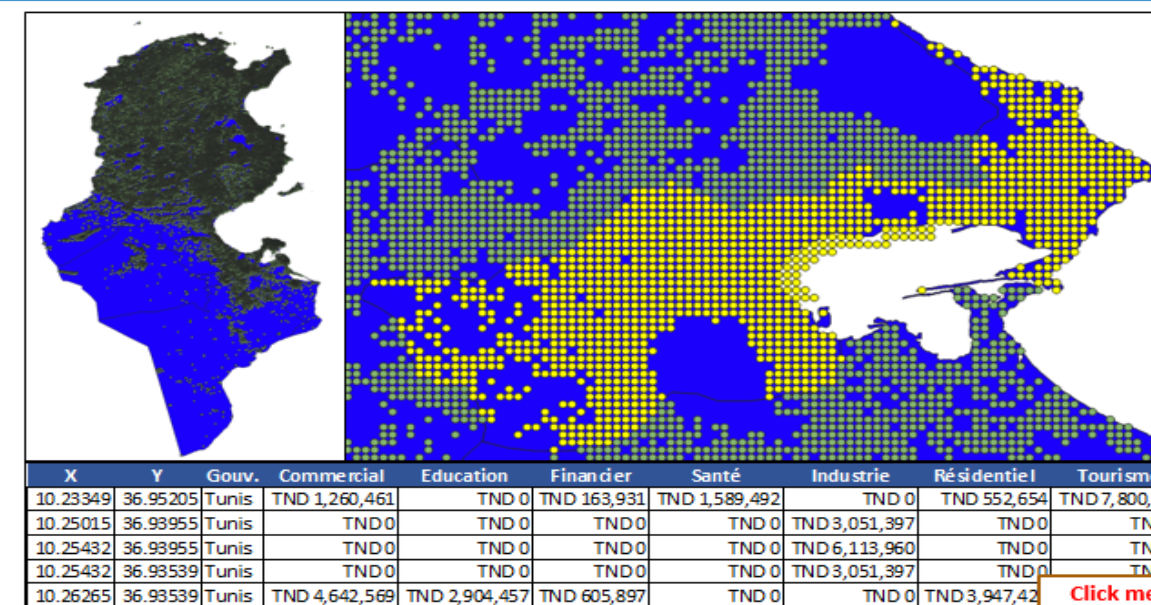
Important role of the insurance sector in strengthening the resilience of individuals and companies against CAT NAT risks

Désagrégation des données de l'exposition financière ...



Base de données EY:

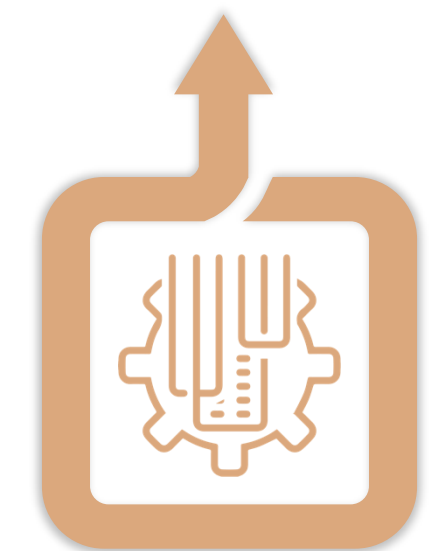
- Agrégées niveau gouvernorat
- Collecte non-exhaustive
- Combinaison avec données de risque /vulnérabilité non fiable



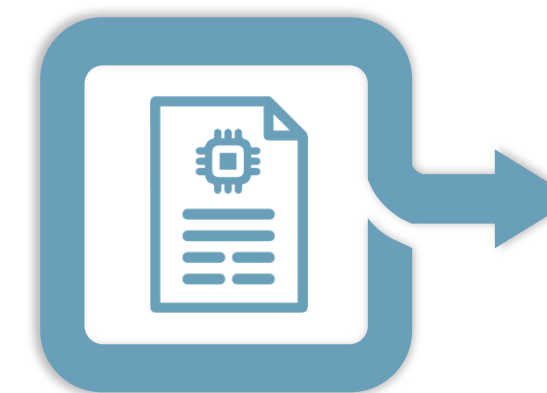
Données désagrégées ImageCat

- Valeurs projetées sur une grille fine couvrant la Tunisie
- Décomposition par secteur économique
- Reconstruction de données granulaires cohérentes avec les données agrégées, sans collecte sur le terrain

The existing database on financial exposure will be key for the development of the actuarial model

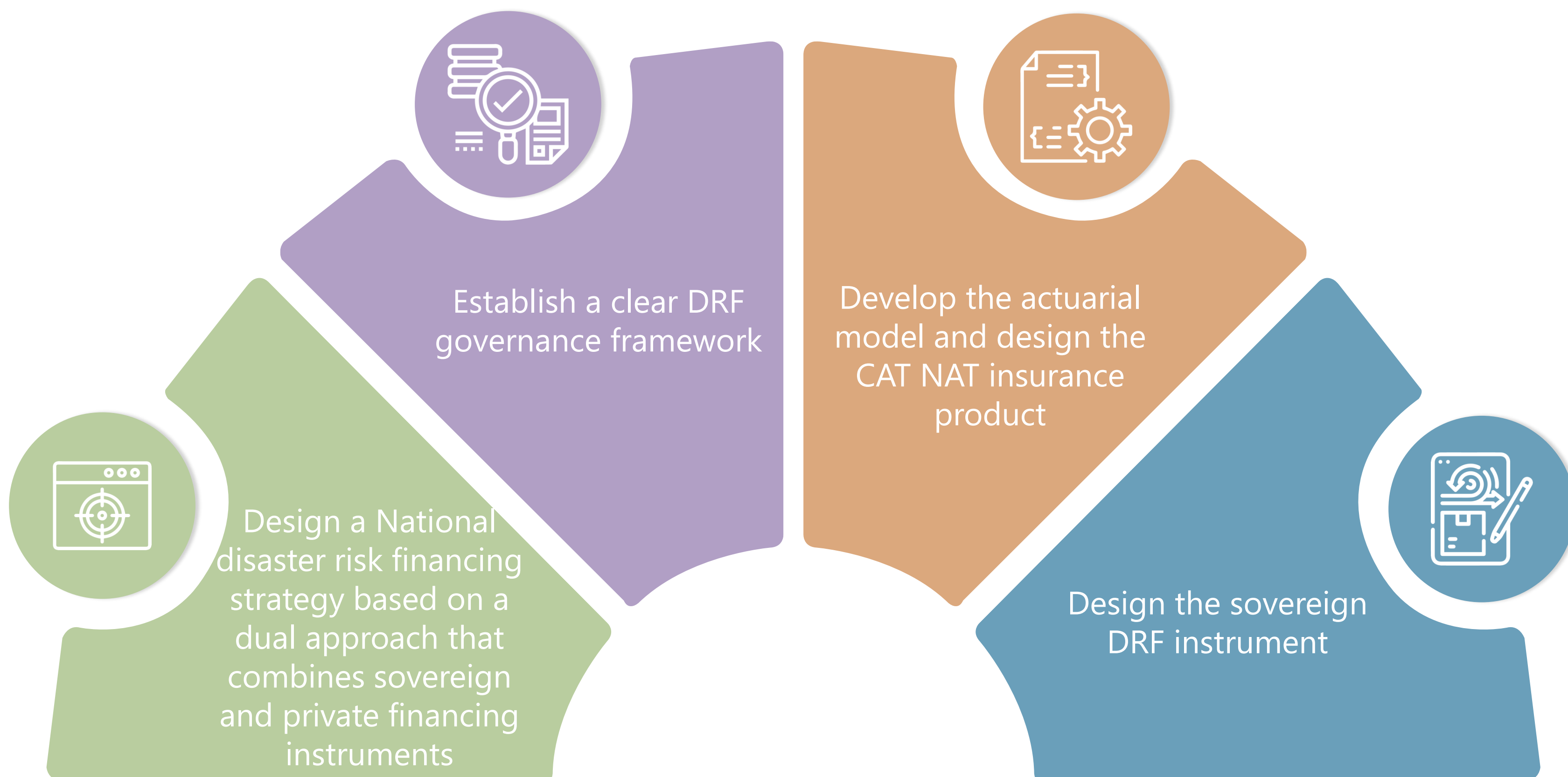


Toward a revamp of the Insurance Code and the establishment of a legal framework for Cat Nat coverage and introduction of a mandatory extension for certain types of damage insurance contracts.



The technical parameters and analytics of this coverage (premium rates, deductibles, compensation ceilings, etc.) have not yet been set.

IV. Next Steps



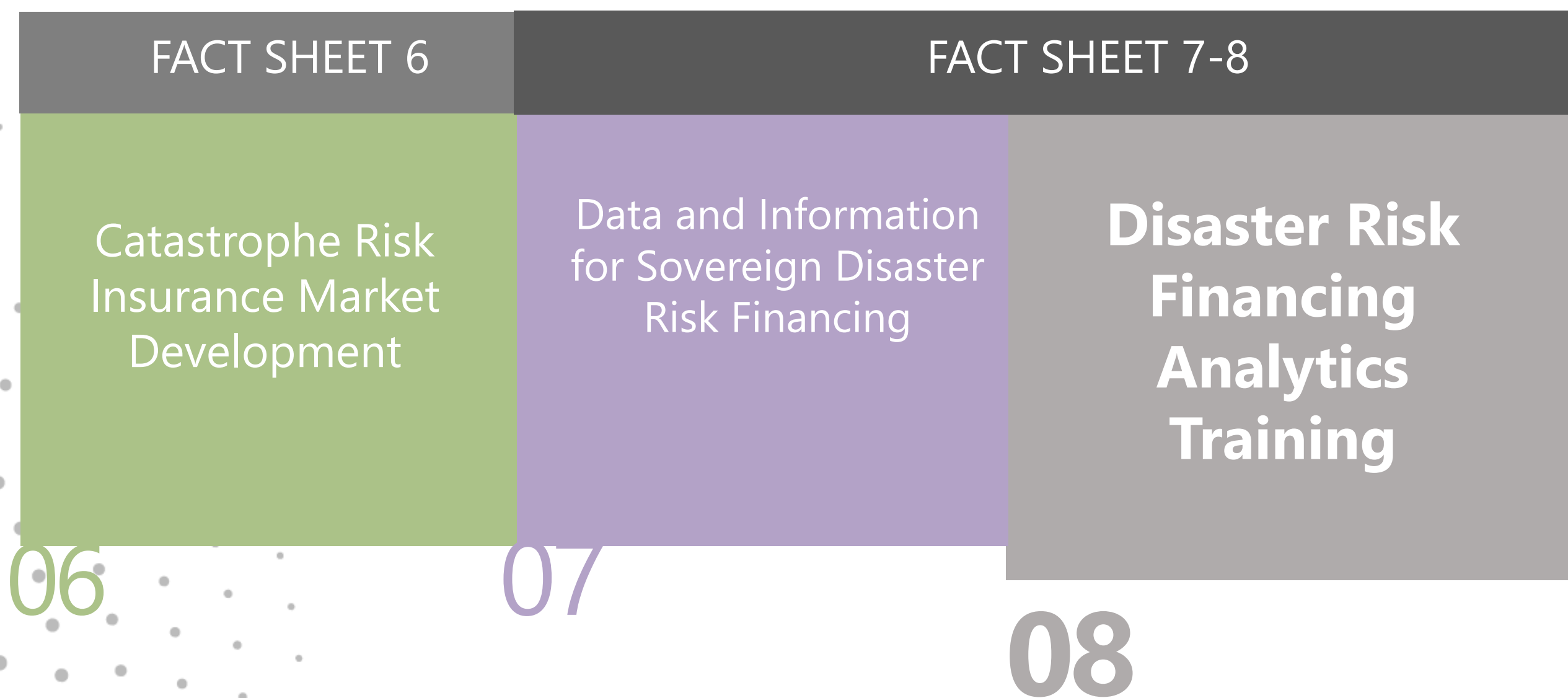
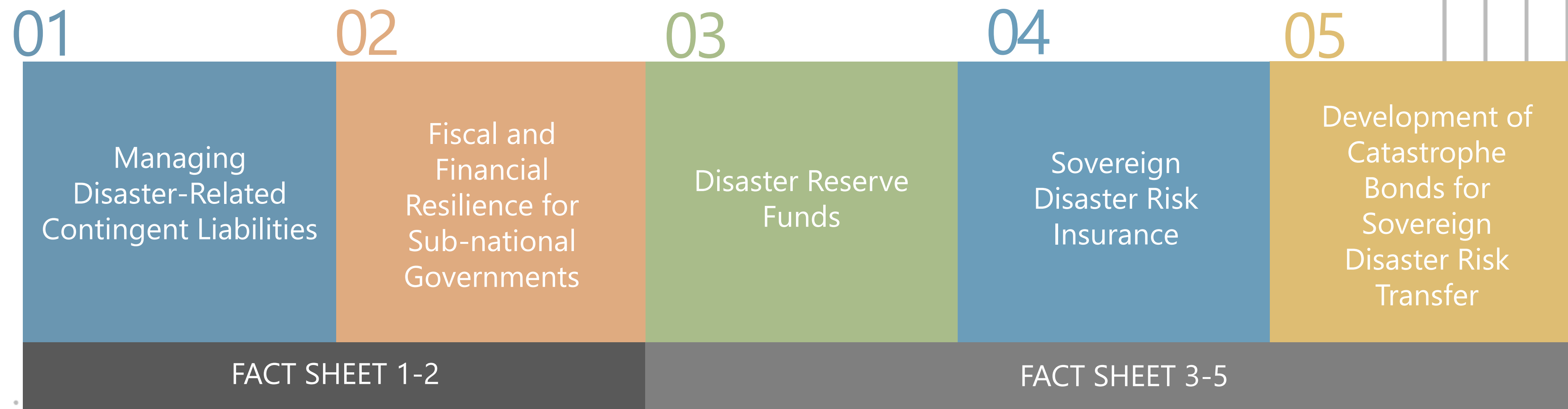
Q&A

- Please share your questions in English via chat box.
- If possible, please indicate which speaker(s) to address your question(s).



**Scan the QR code to join
the Disaster Risk Finance
Community!**

Next Webinar



Thank you

**Disaster Risk Financing
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