Climate and disaster risk: building resilience, bridging the protection gap

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Outline

- The issue?
- Inclusion agenda.
- Who participates in the solutions?
- What are concerns of policymakers, regulators, supervisors, insurers and supply chain
- How to effect change?

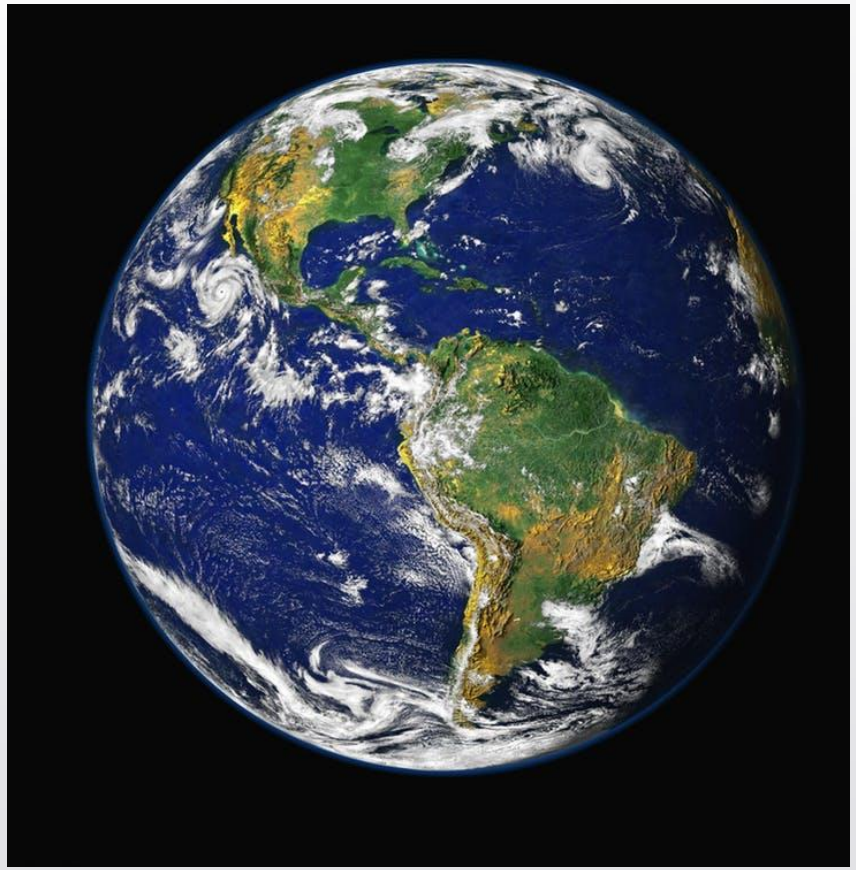
Definitions:

Climate Risk Insurance (CRI):

Climate risk insurance is a vital instrument within a comprehensive climate risk management system, spanning a continuum of prevention, risk reduction, risk retention and risk transfer such as insurance schemes.
Source: https://www.giz.de/de/downloads/giz-2016-en-climate_risk.pdf

Natural Disasters Coverage:

Insurance for major natural catastrophes such as earthquake, volcano eruptions, wild fires, tusnamies, floods, etc.



https://www.pexels.com/search/earth/

The issue!

- Why are we **talking about increasing risk of Climate Risk Insurance and Natural Disasters**?
- There is a **protection gap** in climate risk insurance and natural disasters and the **following consequences, especially for low-income/most vulnerable people**.
- What is the **role and actions required of the various players**.

Haiti 2010 earthquake

Hayonline media: https://www.youtube.com/watch?v=eMi-PX8A8LM

The issue?

- In our recent history we are observing an **increased frequency and severity of natural hazards/extreme weather events**

https://www.ccrif.org/sites/default/files/publications/CCRIF_Annual_Report_2017_2018_0.pdf

The issue?

- In 2018, according to Swiss Re:
  - Total economic losses from natural catastrophes and man-made disasters in 2018: USD 165 billion.

Insurance covered USD 85 billion of those losses

4th highest 1 year aggregate industry pay-out ever

More than the previous 10 year annual average of USD 71 billion.

Natural disasters in 2017 caused overall economic losses of US$ 340bn – the second-highest figure ever according to Munich Re

In 2012 UN's Economic Commission for Latin America and Caribbean (ECLAC) reported that natural disasters had cost the region over $115bn in the preceding decade, more than double the total in the ten years before that.

The issue?

Protection Gap:

Of 2018 insured losses (Swiss Re):

- USD 76 billion were due to natural catastrophes
- More than 60% of these claims were to help populations impacted by secondary peril events.
- 13,500 people lost their lives in all catastrophes.

The issue?

Protection Gap

- The World Bank estimates that Climate Change will push **an additional 100m people into extreme poverty**
- Impact of Climate Change: could reduce the global GDP by 3.3%
- Huge **protection gap** = gap between the economic losses and insured losses from natural disasters;
  - Protection gap is extremely high in emerging countries (about 90 – 100%) and has not change over the years

The Issue?
Impact on low income people

- **Natural disasters and other catastrophes impact is especially hard on low income population.**
- This cost falls disproportionately on poorer sections of the population.
  - Lower-income Latin Americans are more likely to live in flood-prone areas or in buildings that lack the latest anti-earthquake standards.
  - They're also less likely to have an insurance policy to pay for rebuilding.

Source: http://latam-investor.com/2018/11/3340/#

The Issue?

Impact on low income people

South America suffered $4.3billion of damages due to natural disasters in 2017

Only $400 million was insured.

Insured losses make up just 11% of total losses on the continent compared to 55% in Australia and 35% in Europe

The Issue?
Impact on low income people

Natural disasters and other catastrophes impact is especially hard on low income population.

- Developing Asia, 2000 to 2018 had:
  - 84% of the 206 million people affected by disasters globally on average each year

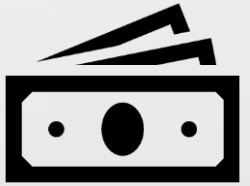
- Nearly 38,000 disaster fatalities per year on average.
- Those who suffer most are poor, marginalized, and isolated

Source: ADB, ASIAN DEVELOPMENT OUTLOOK ,STRENGTHENING DISASTER RESILIENCE, April 2019

The Issue?

Impact on low income people

- Beyond immediate loss of life and wealth, effects can persist over time.
- Case studies of flooding in Indian cities show that:
  - Without social protection, disaster-hit families deplete their savings or borrow at high interest rates from informal sources, pushing them into indebtedness and poverty traps.
- Recent research reveals that disasters can affect victims for decades
  - Example: reduced household spending on food, medicine, and education can stunt a child's potential well into adulthood.



Source: ADB, ASIAN DEVELOPMENT OUTLOOK ,STRENGTHENING DISASTER RESILIENCE, April 2019

The Issue?
Impact on low income people

- Among rural households surveyed:
  - 90% had suffered in the past decade (loss of life or significant damage to assets from floods)
  - Financial recovery took more than 3 times longer than for urban households.
- Pacific island economies are especially vulnerable to severe hazards, reflecting their isolation, limited economic diversification, and extreme exposure.
- Economists, development experts, and world leaders have long warned that climate change is likely to hurt poor countries more than rich ones(2).

Sources:
1) ADB, ASIAN DEVELOPMENT OUTLOOK ,STRENGTHENING DISASTER RESILIENCE, April 2019
2) https://www.nationalgeographic.com/environment/2019/04/climate-change-economic-inequality-growing/

What is the issue?

Recent Example: Hurricane Maria (Sept 2017)

Category 5: 160 mph wind speed and higher gusts.

65,000 people (approx. 80% of the population) were directly affected

More than 90% of roofs were damaged or destroyed

31 people died, 37 missing

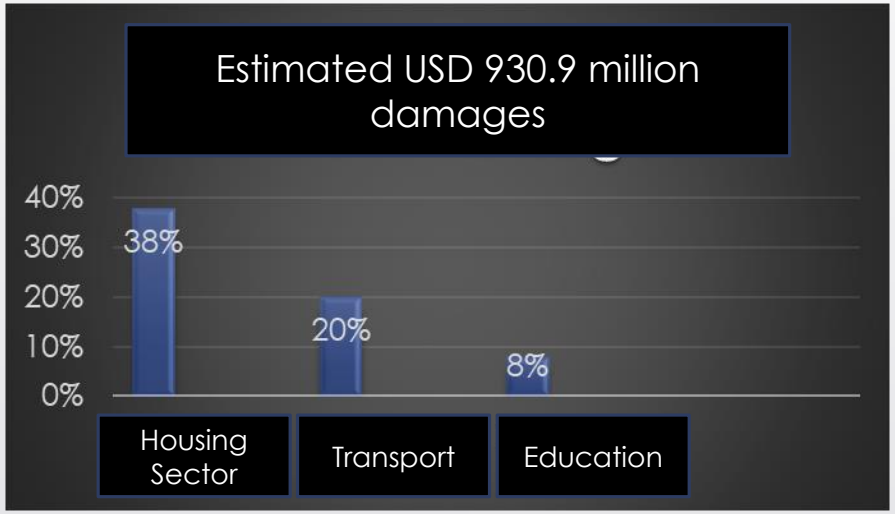
Power and water supplies were disrupted, and entire crops destroyed

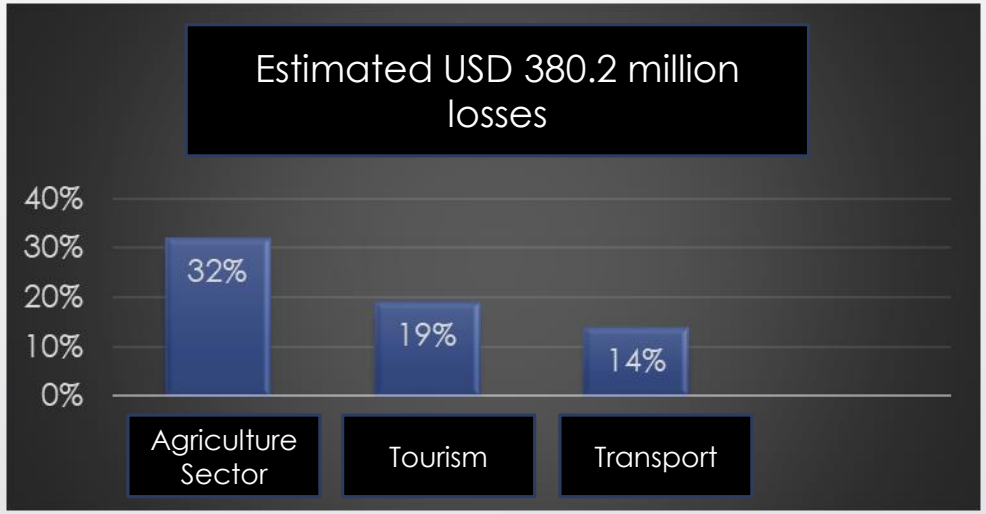
Damage after Hurricane Maria.

Source: ACAPS Disaster Profile: Dominica, January 2018
Photo: https://www.ccrif.org/sites/default/files/publications/CCRIF_Annual_Report_2017_2018_0.pdf

The issue?

Recent Example Hurricane Maria (Sept 2017):





Overall, damages and losses: USD 1.3 billion (estimate) equating to **224% of Dominica's 2016 GDP**

Sources:
1) ACAPS Disaster Profile: Dominica, January 2018,
2) UN 16/11/2017, 18/10/2017, OCHA 26/09/2017

The issue?

Recent Example Hurricane Maria (Sept 2017):

- Caribbean Catastrophe Risk Insurance Facility (CCRIF SAP) paid to the government, on a parametric policy USD 20.3 shortly after the event(1)
- Unreported….mortality rate has increased…for how long and what other long term impacts.
- **With damages of this amount, invested assets of financial firms may be impaired**
- **For small countries there is a need for offshore risk vehicles**(2)

Sources:
1) https://www.ccrif.org/sites/default/files/publications/CCRIF_Annual_Report_2017_2018_0.pdf
2) ACAPS Disaster Profile: Dominica, January 2018

Inclusion Agenda

- The Philippines is the market that has advanced the insurance inclusion agenda the most.
- It also has a comprehensive disaster risk management strategy that is in constant improvement and insurance is seen as a part of it.

Inclusion Agenda

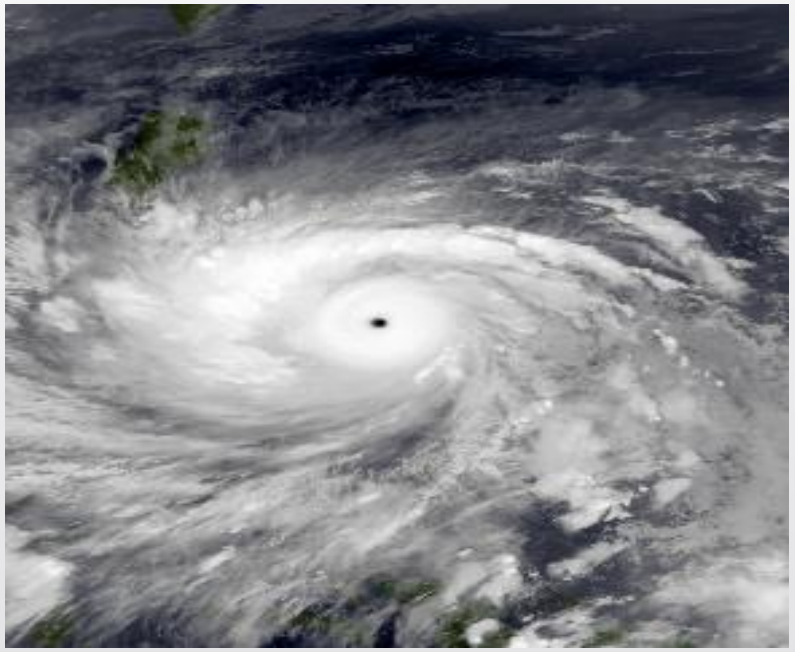
Example: Typhoon Haiyan (November 2013)

Category 5: Highest wind speeds ever seen on land (194 mph)

Impacted over 16 million people

6300 deaths

Displaced almost 4.1 million people



Typhoon Haiyan at peak intensity and approaching the Philippines on November 7, 2013.

Source: Aiding the disaster recovery process: the effectiveness of microinsurance service providers' response to Typhoon Haiyan, Microinsurance Network, Donna Swiderek and John Wipf 2015
Photo: https://en.wikipedia.org/wiki/Typhoon_Haiyan#/media/File:Haiyan_Nov_7_2013_1345Z_(Borderless).png

Inclusion Agenda

Example: Typhoon Haiyan (November 2013)

- **First time in a major disaster that the use of inclusive insurance covered low income population for part of a catastrophic event.**

Microinsurance claims: 126,363 reported claims totalling 12 million USD

98% were calamity claims

Average claim pay-out: 108 USD

Source: Aiding the disaster recovery process: the effectiveness of microinsurance service providers' response to Typhoon Haiyan, Microinsurance Network, Donna Swiderek and John Wipf 2015
Photo: https://movementgeneration.org/wp-content/uploads/2014/07/TyphoonHaiyan.jpg

Who participates in the solutions?

- Paris agreement / **putting policies in place to limit the global rise in temperatures to 2C**, and preferable as close as 1.5C.
- SDG and Sendia framework call for action to all but also to regulators, supervisors and policymakers!
- Para 36 c of the Sendai framework specifically asks the financial sector and its regulators to engage.
- Foreign aid.

Who participates in the solutions?

Sendai has four priorities:

Priority 1. Understanding disaster risk

Priority 2. Strengthening disaster risk governance to manage disaster risk

- Disaster risk for prevention, mitigation, preparedness, response, recovery, and rehabilitation. It fosters collaboration and partnership.

Who participates in the solutions?

Sendai has four priorities:

Priority 3. Investing in disaster risk reduction for resilience	• Public and private investment in disaster risk prevention and reduction through structural and non-structural measures are essential to enhance the economic, social, health and cultural resilience of persons, communities, countries and their assets, as well as the environment.
Priority 4. Enhancing disaster preparedness	• For effective response and to "Build Back Better" in recovery, rehabilitation and reconstruction

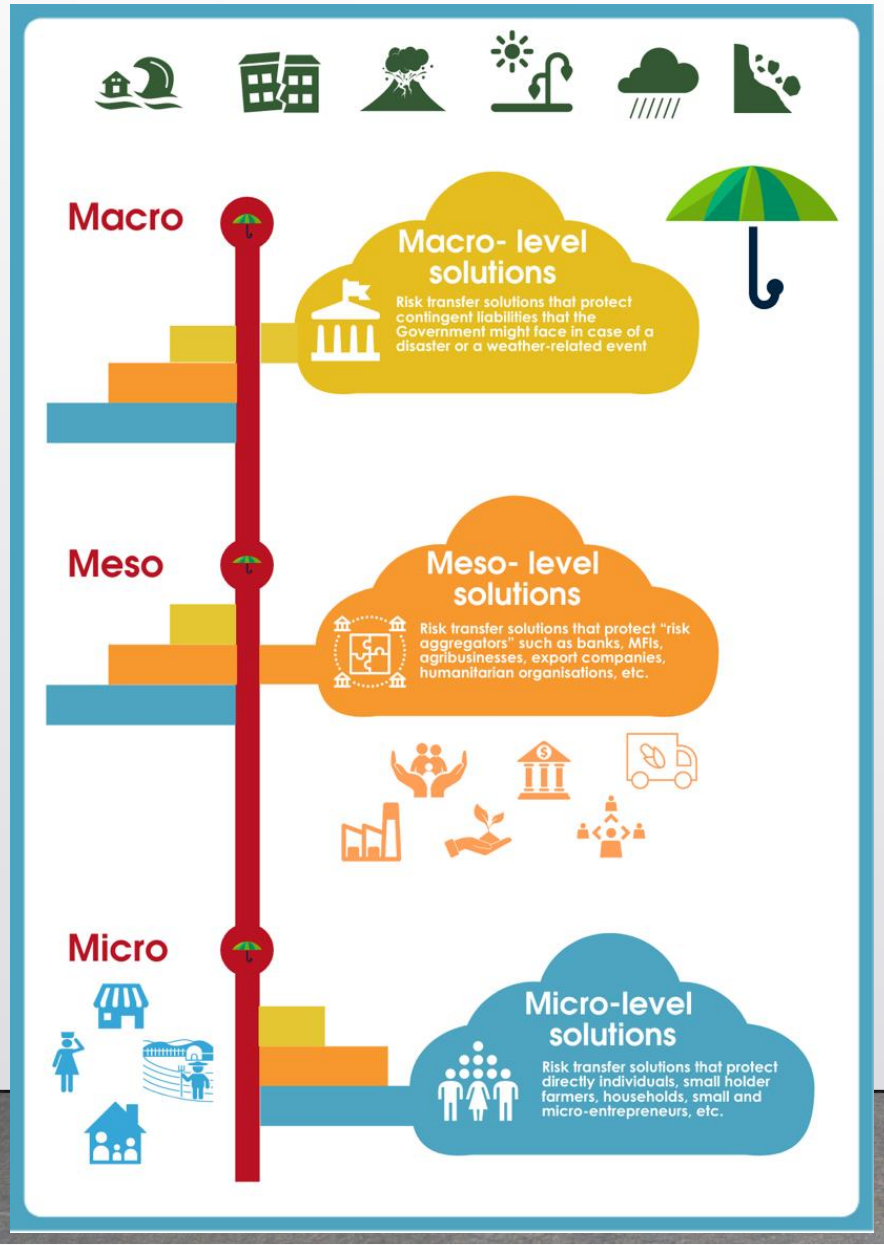
Who participates in the solutions?

Climate and disaster risk insurance as one piece of the puzzle to help people to better deal with risk related to climate change and disasters.

Community members clearing area for mangrove restoration under Anse-La-Raye Disaster Committee flood mitigation project in Saint Lucia.

https://www.ccrif.org/sites/default/files/publications/CCRIF_Annual_Report_2017_2018_0.pdf

Who participates in the solutions?



Infographic developed by A2ii

Macro:
Risk transfer solutions that protect contingent liabilities that the Government might face in case of a disaster or a weather related event

Meso:
Risk transfer solutions that protect "risk aggregators" such as banks, MFIs, agribusinesses, export companies, humanitarian organizations etc.

Micro:
Risk transfer solutions that protect directly individuals, small holder farmers, households, small and micro-entrepreneurs etc.

Who participates in the solutions? Foreign Aid

Does Foreign aid cover all the need?

- Large natural disasters occurring from 1970 to 2008:
  - Median increase in ODA is 18 percent compared to pre-disaster flows
  - the typical surge is small in relation to the size of the affected economies.
  - Aid surges typically cover only 3% of the total estimated economic damages caused by the disasters
- Based on experience, aid delivered is patchy resulting in missing many in need.
- Foreign aid may compete with the implementation of market based insurance solutions, This could impact the ability to make market solutions sustainable.

Source: IDB, Foreign Aid in the Aftermath of Large Natural Disasters, Becerra, Cavallo, Noy , 2012

What are concerns of policymakers, regulators, supervisors, insurers and supply chain?

- This forum will help to understand the roles and **responsibilities of each party to build resilience** and **bridge the protection gap**.
- Set target population covered.
- Change regulations to enable inclusive insurance and understand how to protect insurance company resilience.
- Insurance companies need to understand and adapt products, processes and distribution channels to reach the large uninsured population.

What are concerns of policymakers, regulators, supervisors, insurers and supply chain?

- IAIS has an issues paper on Climate change and risks to Insurance sector
- Impact on insurers
  - Physical risks
    - Insured losses Protection gap Economic disruption
    - Uninsured losses arising from physical climate factors may have cascading impacts across the financial system
  - Transition risk
    - Potential disruption as economy shifts to low carbon and other risk mitigation strategies

Photo: https://www.ccrif.org/sites/default/files/publications/CCRIF_Annual_Report_2017_2018_0.pdf

What are concerns of policymakers, regulators, supervisors, insurers and supply chain?

- Strategies for insurers
  - Set appropriate governance, strategic, and operational frameworks and policies
  - Ensure modelling of risk
  - Ensure that reinsurance risk is diversified with strongly rated companies
- In some countries there is a lack of reinsurance capacity, work with government for alternative facilities

What are concerns of policymakers, regulators, supervisors, insurers and supply chain?

- Supervisor strategies
  - Solvency and stability of insurance firms
    - Disclosure of modelling results, and techniques
    - Disclosure of reinsurance companies and reinsurance arrangements
    - Understanding impact on long term investments
  - Products, permit index and parametric products
  - Market Conduct
    - Ensure clients receive clear information on coverage
  - Macro prudential stability
    - Engagement with policy making bodies

What are concerns of policymakers, regulators, supervisors, insurers and supply chain?

Relevant ICPs:

- ICP 7 (Corporate Governance)
- ICP 8 (Risk Management and Internal Controls)
- ICP 15 (Investment)
- ICP 16 (Enterprise Risk Management for Solvency Purposes)
- ICP 19 (Conduct of Business)
- ICP 20 (Public Disclosure)

How to effect change?

- Dialogue with various parties to improve understand and implement risk mitigation strategies
- Openness to make positive changes
- Monitor evolution and make periodic adjustments

Conclusions

- Understand the issues
- Risk mitigation and disaster resilience is collective action by all stakeholders.
- Work to improve access to insurance to bridge the gap
- Regulatory and insurance company methodology to improve resiliences
- Insurance has an important role and is a necessary participant in the dialogue to reduce the gap of coverage.