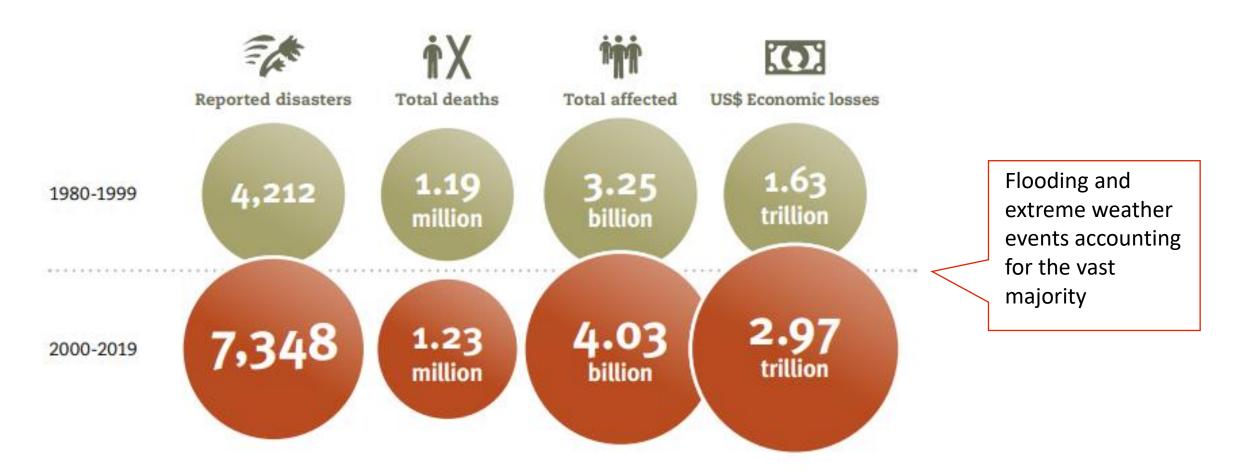


# New ways to tackle and finance natural disasters

### Natural disasters and their consequences are increasing





Source: UNDRR: The human cost of disasters: an overview of the last 20 years (2000-2019)

## Traditional funding – too little too late!





- Wait and see
- Discretionary funding decision
- Funding arrives too late
- Lack incentives to prevent and prepare
- Large and growing funding gap

## Need for more pre-arranged funding to prepare and respond more efficiently



Catastrophe fund / Disaster Relief Emergency Facility

We can set money aside for large disasters to be able to act faster

**Forecast-based Finance** 

We can agree to act earlier based on forecasts and automatic triggers

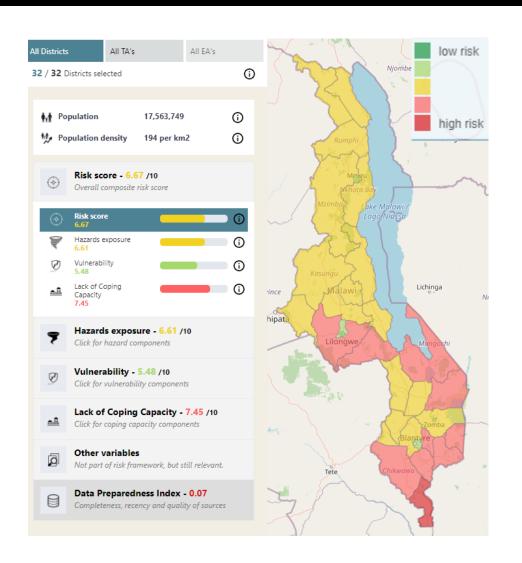
Understanding, measuring and monitoring risk required

Risk transfer/insurance/catastrophe bonds

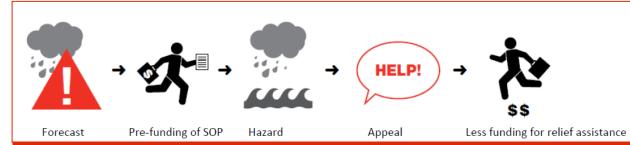
We can transfer the risk to insurance companies or financial sector and secure automatic payouts based on triggers for the severity of the natural disaster

### By understanding risk, we can prepare and respond earlier





#### **Forecast-based Action**



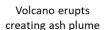
Danish Red Cross has established risk measuring and weather monitoring in 7 countries and pre-arranged funding for early action before the hazard strikes.

- Saving lives
- Saving costs
- Building local resilience

## By understanding risk, we can also price it and insure it









Cat bond triggered based on height of ash plume and wind direction



Blockchain releases flexible funding within hours



Post-eruption deterministic model allocates funding to most vulnerable communities



Funding mobilized before ash hits the ground reducing serious loss



Disaster appeals announced



Less funding needed for disaster relief





This week Danish Red Cross issued the world's first humanitarian catastrophe bond for volcanoes:

- 10 volcanoes insured
- USD 3M insurance sum
- 5% premium payment
- Parametric triggers for ash plume height and wind direction



## A new way of working



#### 1. Testing new grounds

- First time to consider insurance for the programmatic side
- First time to tap into capital markets
- First time to issue a bond
- First time to issue on a blockchain

#### 2. Credibility with Investors

- Oh, that is cute...Red Cross wants to do a cat bond?
- Identifying investors convincing them to trust us

#### 3. New types of partners

- Working with insurance companies, tech-providers, brokers, calculation agents, law firms etc.
- KYC, due diligence

#### 4. New competencies

- Staff with financial skill set
- Organizational readiness

#### 5. New risks

- Value for money what if it does not trigger?
- Reputational use of donor money to pay investors?
- Ethical our principles/mandate
- Data risk reliability, accuracy, independence



It is a challenging agenda for a humanitarian organisation

We cannot do it alone!

Need for both grant funders, investors and technical/knowledge partners, who also have to find new ways of working!

## Thank you



We hope you will join us in developing the next innovative finance solution