

The Power of Parametrics  
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# Global Parametrics

*Smart Decisions for Natural Disaster Risk*

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- Responsible for building new partnerships and programs
- Almost 20 years experience in emerging market insurance/finance
  - 9 Years at AIG (Working in Asia, Africa, South America & Eastern Europe)
  - 6 Years for a consumer MGA (Africa, South America and Asia)
  - 2 Years launching a start-up focused in Nepal, Myanmar & the Philippines
  - Joined GP at end of 2017
- Global experience on projects in Philippines, Thailand, South Korea, Taiwan, Hong Kong, Myanmar, Malaysia, Nepal, India, Pakistan, Mexico, Brazil, El Salvador, South Africa, Ghana, Poland, Australia and New Zealand

# Global Parametrics

## Public/Private Organisation

*(Main  
shareholders DFID  
& KfW\*)*

- Harness climate & geophysical data
- Build Parametric **impact** indices for organisations

## Use the indices for

- Information/Analysis
- Building resilience programs
- Pricing risk products

## Support programs/risk products

- Technical assistance
- A DFID risk capital pool
- Private sector insurance

\*Through the InsuResilience Investment Fund managed by Blue Orchard



# Harnessing climate data for resilience

- Lower- and middle-income countries are disproportionately affected by extreme climate and natural disasters
- Advances in climate data science provide us with the information to develop programs to mitigate these effects
- The key is to translate this information into transparent, accessible metrics that can be simply understood and effectively utilised
- We call these metrics **impact indices**

# The Power of Parametrics

## Traditional Data Analytics

- Limited, disparate and proprietary sources affect data accessibility
- Difficult and complex to interpret so reduces transparency
- Unreliable, particularly in low and middle income countries

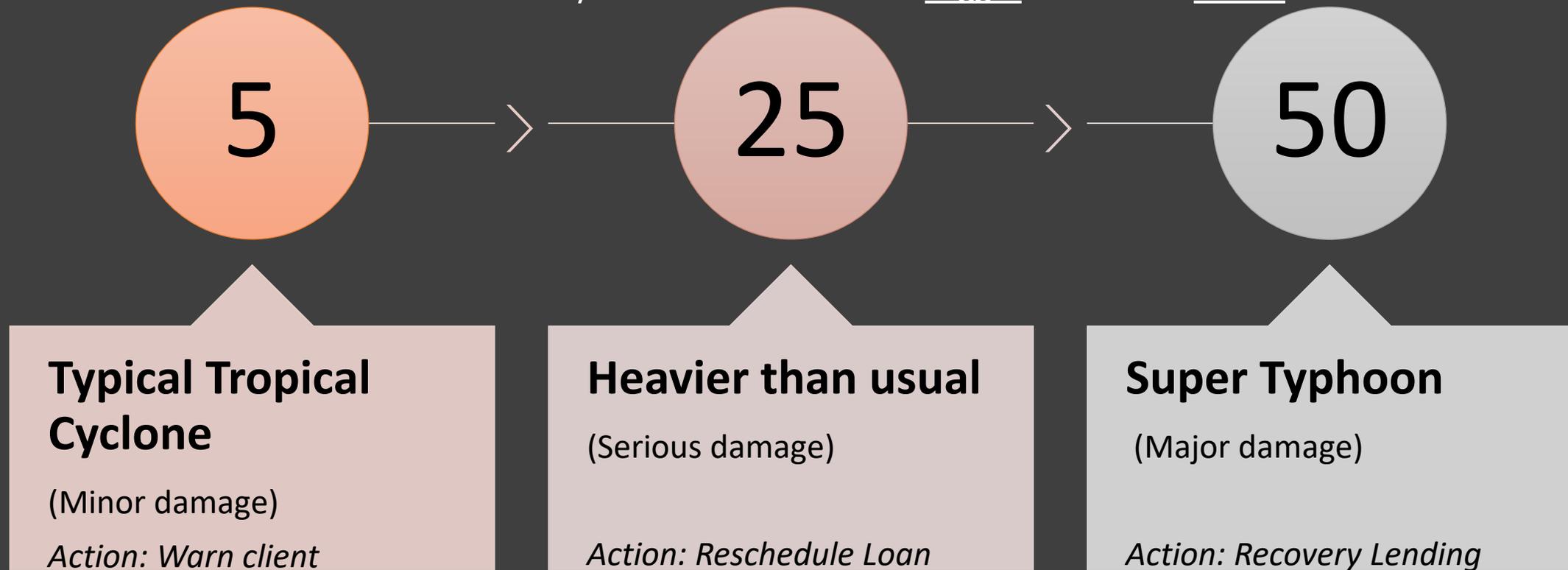
## Parametric Impact Indexes

- Unambiguous
- Universal
- Actionable
- Directly measures the event's impact on the client

**Parametric products are particularly relevant for climate and natural disaster risk in the developing world due to their accessibility, ease of understanding and suitability for developmental programs related to disaster risk financing and resilience**

# Parametric Impact Indexes enable decisions

Severity of event and likelihood of impact to client is converted into a numerical score that can be triggered automatically at a certain value. This trigger leads to an action.



# Indexes can be created for many perils

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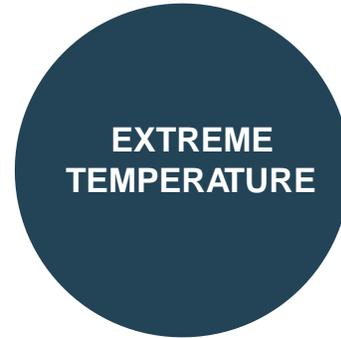
## Standard



Estimates of water and heat stress during the critical timing for major crops



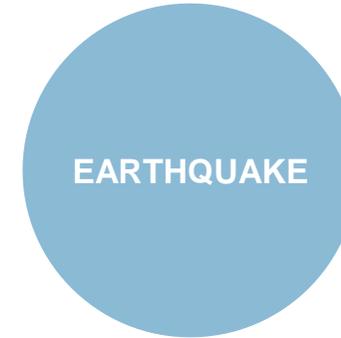
Estimates of damage to vulnerable infrastructure by geography



Hedging instruments capture extreme hot or cold temperatures



Extreme rainfall hedging products for both excess and deficit

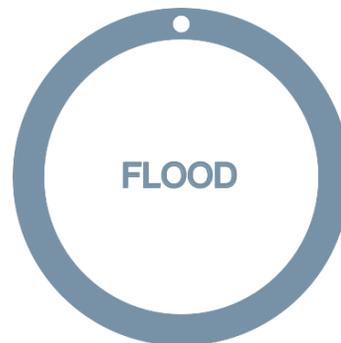


Estimates of damage to vulnerable infrastructure by geography

## Customised



Forecasts soil moisture and provides cash before the planting campaign



Models capture extreme flooding within watersheds



Products lead to cash injections that mitigate impending problems



Protection against landslides in vulnerable areas



Protection against volcanic ash, sand storms, etc.

## How GP supports clients' programs

Take Big Data

Make it useful

Implement

1

**Understand a clients risk and exposure**

Our platform matches together external climate data with a clients portfolio data

2

**Build a impact index for the client**

Our indexes can be totally customised. Examples include: famine, drought, earthquake and tropical cyclone

3

**Structure a Financial Solution**

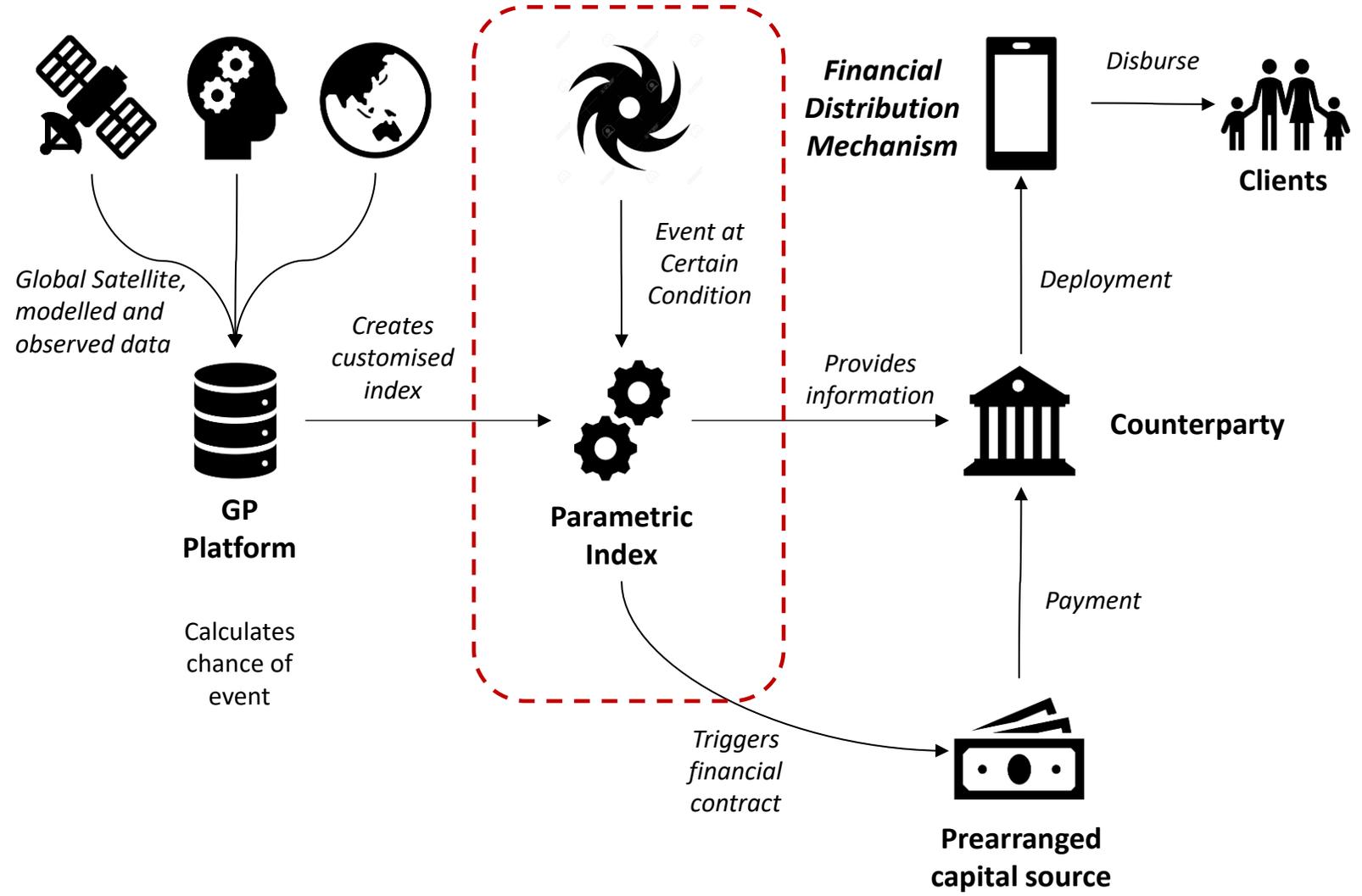
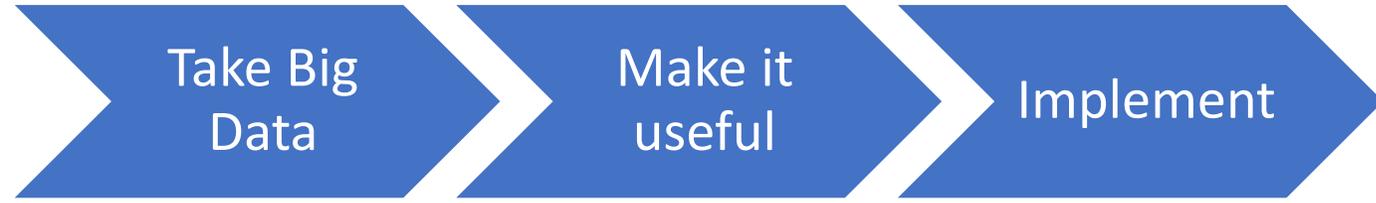
Our solutions can be local, regional or global.  
Our partners can be private, public or Governments

4

**Enable the client to fund their programs**

We advise the Natural Disaster Fund, a 'risk pool' that is a blend of private and public capital

Pre-Arranged Financial solutions



# Financing

## Technical Assistance

- Available for organisations who need to understand their climate & natural disaster risk

## The Natural Disaster Fund

- A DFID funded catalytic risk pool designed to pilot programs

## Private Insurance Sector

- To provide capacity as client need grows

# Some of our current programs

01

**ARDIS**

Drought & TC Recovery lending in partnership with VisionFund International

**Launched Jan 1st, 2018**

02

**B-READY**

Tropical Cyclone Forecast based financing in partnership with Oxfam & Plan

**Launched Jan 1<sup>st</sup>, 2019**

03

**Disaster Risk Central Asia**

Earthquake resilience program in partnership with the Aga Khan Development Network

**Launched October 1<sup>st</sup>, 2019**

04

**CRRF**

Multi-peril Balance sheet protection of partner banks in partnership with large multilateral

**Planned launch January 2020**

# Summary

GP brings together climate, probabilistic event and historical data

GP then creates parametric indices that give an immutable view of risk at any point on Earth

- These indices form the basis of weather and natural disaster risk mitigation strategies

# How data is converted into an index

