

# **Sovereign and Humanitarian Working Group: Tripartite Programme**

# The Protection Gap



**\$162.5bn**

The size of the global insurance protection gap. Emerging economies account for \$160bn (96%) of this.

Lloyd's World At Risk report, Oct 2018  
[www.lloyds.com/worldatrisk](http://www.lloyds.com/worldatrisk)

**1%**

The percentage of natural disaster losses in developing countries 1980-2004 that were insured. This compares to c.30% in developed countries.

Dag Hammarskjöld Foundation and UNDP 2019  
[Financing the UN Development System: Time for Hard Choices](#)

**\$4tn**

The estimated figure lost to extreme natural disaster events globally over the past 40yrs, US \$2.9 trillion of which was uninsured.

[Swiss Re database of natural catastrophes](#)

# Project portfolio I

4

**Projects in execution**

570 m USD projected capacity

12.5 m projected beneficiaries

6

**Projects in various stages  
of ISF application**

530 m USD projected capacity

25 m projected beneficiaries

8

**New Countries**

# Project portfolio II

Projects in execution and application phases

13

Flood, rainfall

4

Drought

3

Earthquake

2

Wind

9

Parametric

3

Indemnity

6

Projects work with  
external model providers

# Company Commitments

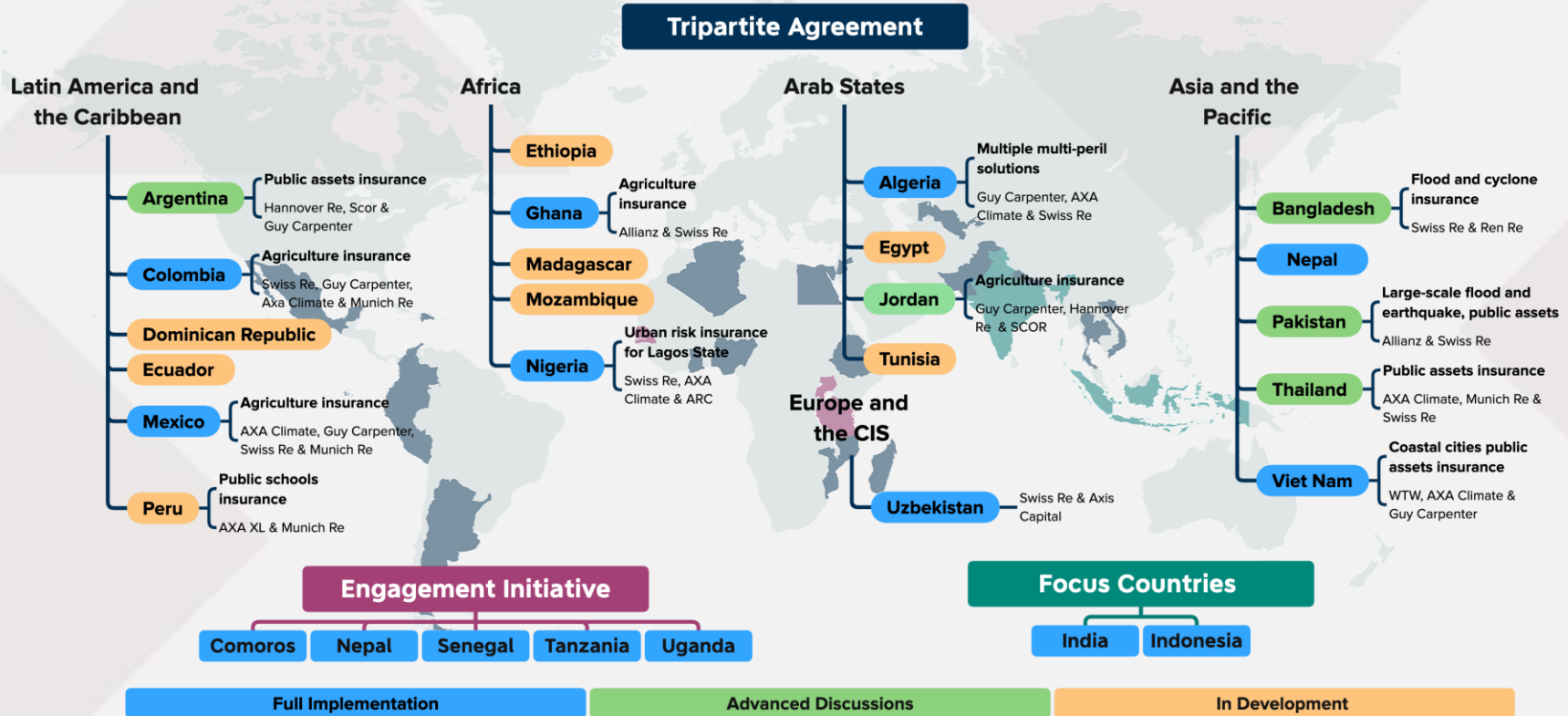
## COMPANY

Allianz  
ARC  
AXA  
Blue Marble  
CelsiusPro  
Convex  
Gallagher Re  
Guy Carpenter  
Hannover Re  
Howden  
Lloyds DR/Hiscox  
Munich Re  
SCOR  
Swiss Re  
WTW

## GUY CARPENTER ENGAGEMENT

Argentina  
Colombia  
Dominican Republic  
Ecuador  
Mexico  
Madagascar  
Mozambique  
Algeria  
Ethiopia  
Egypt  
Jordan  
Tunisia  
Tanzania  
Nepal  
Vietnam

# Country Overview





# IDF Mexico

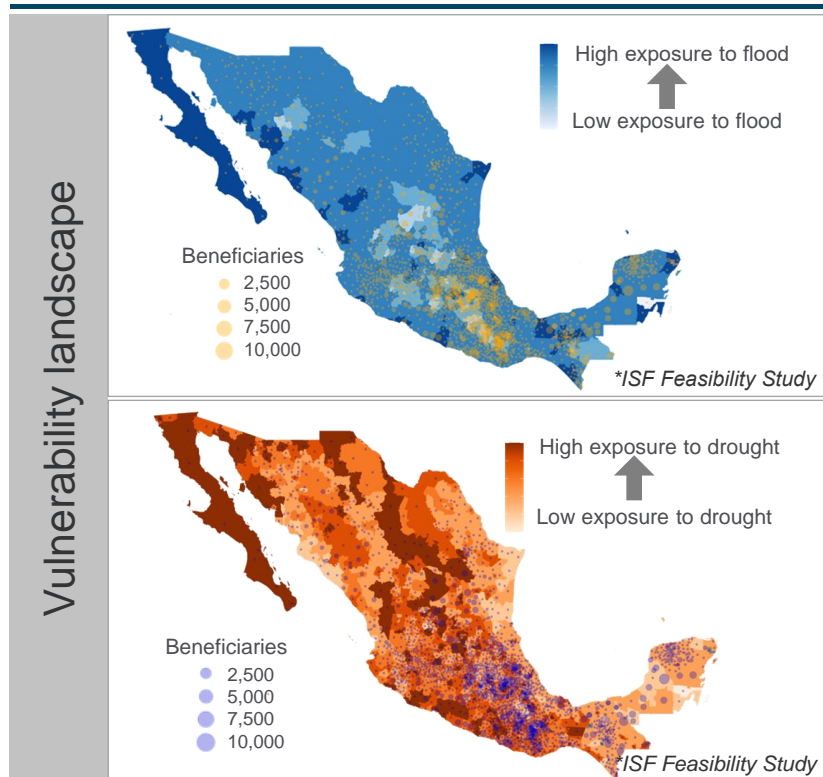
## Parametric Insurance for smallholder farmers

Introduction / Design



# Without a protection coverage, the impact of climate risks affects smallholder producers more strongly due to their vulnerability

Smallholder farmers have a high exposure to drought and excess rain...



Affecting agricultural activity, but hitting vulnerable (with no means of protection) people harder

## Agriculture is affected by Natural disasters

- **80%** of economic losses due to natural disasters affected the agricultural sector<sup>1</sup>.
- **76%** of the total cultivated area (22 million Ha) is seasonal and exposed to excess of rainfall, droughts and changes in temperature<sup>2</sup>.
- **80%** of the 5.3 million producers have less than 5 Ha in rainfed land<sup>3</sup> and do not have access to irrigation

## Smallholder farmers are the most vulnerable

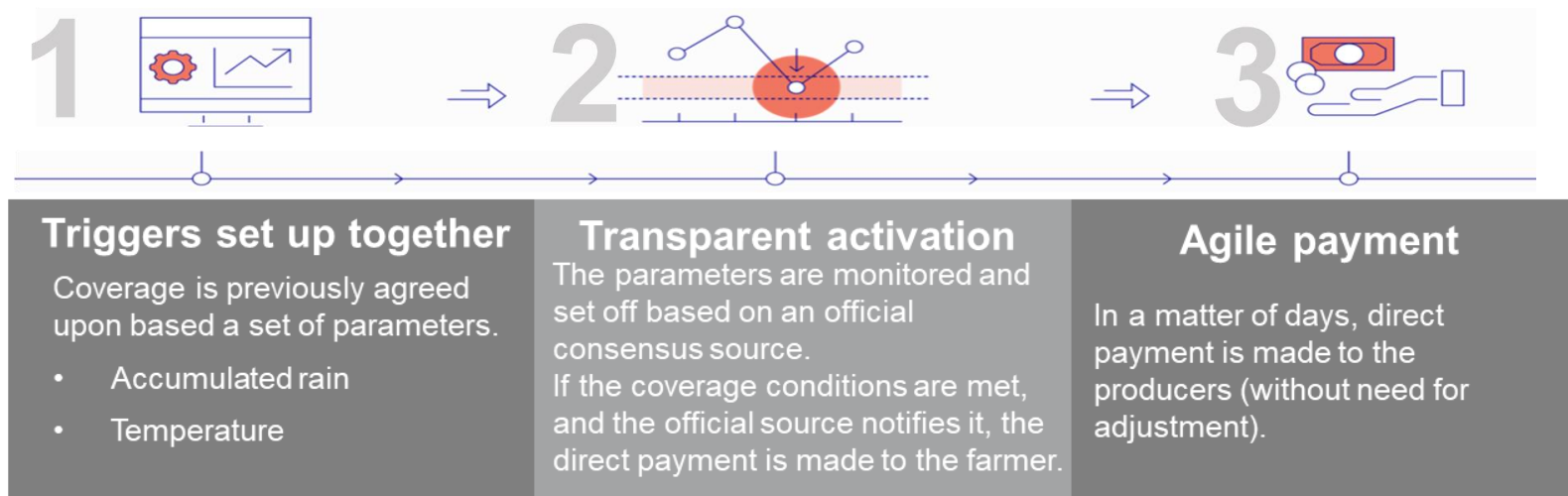
- 4.4 million smallholder farmers across Mexico
- Mostly indigenous communities living in less connected rural areas, with an income of less than USD 4/day
- Growing crops for self-consumption, with lands of less than 5Ha, corn is the staple crop (82.4%)
- Crops are concentrated in areas of high exposure, and depend on weather for irrigation
- Have no protection for their crops, becoming not only an economic but also food security hazard if something happens

<sup>1</sup> World Bank, Agriculture Insurance Market Review N.4, 2013, data from 2000-2020  
<sup>2</sup> ENA 2017  
<sup>3</sup> ENA 2019



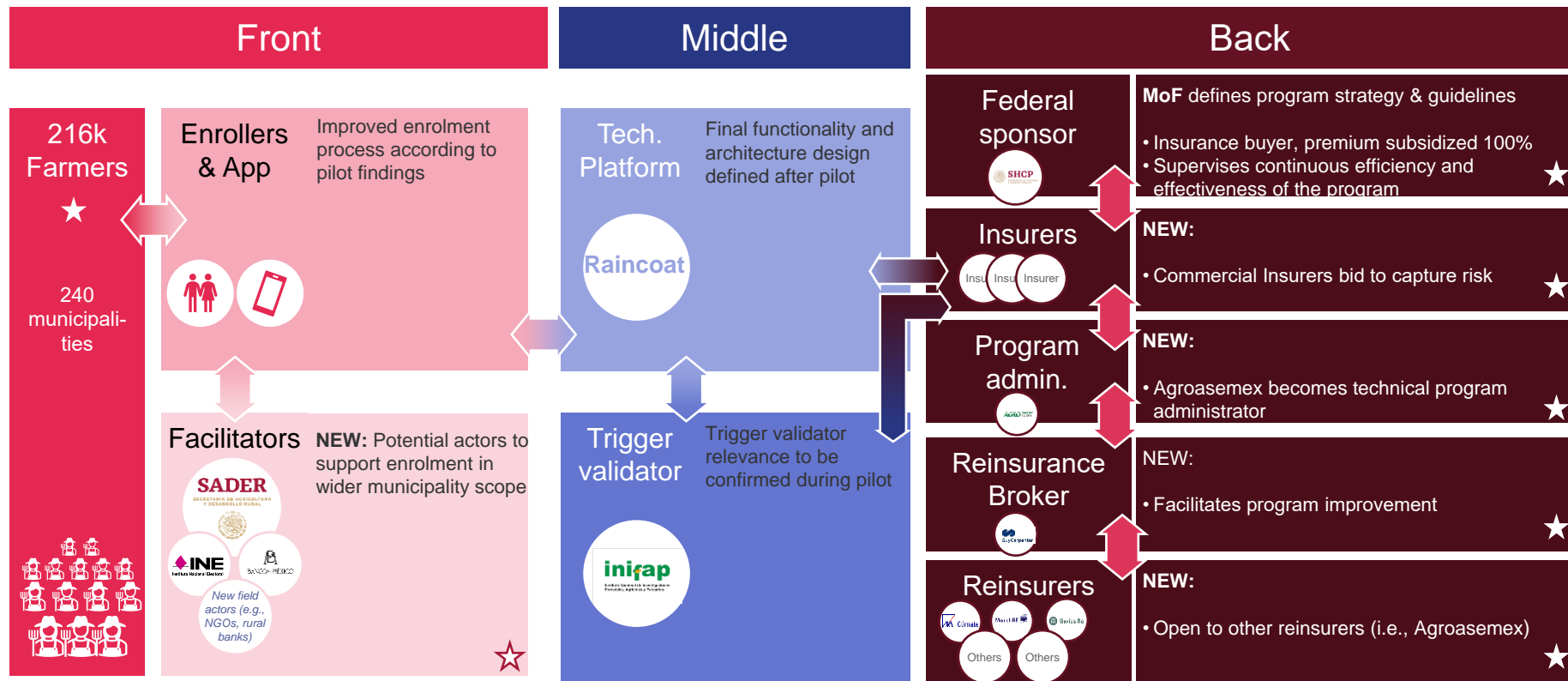
**Solution |** To address this protection gap, we propose a parametric insurance cover with direct pay-out to smallholder farmers, using the lessons from CADENA

Key pain-points	CADENA catastrophic insurance program	IDF consortium parametric insurance program vision
Policyholder	Each State was contractor and direct beneficiary	Ministry of Finance / Ministry of Agriculture as policyholder, but farmers as beneficiaries
Product and pay-out	In-place loss adjustment created lengthy claims processes with high admin costs	Parametric excess rain-fall & drought tracked via satellite; rates & triggers agreed in advance, fast and direct pay-out without loss adjustment
Cost efficiency	State level pricing negotiation, insurers placing reinsurance individually ultimately ended in high costs	Global placement will lead to larger exposure and diversification; synergy with current SADER programs for end-to-end enrolment and payouts
Risk & pricing	Lack of sufficient data = high assumptions on risk quality = conservative pricing	Satellite data points will increase accuracy (from municipalities to “pixels”) = better risk assessment = more adequate pricing
Transparency	States received payouts and dispersed it to smallholder farmers at discretion	Farmers will be beneficiaries, receiving fast pay-out directly with no intermediation

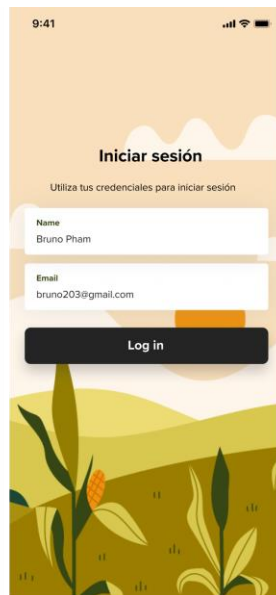
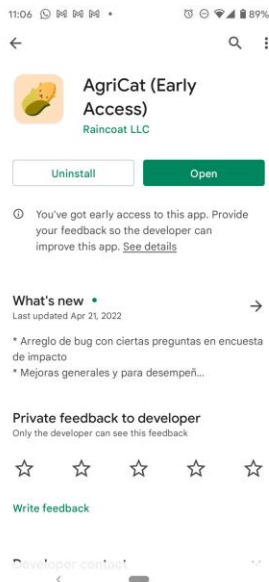


- **Cost effective.** Traditional insurance would be unfeasible due to costs
- **Reliable.** A third party ratifies the trigger
- **Efficient.** Fast payment to producers
- **Simple.** Removes operational complexities

# Roll-out | Operating Model | With improvements from the Pilot, the Program is expected to become fully operational in 2023 with additional Federal funding



# AgriCat (enrollment App)



## Relevant points

- Powered by Raincoat
- Aimed at field personnel
- Only authorized personnel can download the app and registration is required
- Possibility of working offline by downloading information to the phone
- All enrollment data is encrypted, accessed using a QR code
- When network access available, the enroller uploads the information to the cloud