WRMS

PARAMETRIC INSURANCE PLATFORM

SecuRisk

Index Insurance Platform

Bespoke parametric product design and instant claims payment — closing the protection gap for farmers and low-income communities in emerging economies.

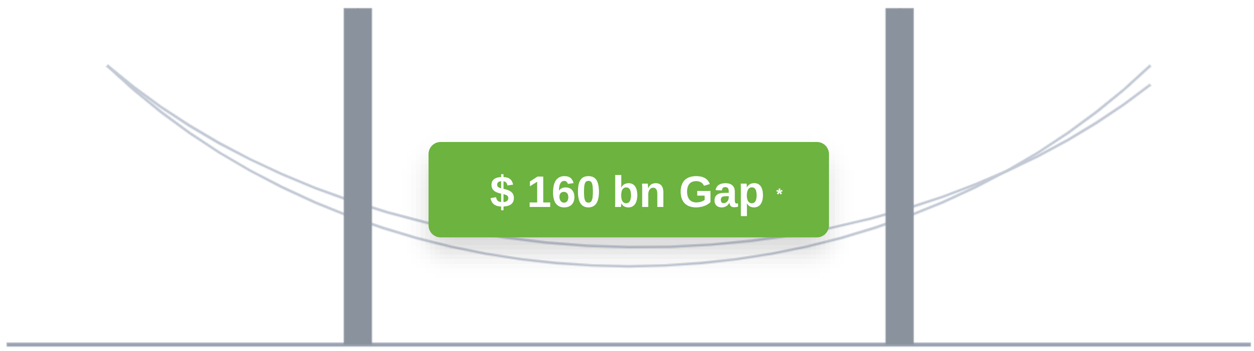
1.2M
Beneficiaries

$60M
Sum insured

40
Partnerships

THE GLOBAL UNDERINSURANCE GAP

The world’s most exposed are the least protected.



96%

in emerging economies

where extreme weather strikes hardest and cover is scarce.

$160bn

annual protection gap

the shortfall between economic and insured losses.

* Swiss Re Sigma Report – 2022

WHY PARAMETRIC INSURANCE?

Traditional cover doesn't reach those who need it most.

Farmers

Smallholders produce 1/3rd of the world's food, yet are the most climate-vulnerable group. Their experience with traditional insurance has been:

Expensive · Complex · Resource Intensive · Payout Delay

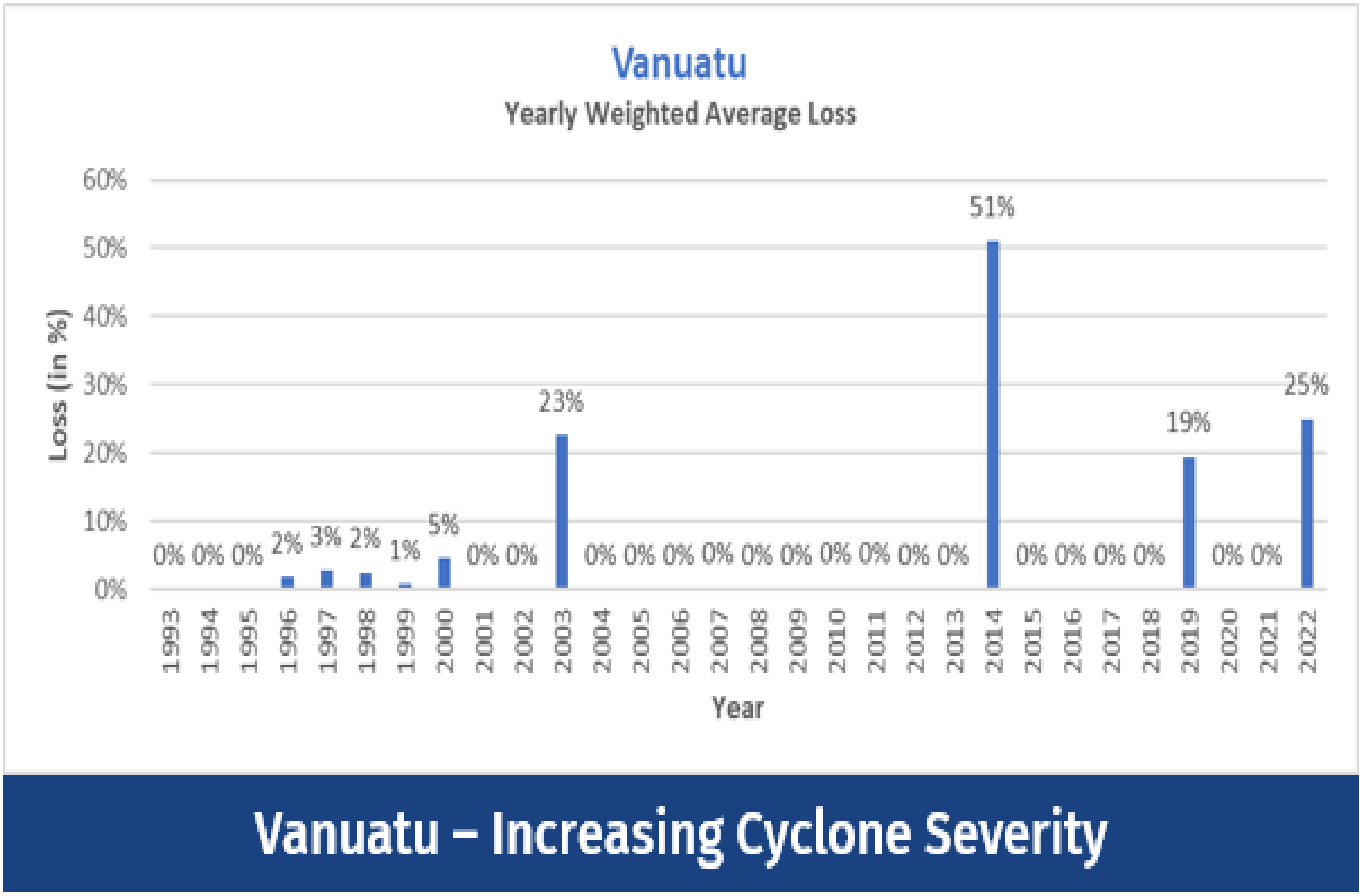
Low-income communities

Extreme events now hit at higher frequency, making these communities more vulnerable to income instability — while traditional insurance is unavailable or too expensive and complex to help.

Smallholders feed the world — and carry its greatest climate risk.

VANUATU — INCREASING CYCLONE SEVERITY

Importance of insurance to manage these disasters is increasing amid the need for better fiscal planning and faster response by policymakers.



PARAMETRIC PITFALLS IN EMERGING ECONOMIES

Four barriers have held parametric insurance back.

01

High roll-out time & cost

Manual design and settlement make products slow and expensive to launch.

02

Lack of quality data

No clean, deep historical repository to design and price reliable products.

03

Low awareness & education

Limited product understanding among customers and distributors slows adoption.

04

Low carrier interest

Insurers and reinsurers are hard to engage in small, fragmented markets.

SecuRisk answers all four → one platform unifying data, product design, distribution and settlement.

SECURISK TECH PLATFORM

A full-stack platform, from product design to instant payout.

Bespoke parametric product design and instant claims payment — unifying the entire value chain on one system.

01 Global data repository

Diverse, cleaned historical climate and yield data to design and validate products.

02 Localized product design

Bespoke parametric products built on localized ground-station data.

03 Digital marketplace

A vast network of risk carriers connected through one digital marketplace.

04 Rapid settlement

Transparent underwriting and instant, rules-based claims payment.

GLOBAL DATA STACK ON A BIG-DATA FRAMEWORK

Localized product design starts with global data.

Surface Weather Data

- 50,000 stations from 1970 onwards — 15,000 built by WRMS
- Coverage across 50 countries

Gridded Climate Data

- Global gridded data from 15 sources, 4–100 km resolution
- 30 million daily data points

Agriculture Yield Data

- India, Bangladesh, Australia, Indonesia & Brazil
- Yield datasets from 2000 onwards

Remote-Sensed Data

- 10 m to 250 m resolution global vegetation & water-stress data

BUILT ON A BIG-DATA FRAMEWORK

AI-enabled	Data cleaning algorithms
NoSQL	Scalable cloud architecture
Blockchain	Enabled platform
Geospatial	Data visualization

ONE PLATFORM, TWO SIDES OF THE MARKET

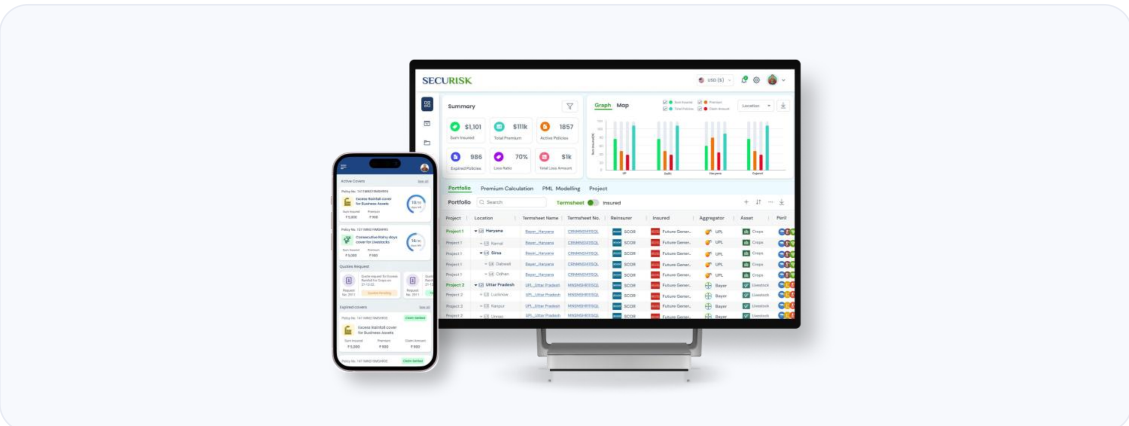
Built for carriers and customers alike.

For Insurers & Reinsurers

- Product Design
- Product Validation
- Policy Management
- Claim Management
- Portfolio Risk Mgmt

For Brokers & Customers

- Digital Onboarding
- Product Education
- Product Customization
- Policy Purchase
- Claim Settlement



SECUSENSE — WEATHER & CLIMATE IOT

Cutting-edge hardware feeding the data intelligence.

50% cheaper

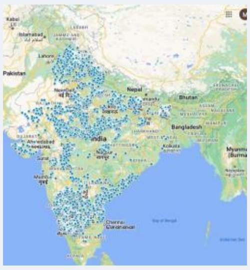
than the cheapest in the market.

30% better

more efficient than the best in the market.

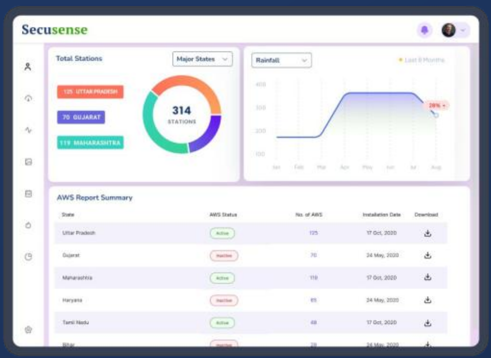
+10,000

AWS deployed across India.



Automatic Weather Station

Weather Forecasting & Data



HARDWARE — MEASURED PARAMETERS

- Air Temperature
- Precipitation
- Barometric Pressure
- Soil Moisture & Temp.
- Relative Humidity
- Solar Radiation
- Wind Speed & Direction

Low-cost, high-quality infrastructure democratizes data usage and builds data intelligence at scale.

HOW WE COME TOGETHER

Five partners, one protected community.

CLIENT
Programme sponsor

- Wishes to insure target communities or members; provides macro insights
- Where applicable, subsidises premium

LOCAL DISTRIBUTORS
On-the-ground reach

- Hold the local relationship; provide micro insights & build awareness
- Where applicable, collect premium

LOCAL INSURERS
Risk carriers

- Issue the group policy
- Pay claims to distributor or directly to insured

WRMS
Platform & orchestration

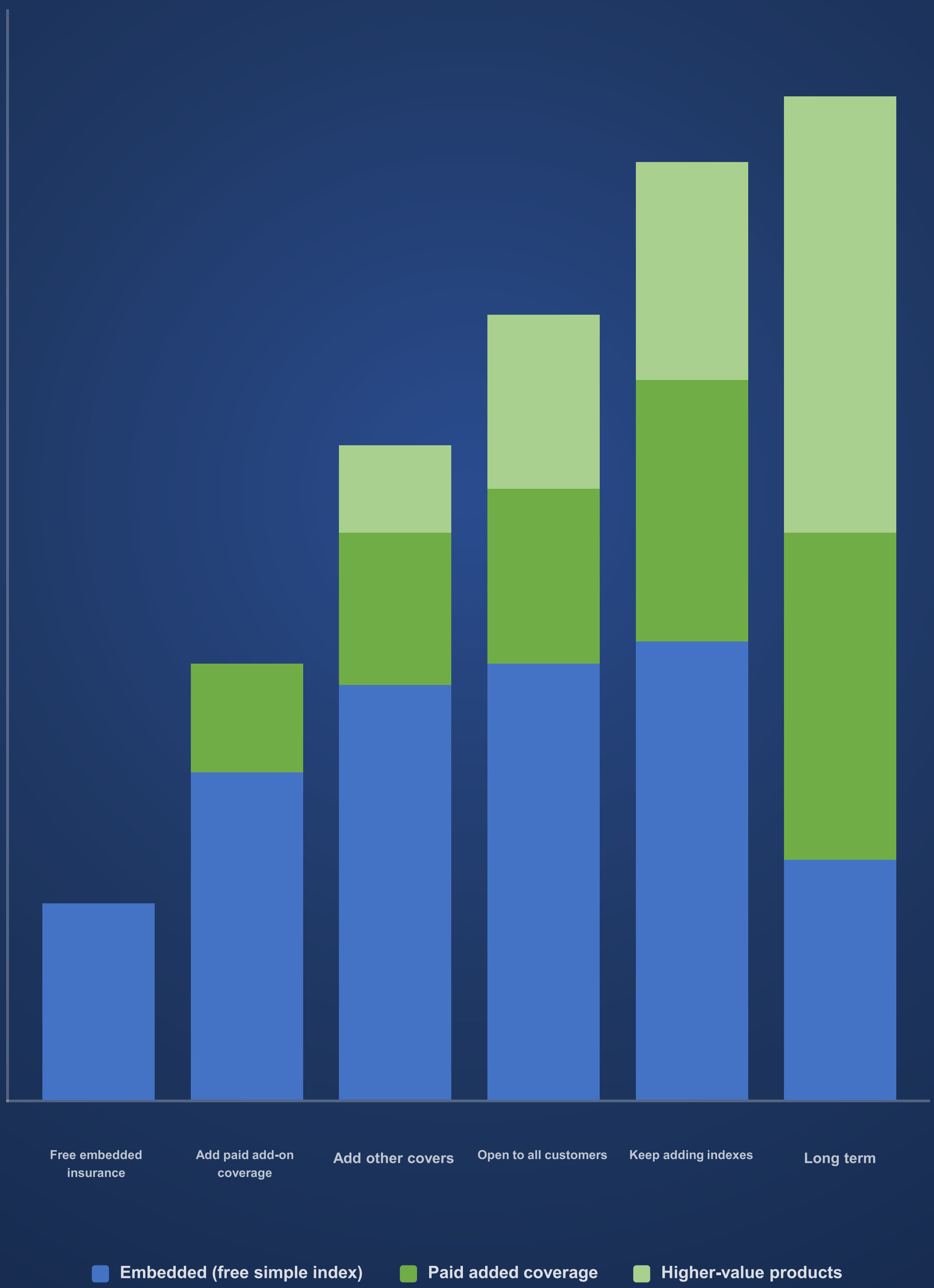
- Designs the product; secures insurer & reinsurer
- Monitors the index; instructs when claims pay out

THE INSURED
Protected community

- Farmers & low-income communities
- Receive fast, transparent payouts when events strike

ADOPTION OVER TIME

From free embedded cover to higher-value products.



CASE STUDY · INDIA

Small-ticket bundled insurance with agri-input.

CHALLENGE

- Bundle small-ticket parametric products for 1M+ farmers across India.
- Integrate with a partner mobile app for quick enrolment & settlement.

SOLUTION

01 **Rapid underwriting of 4,000+ termsheets across 3 seasons.**

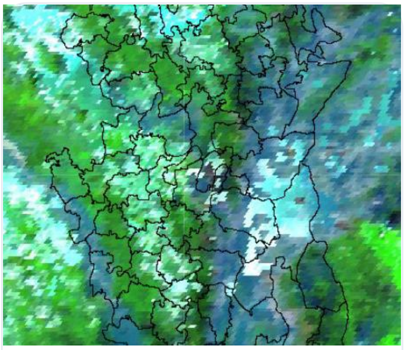
02 **API integration with the partner app for a frictionless experience.**

03 **Instant claim calculation & settlement.**

1M+	4,000+	3
Farmers	Termsheets	Seasons

CASE STUDY · BANGLADESH

Satellite-data-based flood index insurance.



Rainfall & flood distribution — Kurigram

4,000 Beneficiaries

$780K Sum insured

Piloted July 2020 in Kurigram, in the Teesta–Brahmaputra flood plains where most districts flood frequently. Catastrophic floods of longer duration pose real livelihood risk.

Data Stack

Model & settlement: MODIS Flood Extent data

Calibration: Sentinel-1 SAR, rainfall & water level

Value-at-risk: Credit & borrower data from MFI

Consecutive Observed Flood Incidents (OFI)	Flood duration (consecutive days > trigger)	Raniganj Union	Jatrapur Union
			Payout (% of Sum Insured)
< 4 OFI	Less than 24 days	0%	0%
4 OFI	24 or more days	10%	0%
5 OFI	32 or more days	15%	15%
6 OFI	40 or more days	25%	30%
7 OFI	48 or more days	35%	40%
8 OFI	56 or more days	50%	60%
9 OFI	64 or more days	60%	70%
10 OFI	72 or more days	80%	80%
11 OFI	80 or more days	90%	90%
12 OFI	88 or more days	100%	100%

HAITI'S FIRST-EVER

Parametric Drought Cover.

Protection for communities whose livelihoods are hit by continuous drought — using a **Water Deficit Index (WDI)** that sums rainfall falling below phase-wise strike levels across the season.

Duration	Ph	S1	S2	S3	S4	S5
Sep-Oct	**1**	160	125	100	75	50
Oct-Nov	**2**	130	95	70	45	20
Nov-Dec	**3**	60	40	25	10	5
Dec-Jan	**4**	45	30	20	10	5
Jan-Feb	**5**	45	30	20	10	5
Feb-Mar	**6**	60	45	25	15	5
Mar-Apr	**7**	85	60	45	30	15
Apr-May	**8**	115	85	65	45	25
May-Jun	**9**	110	85	65	45	25
Jun-Jul	**10**	60	40	25	10	5
Jul-Aug	**11**	80	55	40	25	10

Index: Water Deficit Index — sum of actual rainfall below the strike, across the crop season.

PAYOFF BY STRIKE

2.5%	**$10**
5.0%	**$20**
10%	**$40**
15%	**$60**
20%	**$80**

BUNDLED INDEX INSURANCE

Insurance, seed systems & climate info — delivered together.

Background

Adapting and scaling gender-responsive agricultural risk-management strategies for vulnerable smallholders through bundled seed systems, index insurance and climate information in India and Bangladesh. Piloted in Gaya, Bihar.

WHAT WE DID

- **Package of Practices:** farm advisory to maximize farm income.
- **Weather forecast:** 7-day forecast via SMS or mobile app.
- **Seed systems:** flood-resistant varieties to boost resilience.
- **Drought & flood cover:** index from rainfall & MODIS flood data.

WEATHER-BASED INDEX INSURANCE

Cover bundled with agri-input purchases.

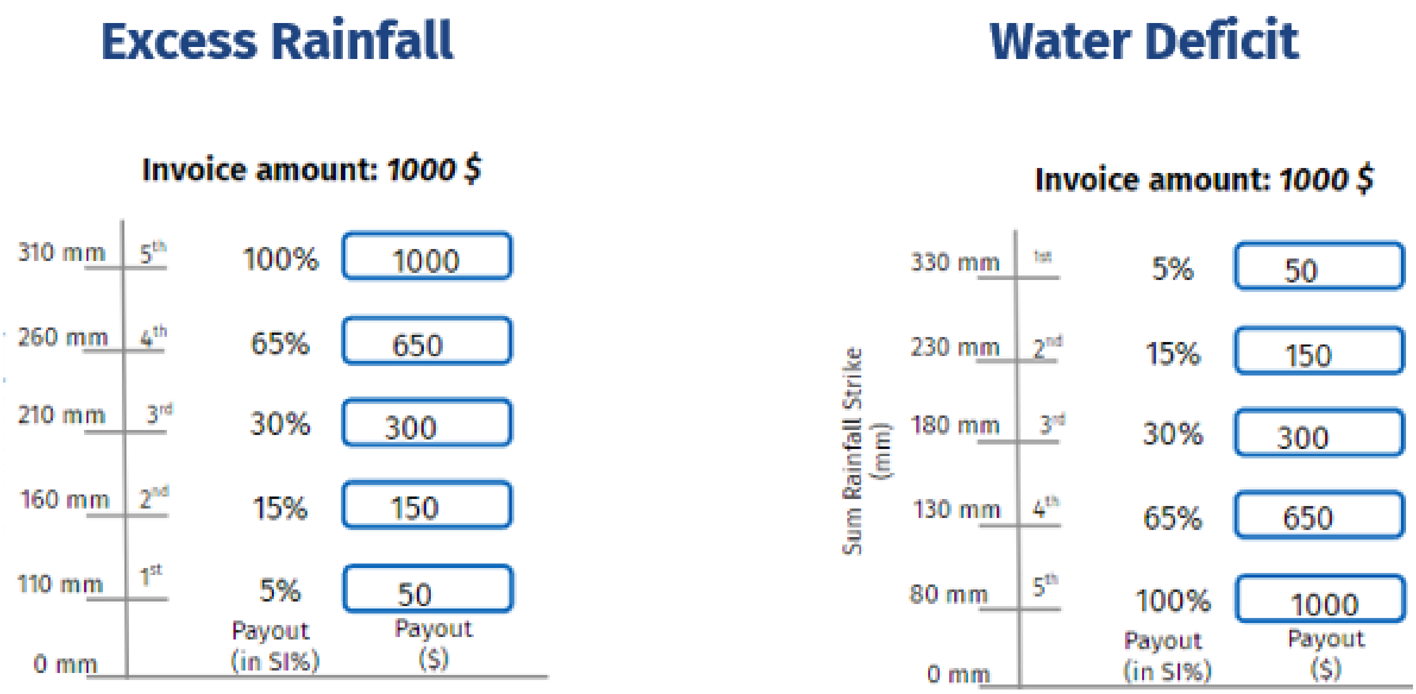
Insurance Bundling with Agri Inputs

- Insurance bundled with agri-input purchase
- Compensation for excess & deficit rainfall events
- Maximum compensation capped to invoice amount
- Awareness & distribution via retailer network

Benefits to Client

- Builds farmer trust by covering downside risk
- Credit protection against calamity crop loss
- Tracks farmer input-usage data

Example



WEATHER-BASED INDEX INSURANCE

Cover bundled with seed purchase.

Insurance Bundling with Seed Purchase

- Insurance bundled with each seed purchase
- Seed-packet replacement on extreme rainfall events
- Packets replaced scaled to event severity
- Premium paid by the partner for farmers

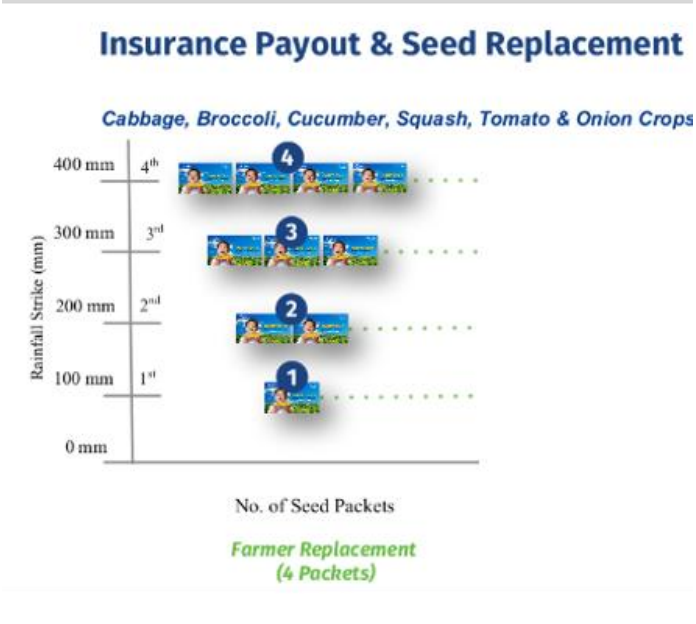
Benefits to Client

- Market Visibility
- Farmer Retention
- Sustainability
- Increased Revenue
- Brand Trust

Insurance Payout & Seed Replacement

Cabbage, Broccoli, Cucumber, Squash, Tomato & Green Crops

No. of seed packets replaced (by event severity)



CASE STUDY · RWANDA TEA FARMERS

Satellite-based crop insurance for smallholders.

Challenge

Area-yield index covers are hard to run for smallholders: small, fragmented lands make them expensive and slow to implement.

4,283 ha

Proposed area insured at cooperative level

What We Did

- Designed cover at cooperative level (no farmer-level yield data)
- Built a crop-yield model estimating tea biomass from satellite F-Cover & rainfall indices
- Settled losses using monthly cooperative-level production estimates
- Estimates generated per planted-area farm boundaries

Index Definition	Shortfall of estimated monthly production from its Benchmark, where benchmark is calculated from average of monthly estimated yield of past 5 years (2017-2021)											
Month	1	2	3	4	5	6	7	8	9	10	11	12
Benchmark Production (in kg)	8,97,140	7,81,380	8,39,260	8,75,435	9,04,375	7,59,675	5,57,095	3,83,455	5,20,920	9,18,845	9,33,315	9,69,490
Payout per kg shortfall (RWF)	230	230	230	240	240	240	230	230	230	240	240	240
Maximum Month wise Payout ('000 RWF)	2,06,342	1,79,717	1,93,030	2,10,104	2,17,050	1,82,322	1,28,132	88,195	1,19,812	2,20,523	2,23,996	2,32,678
Total Sum Insured ('000 RWF)	**22,01,900**											

MILESTONES

Impact at scale.

WRMS MILESTONES

10M+
Beneficiaries served

$5B
Parametric portfolio serviced

15,000+
Climate & Agri-IoT network

SECURISK MILESTONES

1.2M
Parametric beneficiaries

$60M
Sum insured

$5M
Premium underwritten

40
Institutional partnerships

Recognized globally

Winner, InsureTech Connect Asia Awards 2023 · Lloyd's Lab finalist · IIA-Israel Startup Pitch winner · €2.1M ISF grant · key technology partner in PMFBY, India's $4B crop-insurance program.

THE WRMS JOURNEY

Two decades of parametric firsts.

2005–10
- Bundled parametric with agri procurement & inputs
- Crop water-sufficiency & disease-condition indices
- First AWS network funded by Ford Foundation

2011–15
- Parametric for seed-production risks
- Product innovation — Cloud Cover
- Parametric insurance in Cambodia
- DAAS service model in PMFBY for state govts

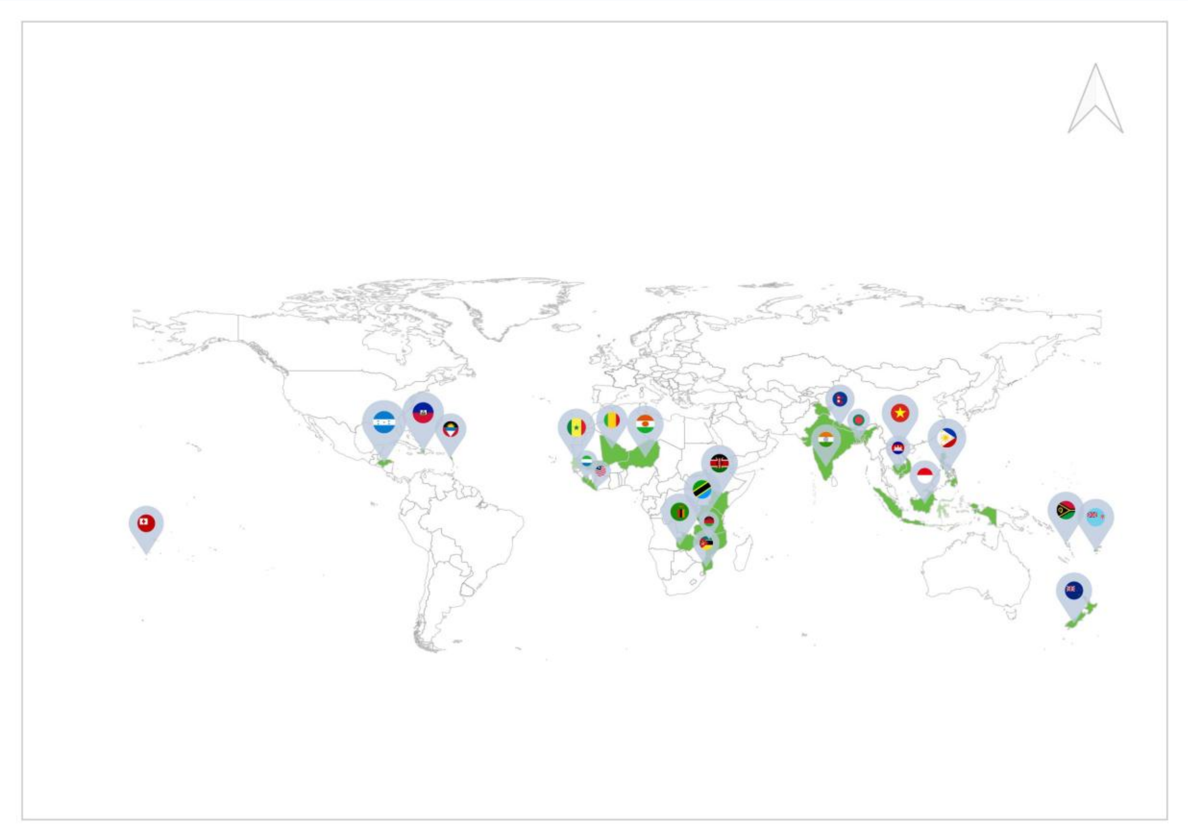
2016–20
- Area-Yield Index Insurance in Indonesia
- Cyclone Index Insurance in Pacific Islands
- EMI Protect — Nat-cat for micro-borrowers
- AWS infra across Bihar, AP, PB, WB, TN, KA

2021–22
- Milk-yield & seed-grower income cover, India
- Flood Index Insurance using SAR data
- Index Insurance in Bangladesh
- AWS exported at scale to Bangladesh

2023–24
- Launched SecuRisk, AI-enabled PI platform
- Empanelled with PMFBY as major data provider
- Winner, InsureTech Connect Asia Awards 2023

GLOBAL FOOTPRINTS

Protecting communities across four continents.



India · Bangladesh · Cambodia · Indonesia · Vietnam · Philippines · Nepal · Fiji

Vanuatu · Tonga · Rwanda · Kenya · Tanzania · Zambia · Mozambique · Senegal

Honduras · Haiti

OUR TEAM

The people behind the platform.

Anuj Kumbhat
Founder & CEO

22 years of experience in finance & risk management.

Ashish Agarwal
Co-Founder & CTO

16 years in IoT, data science & cloud technologies.

FUNCTIONAL LEADERSHIP

Neha Batra
Head of Underwriting & Product Development

Sarathy Srinivas
Head of Strategy & Distribution

Dr. Kanti Prasad
Head of Meteorology

Pardeep Singh
Head — Agriculture

CB Mehta
Head of Operations

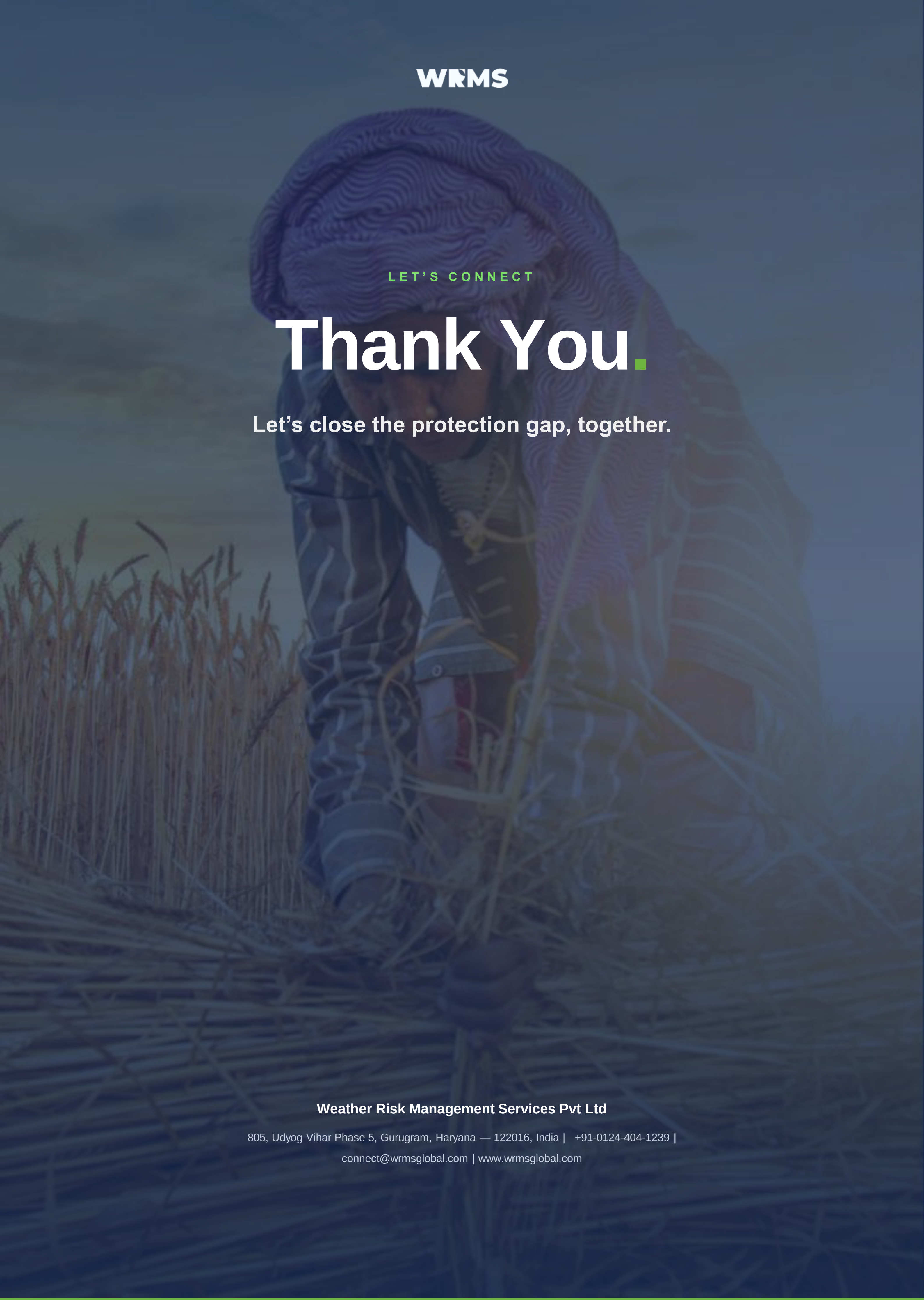
Amrinder Singh
Head — AI & ML

Rizwan Ahmad & Mehdi Abbas
Head — Platforms

20 Technology & Engineering

15 Underwriting & Product

7 Marketing & Business Dev.



WRMS

LET'S CONNECT

Thank You.

Let's close the protection gap, together.

Weather Risk Management Services Pvt Ltd

805, Udyog Vihar Phase 5, Gurugram, Haryana — 122016, India | +91-0124-404-1239 |
connect@wrmsglobal.com | www.wrmsglobal.com