

# Climate Risk Microinsurance

Singapore Actuarial Society and Actuarial Association of Sri Lanka  
– *Future of insurance* webinar mini-series

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**MicroInsurance  
Centre** at Milliman

Queenie Chow, Senior Consultant  
MicroInsurance Centre at Milliman

Ravinda Herath, Assistant General Manager  
Sanasa General Insurance



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SRI LANKA **FACES SIGNIFICANT THREAT FROM  
EXTREME HEAT**, WITH THE NUMBER OF DAYS  
SURPASSING 35°C, POTENTIALLY RISING FROM **A  
BASELINE OF 20 DAYS** TO **MORE THAN 50 DAYS BY  
THE 2090S**, UNDER HIGHEST EMISSIONS PATHWAY

Source: [Climate Risk Country Profile Sri Lanka](#), World Bank Group, 2020

**FALSE**

**ANSWER: MORE THAN 100 DAYS**

OVER THE LAST 5 YEARS, **SANASA** HAS INSURED A  
**CUMULATIVE TOTAL OF 160,000 FARMERS** OF WHICH  
**40% OF POLICYHOLDERS** ARE **FEMALE**

TRUE

# Agenda

Brief introduction to climate risk microinsurance


Case study: Sanasa

Lessons learnt

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# Introduction

What is climate risk microinsurance?

A photograph showing a woman and a young girl sitting together, looking at a document. The woman is wearing a yellow cardigan and a yellow skirt, and the girl is wearing a patterned top and a red shawl. They are both looking down at the document, which is held by the woman. The background is dark and out of focus.

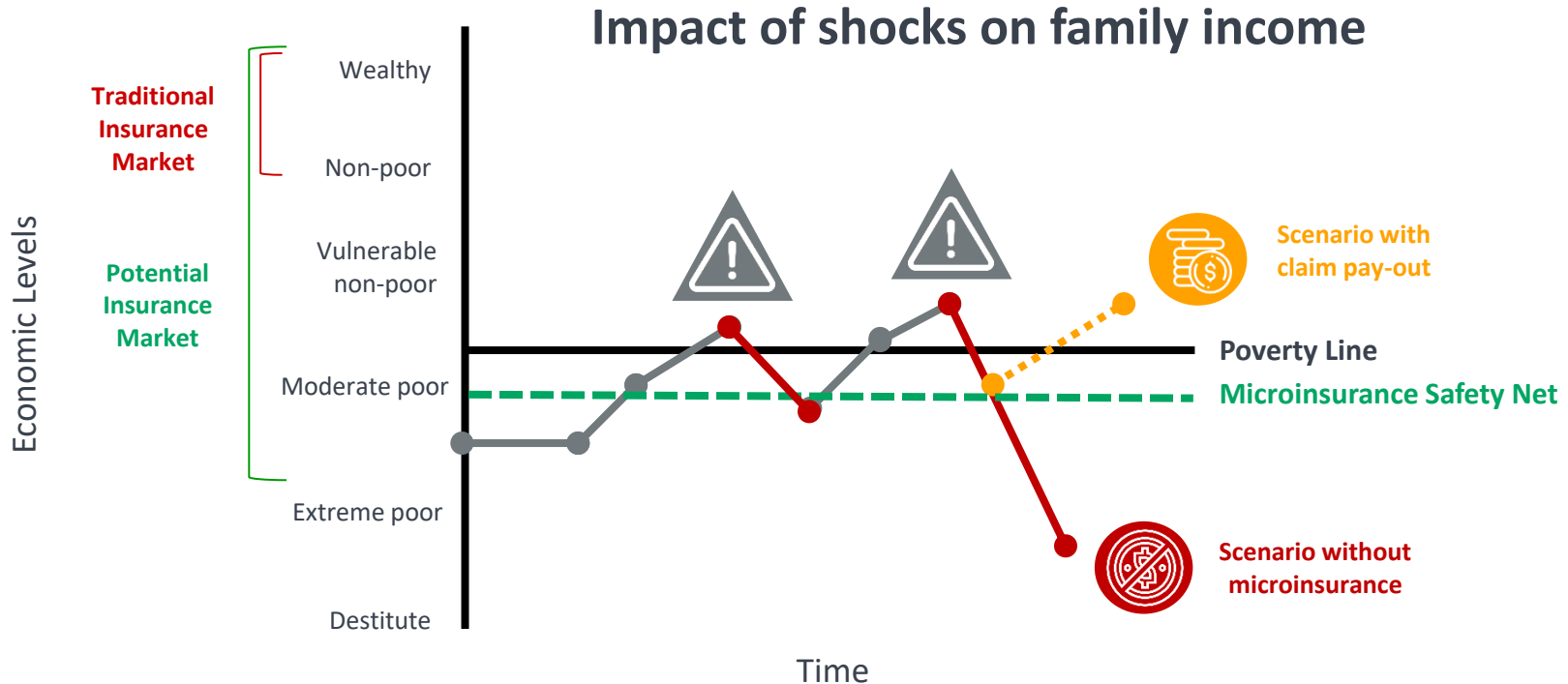
*Climate risk microinsurance* is a risk transfer solution that aims to protect low-income populations - individuals, families, businesses and countries - against the negative impacts of extreme weather events that are becoming more frequent and more severe due to climate change.

- InsuResilience Global Partnership



# Microinsurance and sustainable development

There can't be sustainable development without microinsurance

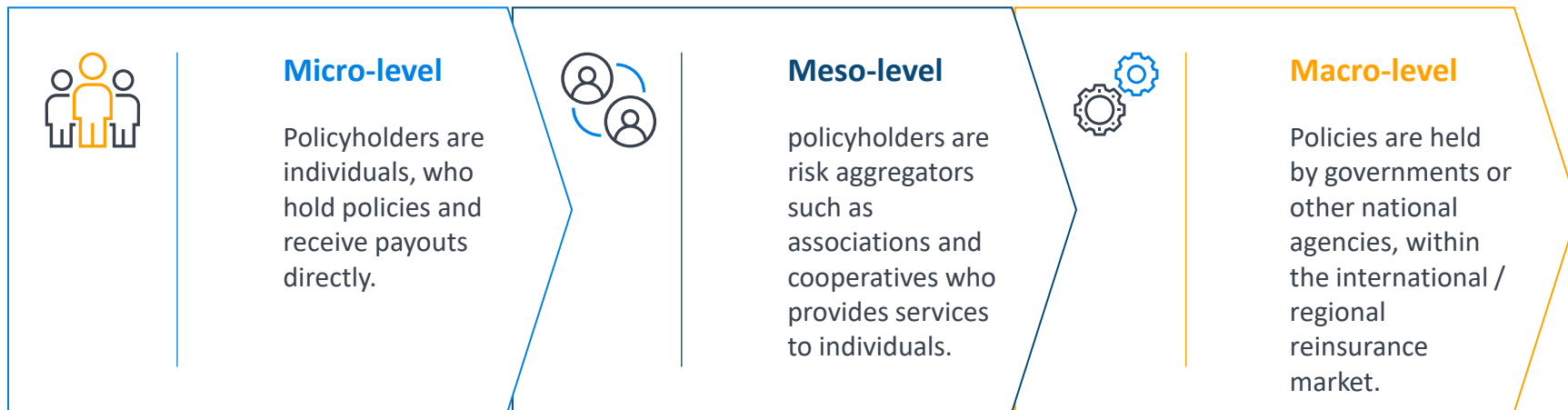


**“Without good insurance the cycle of poverty continues, and sustainable development is not possible.”**

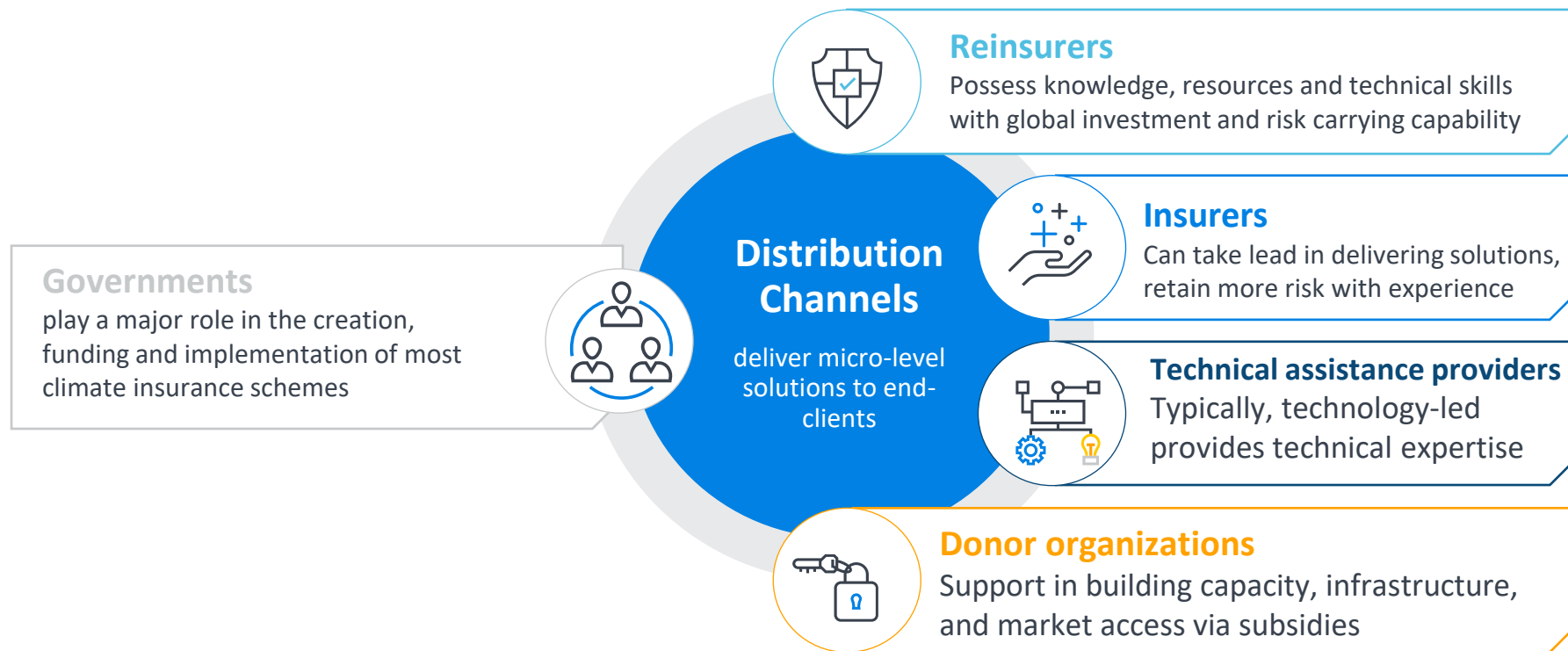
— Michael McCord, MIC@Milliman

# Climate risk insurance

## Implementation at three levels



# Actors and the roles they play in delivering climate risk microinsurance



# Types of climate risk insurance products

Vegetation index

Maize Ground nut Tea

Indemnity-based Frost index-based

Revenue-based Satellite-based index

**Weather-based index**

Drought index-based **Index insurance**

Pasture index insurance Rice

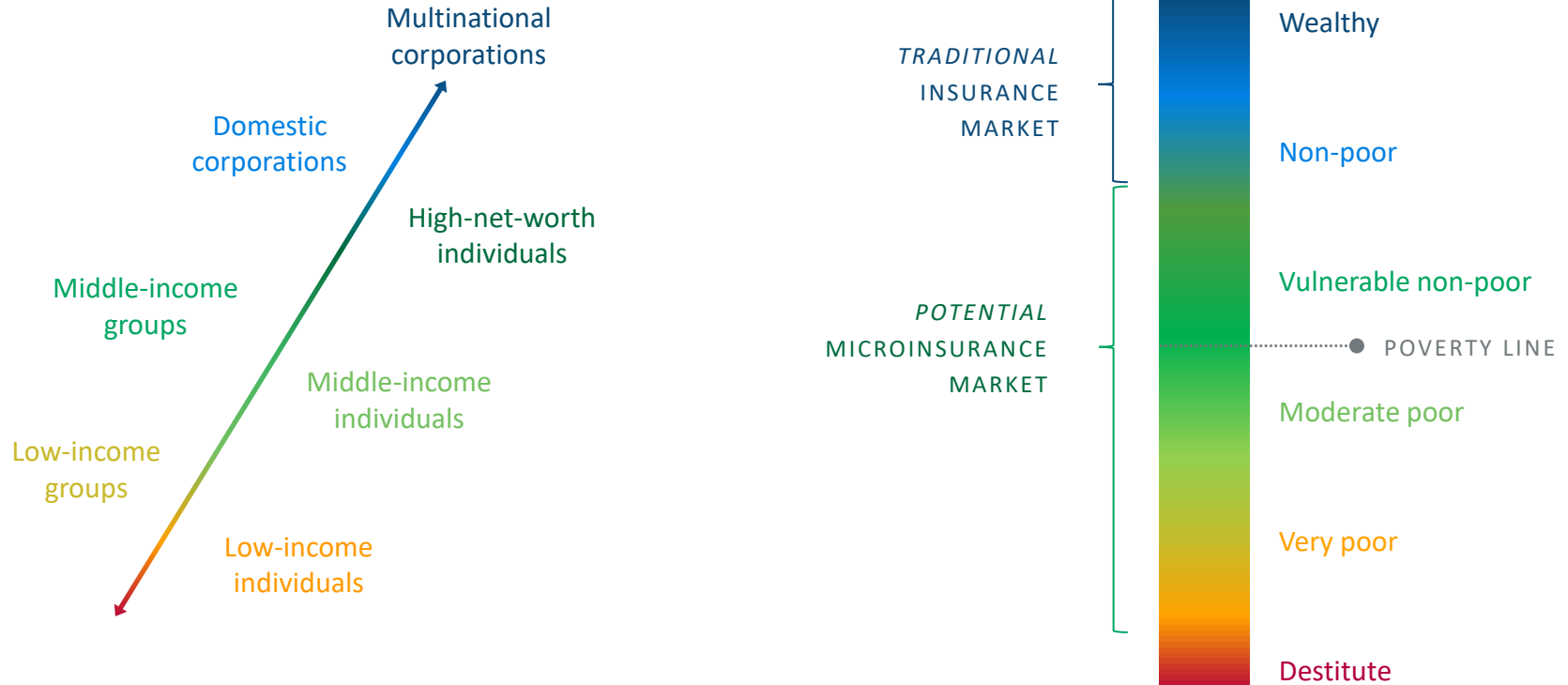
**Area yield index**

Property insurance **Income replacement**  
due to catastrophe **due to weather**  
**disturbance**



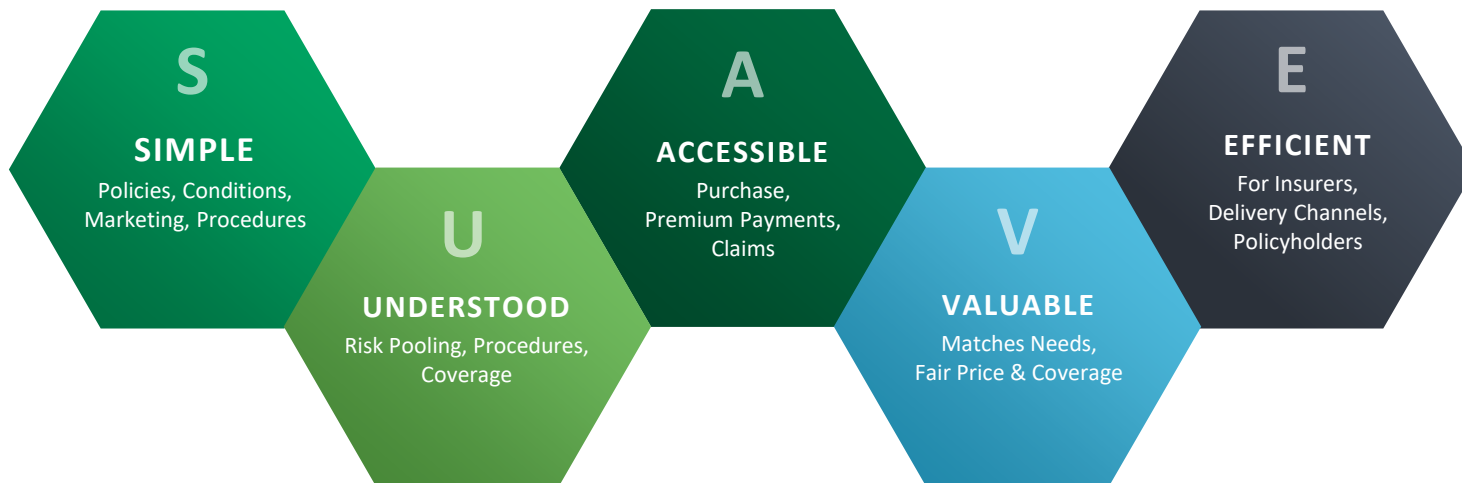
# The microinsurance market – 3 billion people

Is there a business case and can it be commercially viable?



# Good microinsurance with business case must be SUAVE

The SUAVE principle continues to be an established standard in microinsurance



# Case Study:

Sanasa in Sri Lanka



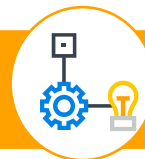
# Introduction of Sanasa General Insurance Company Ltd (SGIC)

SGIC ventured into crop insurance in 2010 to better cater for needs of rural farmers



- SGIC, set up in 2002, is a Colombo-based insurance company and is owned mostly by SANASA savings and credit societies.
- By building trust in insurance and building brand recognition among the rural communities, SGIC could cross-sell motor and other products.
- By building trust in insurance and building brand recognition among the rural communities, SGIC could cross-sell motor and other products.

# Key challenges in implementing Weather Index Insurance (WII)



## Client related challenges

- Lack of customer confidence on reliability of Rainfall data.
- Lack of awareness of WII.
- Farmers have a negative attitude towards insurance.
- Inability to pay premium upfront.

## Technical challenges

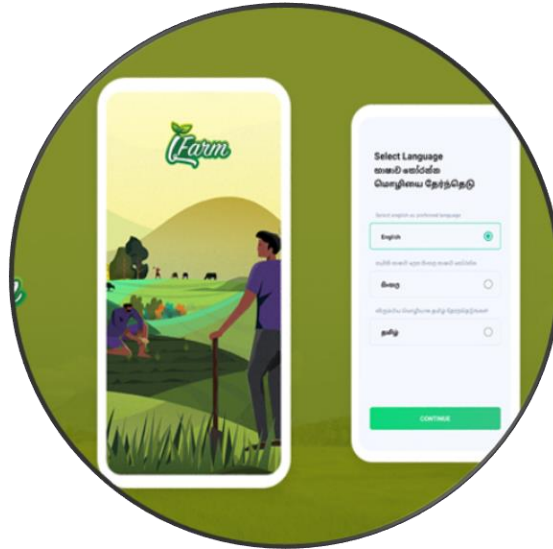
- Product configuration for season/months differs.
- Insurance coverage for weather station area is confined to the extent of limited km radius.
- Basis risk experienced due to microclimatic conditions,
- Yield data was not available and therefore payouts were not calculated equitably.

## Other challenges

- Lack of awareness of WII among office and field staff.
- Difficulty in obtaining daily rainfall weekly basis.
- Difficulty in arranging reinsurance support during initial period.

# Delivery model and movement towards holistic risk management

Insurance bundled with loans and sold through financial institutions with iFarm platform



Map their properties digitally



Apply for various agricultural insurance schemes



Access real time weather data



Obtain prices for agriculture commodities and market platform

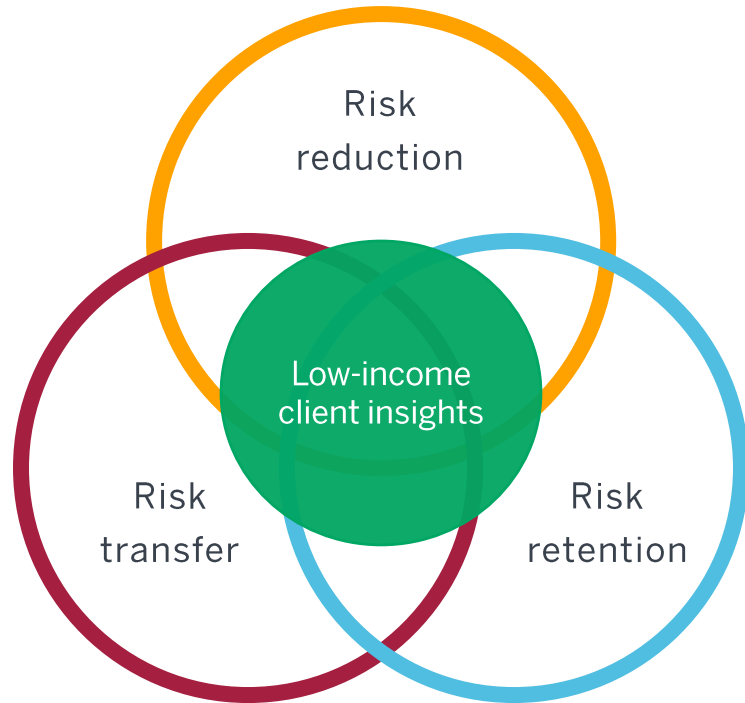


Make payments and request claims digitally



Key lessons learnt

# Risk Management 360 – providing holistic solution to customers



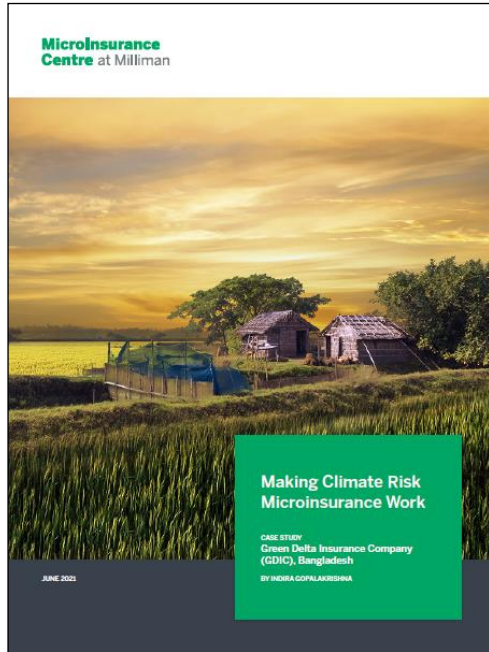
RM360 is an approach to risk management that provides a **holistic solution** to a risk faced by customers.

A broad lens is used to explore potential solutions (financial & non-financial) and design a **risk management blanket** that helps low-income clients **reduce risk** (through prevention, preparation, adaptation) while preparing them to better **retain risk** (through financial and non-financial means) and **transfer risk** (through insurance) as the last recourse.

**“Get closer than ever to your customers.  
So close that you tell them what they  
need well before they realize it  
themselves**

— Steve Jobs, Founder and Former CEO Apple

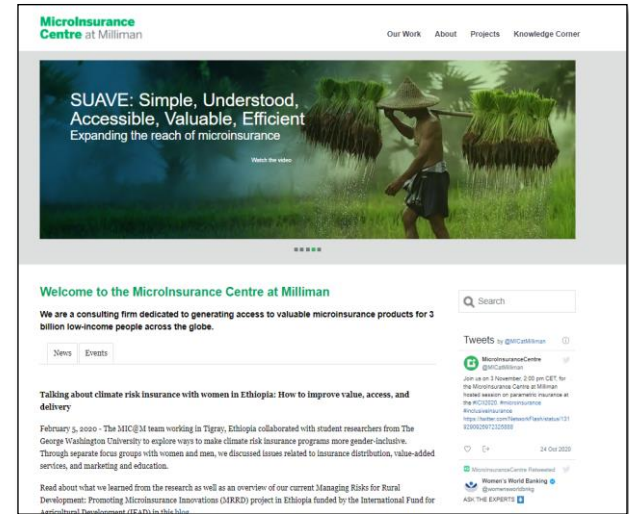
# “Making climate risk microinsurance work” case study series



- Strategic need
- Motivations
- Delivery model
- Benefits
- Costs
- Risks
- Challenges
- Time horizon

Visit us at:

[www.microinsurancecentre.org/](http://www.microinsurancecentre.org/)



# Thank you

Queenie Chow,  
Senior Consultant, MicroInsurance Centre at Milliman  
[Queenie.chow@milliman.com](mailto:Queenie.chow@milliman.com)

Ravinda Herath,  
Assistant General Manager, Sanasa General Insurance  
[ravinda@sgic.lk](mailto:ravinda@sgic.lk)

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