

# Challenges and Opportunities for Climate Risk Takaful

Tuesday 14<sup>th</sup> May 2024

**Disaster Risk Financing  
& Insurance Program**



**Global Shield**  
Financing Facility

# Opening Remarks

**Olivier Mahul**

Program Manager,  
Disaster Risk Financing and Insurance Program,  
World Bank

Disaster Risk Financing  
& Insurance Program



SUPPORTED BY  
WORLD BANK GROUP



**Global Shield**  
Financing Facility

# The context

**Qhelile Ndlovu**

Financial Sector Specialist,  
Disaster Risk Financing and Insurance Program,  
World Bank

Disaster Risk Financing  
& Insurance Program



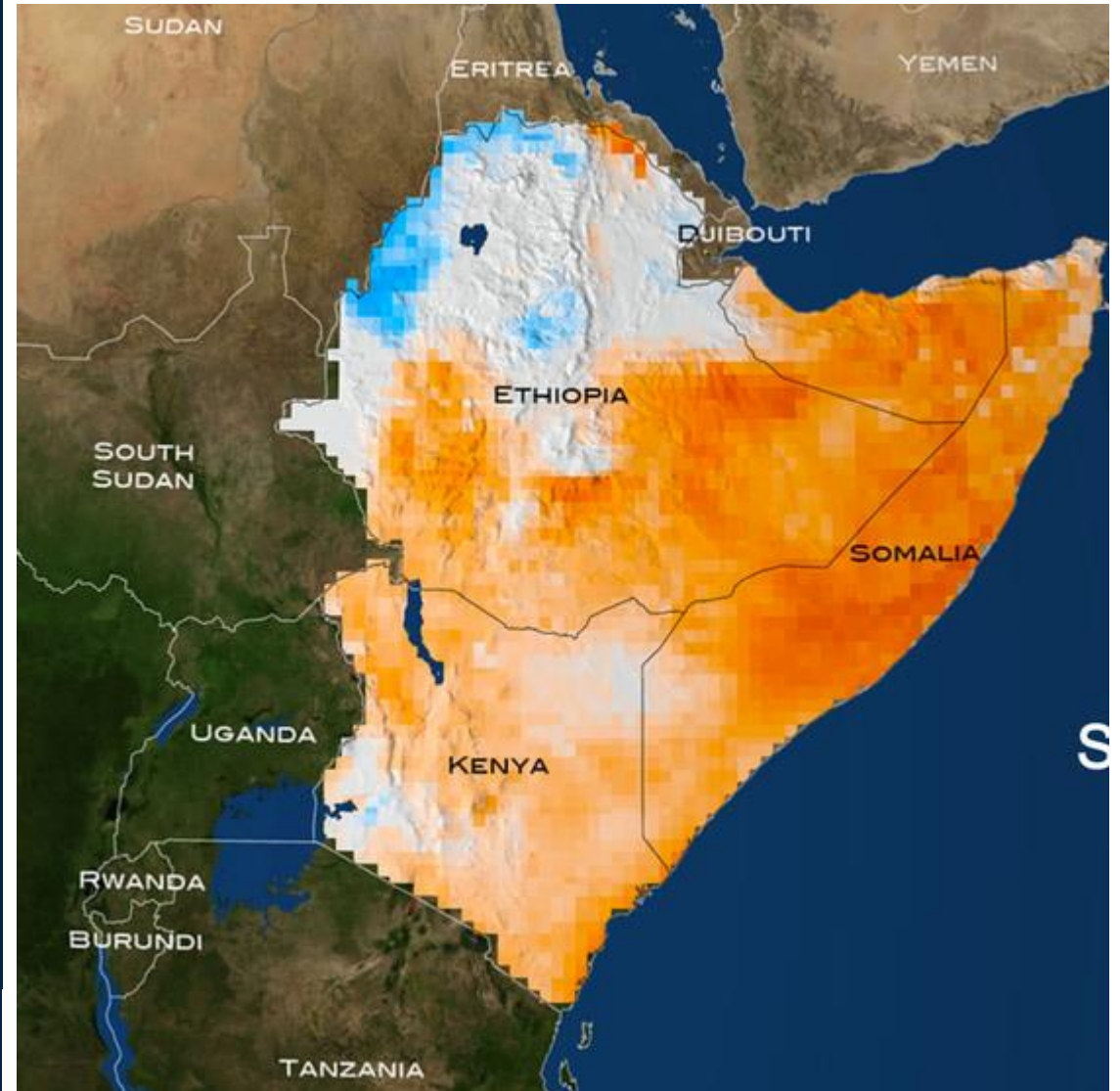
SUPPORTED BY  
WORLD BANK GROUP



**Global Shield**  
Financing Facility






## Droughts have a devastating impact in Horn of Africa and pastoralists are one of the most affected populations

- Severe droughts are expected once every 5 years on average and can occur in recurrent years.
- Droughts have a significant impact on Somalia's public finance. Between 2010-18, more than USD 4.5 billion has been spent on emergency responses.
- Early financial response to drought in Ethiopia, Kenya and Somalia would have saved nearly \$2.5 billion in avoided losses over 15 years (USAID 2018).
- Two key challenges
  - I. How To enable a more sustainable response to drought in pastoral areas of the HOA
  - II. How To Ensure pastoralists get more value for their livestock

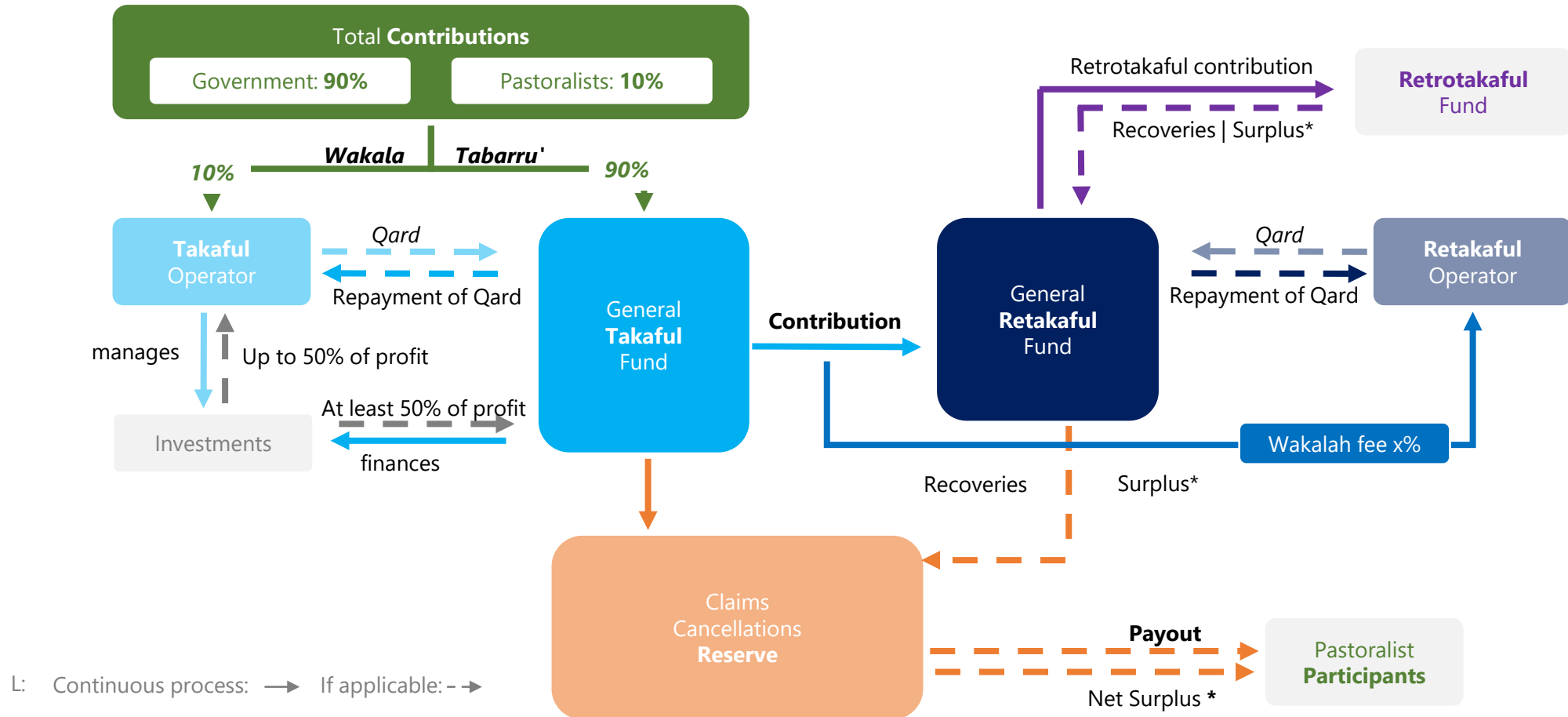


# Parametric takaful in the HoA to strengthen pastoralist' financial resilience to drought offers a lot of promise



		OND 2022	MAMJ 2023	OND 2023	MAMJ 2024
Growth and progress	 Pastoralists numbers	18,616	151,892	133,168	
	 Insurance premium	US\$ 2.1 m	US\$12.4m	US\$4.3m	
	 Sum insured	US\$11m	US\$63m	US\$21.6m	
	 Takaful contributions	US\$185k	US \$5.7m	US \$11.2m	
	 Takaful cover	\$1.02m	\$29.5m	\$56.2m	

# But limited capacity for retention and availability of retakaful capacity poses a challenge for sustainable growth



\*Only after outstanding Qard has been paid back

# Today, we are joined by esteemed guests for a discussion on the challenges and opportunities on Climate Risk Takaful



**SHAMSUL  
AZMAN**

Chief Executive  
Officer



**HILMAN  
SIMANJUNTAK**

President Director &  
CEO



**WAJAHAT  
KHAWAJA**

Executive Director |  
Head of Strategic  
Initiatives



# Snapshot of Takaful Industry in Malaysia

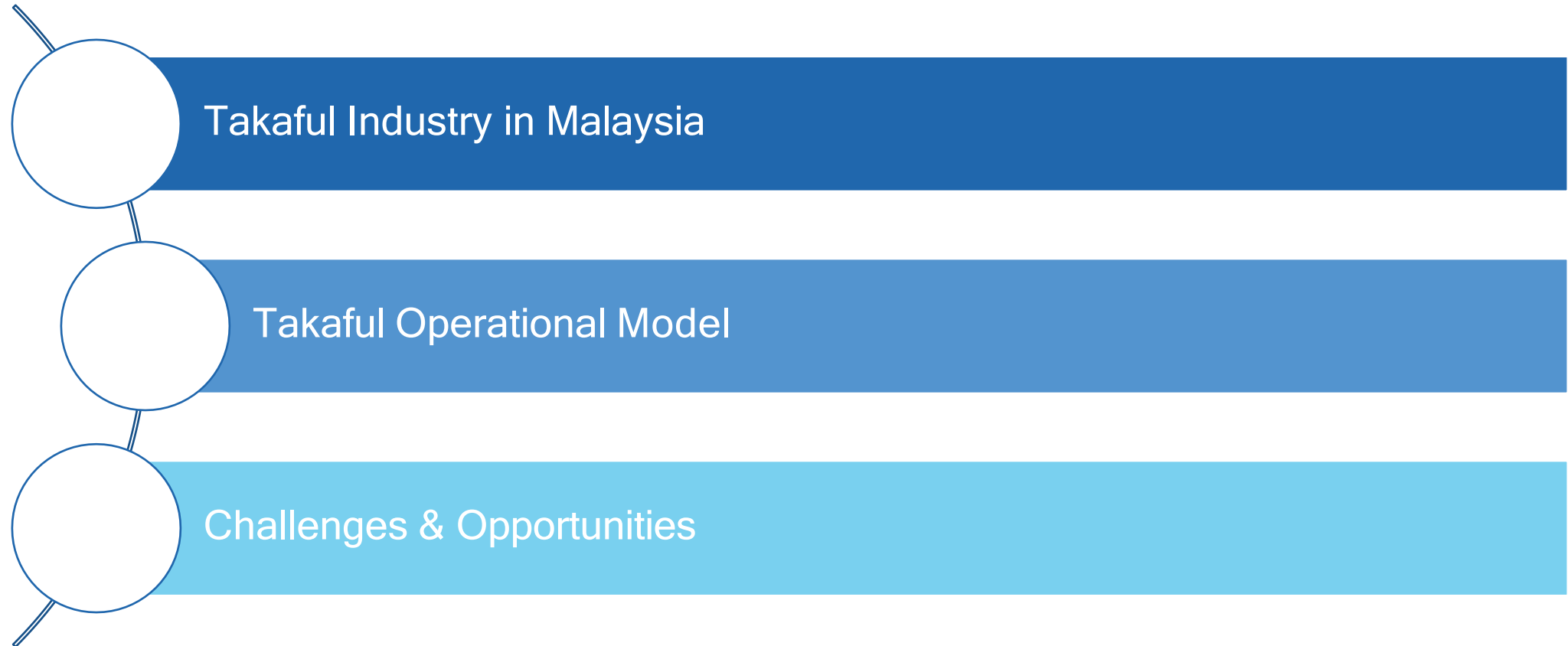
**Shamsul Azman**

Chief Executive Officer,  
Zurich General Takaful Malaysia Berhad (ZGTMB)





# Agenda



# Takaful Industry in Malaysia

## Key Industry Milestones

### PHASE I 1982-1990

**1982 :** Setup of a Special Task Force to explore viability of setting up an Islamic insurance company

**1984 :** Takaful Act 1984 was enacted to govern the conduct of Takaful business and provide establishment of Shariah Committee.

**1985 :** Incorporation of Syarikat Takaful Malaysia Bhd., the first Takaful Operator in Malaysia

**1988:** BNM commences its supervision of the insurance and Takaful industry.

### PHASE II 1990-2000

**1993 :** MNI Takaful Sdn. Bhd. commenced operations

**1995 :** Setup of ASEAN Takaful Group

**1997 :** Incorporation of ASEAN Retakaful International (L) Ltd. In the International Offshore Financial Centre, Labuan

**1998 :** MNI Takaful changed its name to Takaful Nasional Sdn. Bhd.

**2000 :** Takaful Malaysia and Takaful Nasional (now known as Etiqa Takaful) jointly developed a Code of Ethics for the industry.

### PHASE III 2001 - 2010

**2001:** Establishment of IBFIM. BNM launched the Financial Sector Masterplan

**2002:** Maybank Takaful Berhad commenced operations. Establishment of the Malaysian Takaful Association.

**2003:** Takaful Ikhlas Sdn. Bhd. commenced operations.

**2005 – 2007 :** Start of operational takaful licenses - Sun Life Malaysia Takaful, HSBC Amanah Takaful, Hong Leong MSIG Takaful, Prudential BSN Takaful

**2006 :** Establishment of Malaysian International Financial Centre (MIFC)

**2008 – 2010 :** Establishment of four Retakaful operators : MNRB Re Retakaful, Swiss Re Retakaful, Munich Re Retakaful, ACR Retakaful.

**2009:** Establishment of AIA International Takaful Bhd.

**Sep 2010 :** Announcement of four new family takaful licenses

**Dec 2010 :** Great Eastern Takaful began its operations

### PHASE IV 2011 - 2022

**2011:** AIA AFG Takaful, ING Public Takaful Ehsan began its operation BNM unveiled its Financial Sector Blueprint 2011-2020

**2012:** Enforcement of Takaful operational Framework and the revised Shariah Government Framework

**2013 :** The new Islamic Financial Services Act (IFSA) 2013  
Merger of AIA AFG Takaful Bhd & ING Public Takaful Ehsan Berhad

**2014 :** Enforcement of the Risk Based Capital for Takaful

**2015:** Internal Capital Adequacy Assessment Process (ICAAP) for Takaful Operators

**2016:** Acquisition of MAA Takaful by Zurich. MAAT was renamed to Zurich Takaful Malaysia Berhad.

**2020:** Enforcement of the revised Takaful Operational Framework and the Revised Shariah Governance Policy

**2022:** Issuance of Financial Stability Blueprint 2022-2026

Over the last 40 years, Malaysia has focused on strengthening the domestic market which also acts as a strategy for internalization. Takaful in Malaysia developed as component of comprehensive Islamic financial system operating in parallel with conventional financial system.

# Takaful Industry in Malaysia

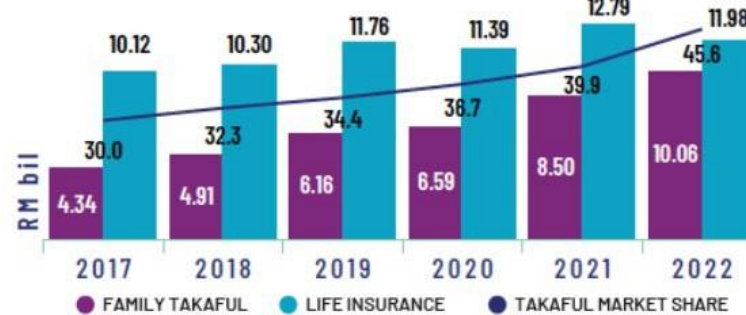
## Current Progress and Growth

- Malaysia is top ranked in Islamic finance (2022), scoring 113 out of global average of 9. [Source: Islamic Financial Development Indicator Report 2017-2022, Refinitiv]
- Success in strengthening the domestic market has enabled Malaysia to be one of the leading Islamic finance jurisdictions globally.



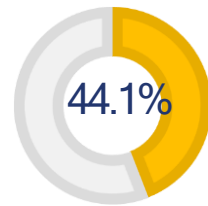
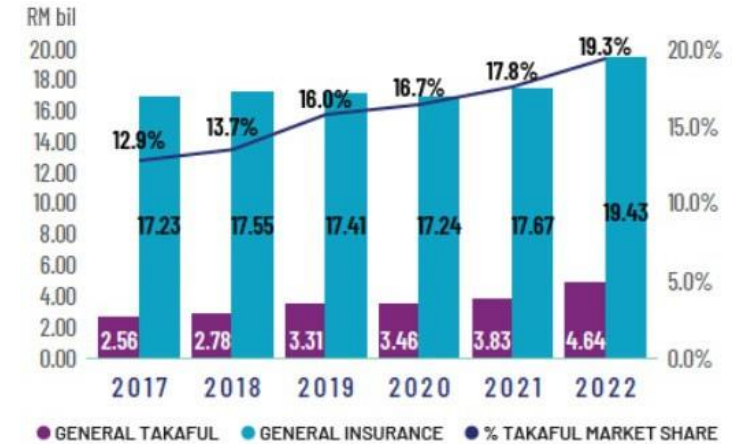
## Family Takaful Business

### New Contribution



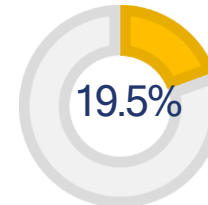
## General Takaful Business

### New Contribution



### Contribution Market Share Q2 2023

Q2 2022 - 46.6%



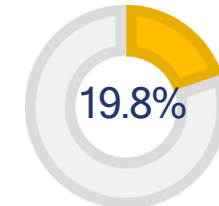
### Penetration Rate As at Q3 2023

Q2 2023 - 19.5%

Q4 2022 - 20.1%

(Current rate is based on Q2 Population)

## Family Takaful Business



### Contribution Market Share As at Q3 2023

As at Q3 2022 - 18.3%

## General Takaful Business

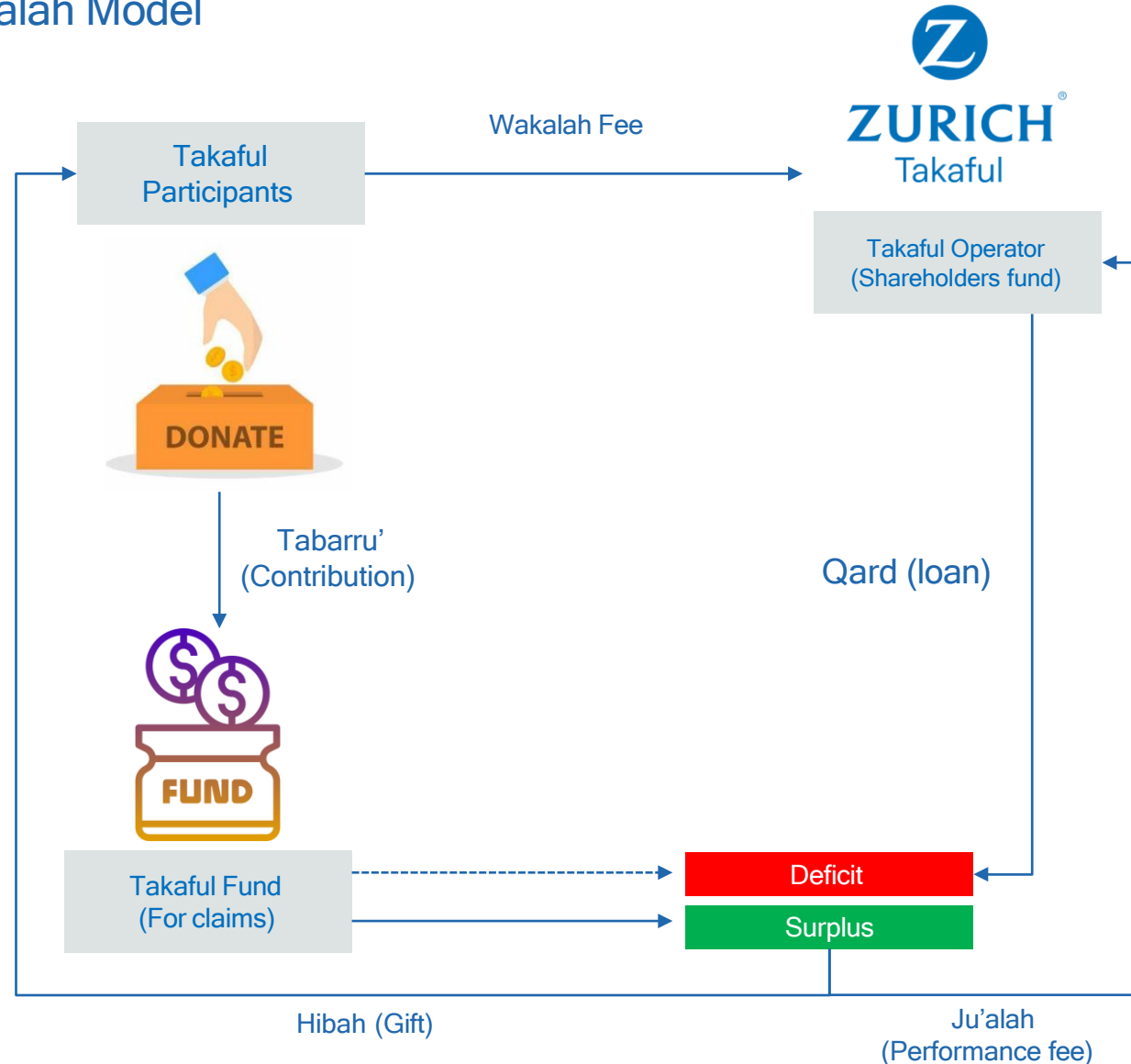


Reference: Family Takaful Contribution Market Share, Assets - Monthly Highlights Statistics Bank Negara Malaysia, New Business & Business In Force, Penetration Rate - ISM Statistical Bulletin, Net Certificate Benefits - MTA Database

Reference: Assets - Monthly Highlights Statistics Bank Negara Malaysia, ISM Statistical Bulletin & ISM Knowledge Management System (KMS)

# Takaful Operational Model

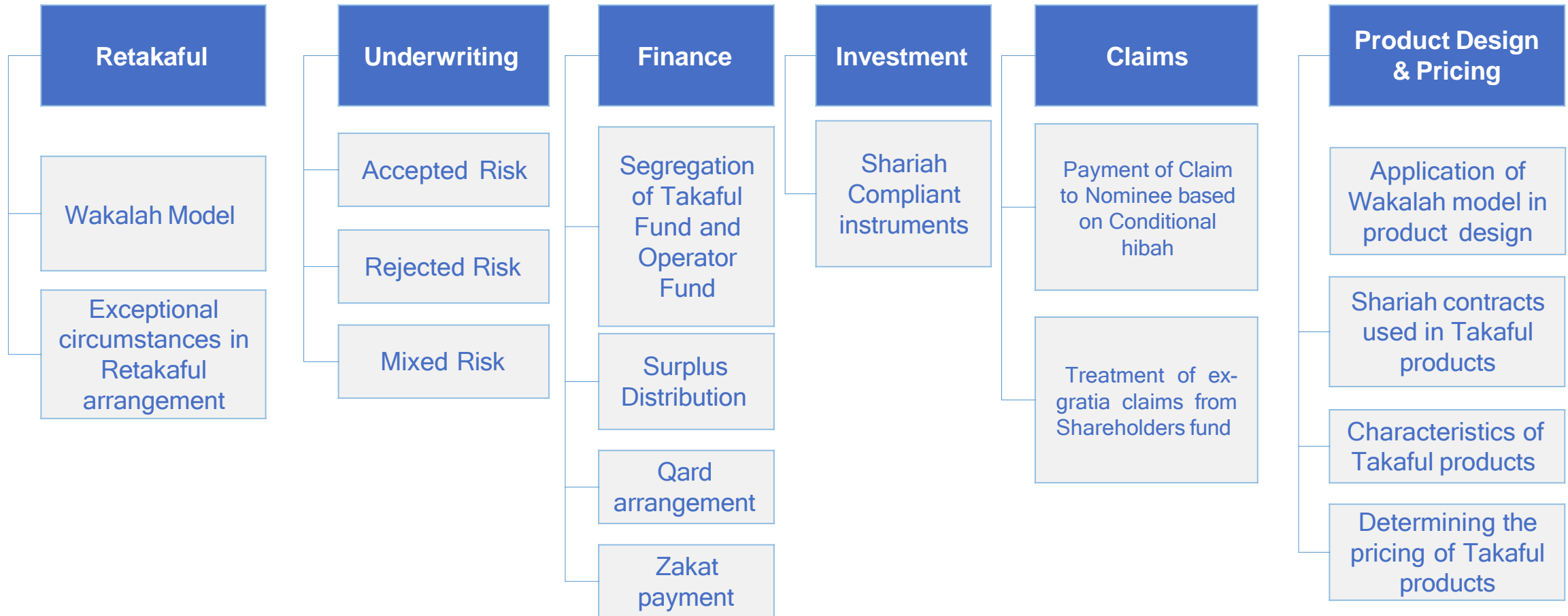
## Wakalah Model



1. Participants make contributions to the Takaful fund (called Participants Risk Fund - PRF) based on Tabarru' contract.
2. The participant appoints Takaful Operator to manage the PRF. In return, the TO will receive Wakalah fee (agreed percentage from the contributions) for their services.
3. The Contribution amount will be credited into the PRF to be utilized for claim purposes.
4. Any surplus from PRF (after deducting claims, retakaful, reserve and related expenses) will be distributed between participants and TO i.e. TO will take some amount of surplus as performance fee (based on ju'alah) and the remaining amount will be distributed to the participants (based on hibah).
5. If PRF is in deficit, TO will provide interest-free loan to the PRF based on qard.

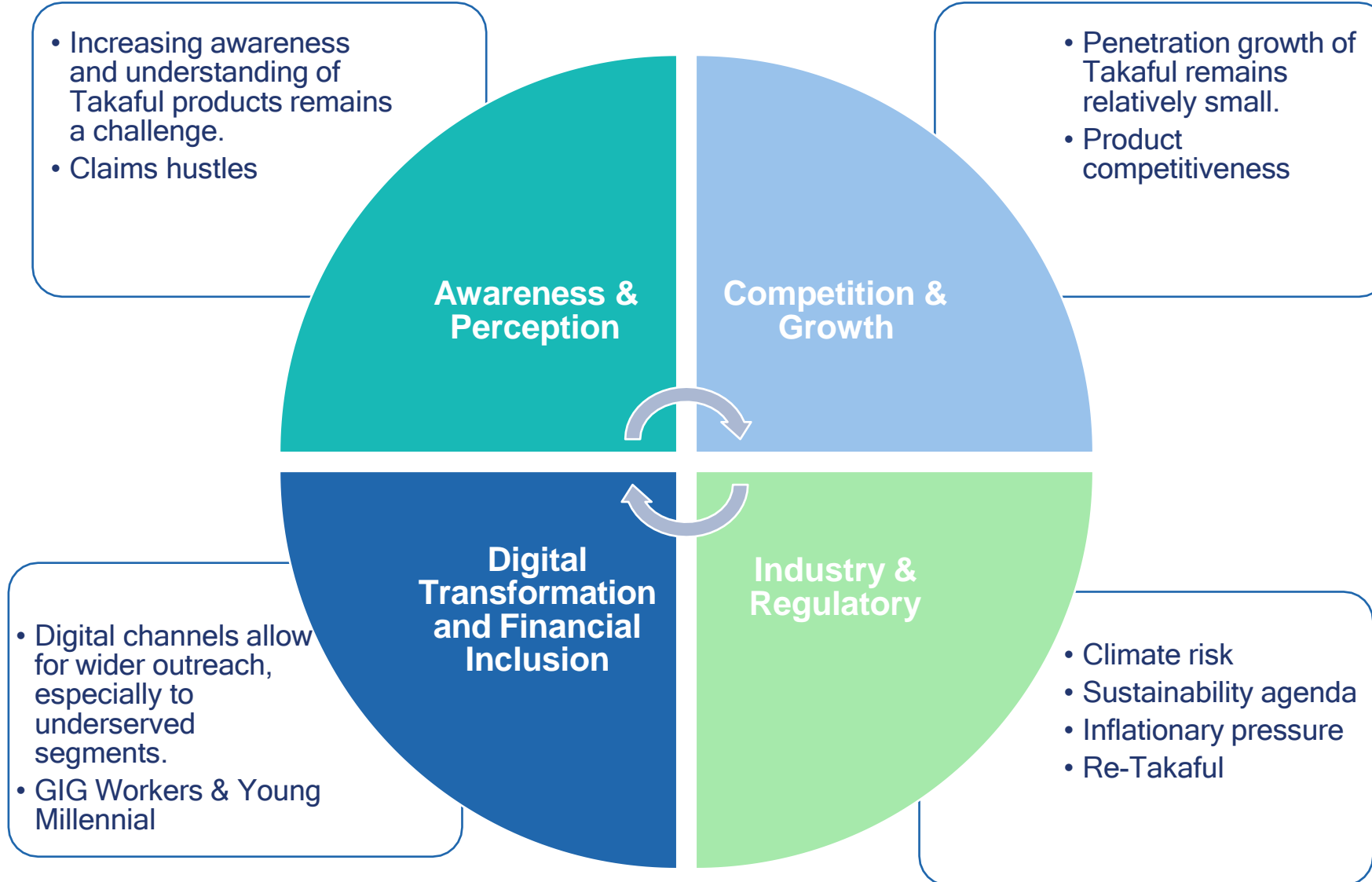
# Takaful Operational Model

## Takaful Operational Model (TOM)



# Challenges & Opportunities

The Takaful industry in Malaysia has seen significant growth, offers numerous opportunities as well as faces various challenges.



# Parametric Takaful Solutions

**Hilman Simanjuntak**

President Director,  
Zurich General Takaful Indonesia



# Zurich in Indonesia

## Zurich Topas Life

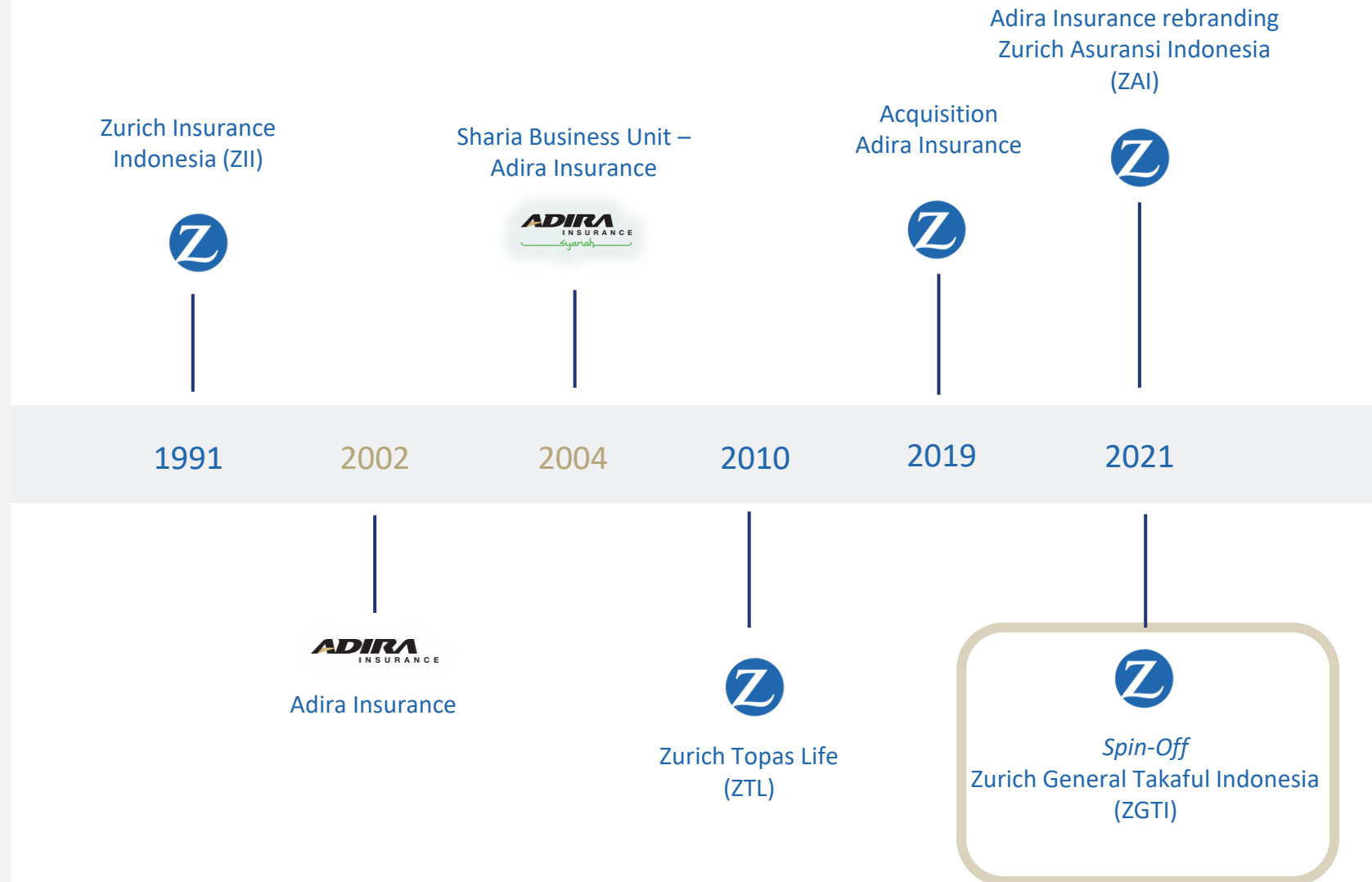
- Life and health insurance
- Retail customers

## Zurich General Takaful Indonesia

- Sharia general insurance
- Retail and corporate customers

## Zurich Asuransi Indonesia

- Conventional general insurance
- Retail and corporate customers





## Zurich Syariah's Awards



The Best Sharia General Insurance 2022 from Media Asuransi



Excellence Financial Performance 2022 from InfoBank



The Best Sharia General Insurance 2023 from Republika



New Insurance Product of the Year for Sharia Weather Index Parametric Insurance 2023, Insurance Asia Awards



And other awards.

Zurich Syariah continues to strive to be the best in its field – since Day 1

Elevate Excite Energize  
#CreateBrighterFutureTogether

Has,



36  
Products

Collaboration with,



30+  
Partners

(Sharia Banks, Multifinance, Digital Insurers)



400+  
Active agents



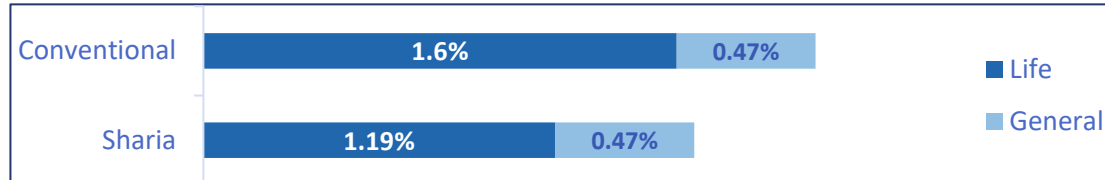
450+  
Garages



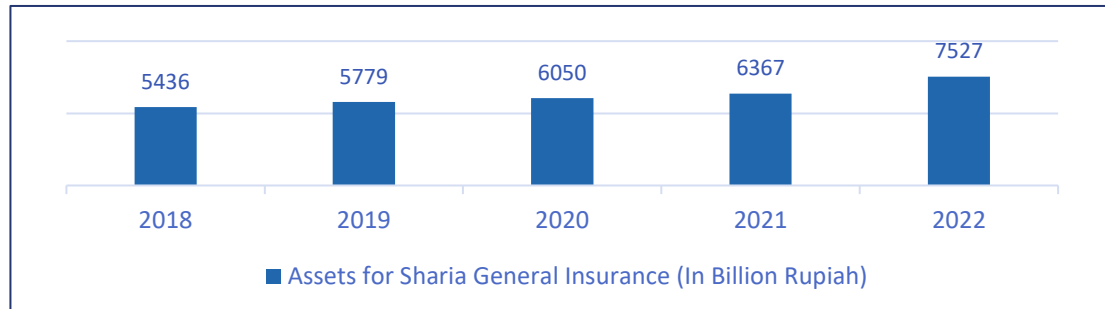
700+  
Travel agent partners

Indonesia is a developing country that has great opportunities in the field of insurance – an industry that has an important role in the wheel of the economy

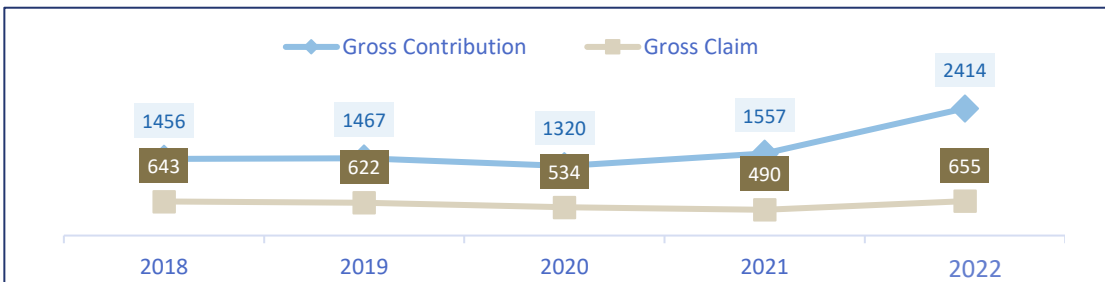
#### Insurance Penetration (vs population)



#### Sharia General Insurance Assets<sup>4</sup>



#### Contributions vs. Gross Claims Sharia General Insurance<sup>4</sup>



#### State Of Play

- Indonesia, as the country with the **largest Muslim population in the world – 230 million people** – in 2023<sup>1</sup>, has great potential in Sharia insurance penetration.
- Increasing trend of Halal lifestyle:**
  - Halal F&B estimated to grow by 51.11% in 2025 to IDR 2,917.2 trillion<sup>5</sup>.
  - Halal Media and Recreation estimated to grow by 53.48% in 2025 to IDR 455.2 trillion<sup>5</sup>.
- The accumulated tabarru funds of the sharia general insurance industry in Q1 2023 amounted to IDR 1,085 billion<sup>2</sup> – **Zurich Syariah, which ranks 2nd in the market, contributed 30% with a total of IDR 320.7 billion**<sup>3</sup>



<sup>1</sup>Source: Annual Islamic Finance Conference (AIFC) 2022 <sup>2</sup>Source: OJK

<sup>3</sup>Source: Financial Report PT Zurich General Takaful Indonesia <sup>4</sup>Source: AASI <sup>5</sup>Source: Dinar Standard

# Parametric Insurance

## Bridge the Protection Gap through Parametric Weather Index Insurance for Coffee Farmers in Indonesia –the top 5 Coffee Bean Producing and Exporting Country

*Parametric Weather Index Insurance is a product that provides compensation services for losses experienced by farmers due to weather factors and climate change.*

### Problems:

- **Extreme weather** inflicts a long-term financial loss for the farmers as they need to take care of their family.
- **Lack of financial and insurance literacy** leads the farmers to be skeptical about risk transfer and most of the farmers don't own a bank account.

### Solutions Zurich Offers:

#### Customer

- **Addresses the financial vulnerability** through the provision of affordable insurance protection against extreme weather conditions.
- **Zurich Syariah can conduct business nationally**, including Aceh which is a Moslem city and has largest coffee plantation in Indonesia.
- **Collaboration with local communities** to build necessary trust before reaching the ecosystem.

#### Innovate

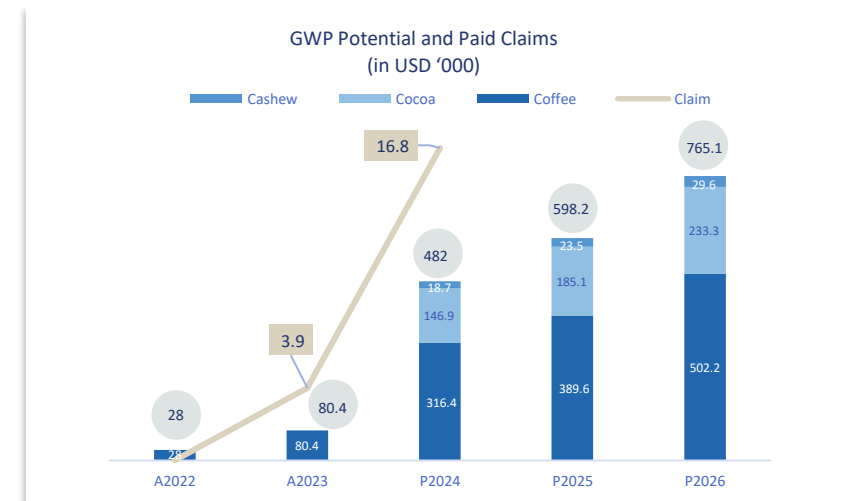
- **The 1<sup>st</sup> in Indonesia** to launch weather index insurance using data captured by weather satellite.
- **Expandable to other commodities.**

#### Simplify

- A non-traditional insurance product that offers **pre-specified payment based upon a trigger event.**
- Offers a suite of technology and service solutions which help farmers to **simplify communication and work together more effectively**

### Distributions:

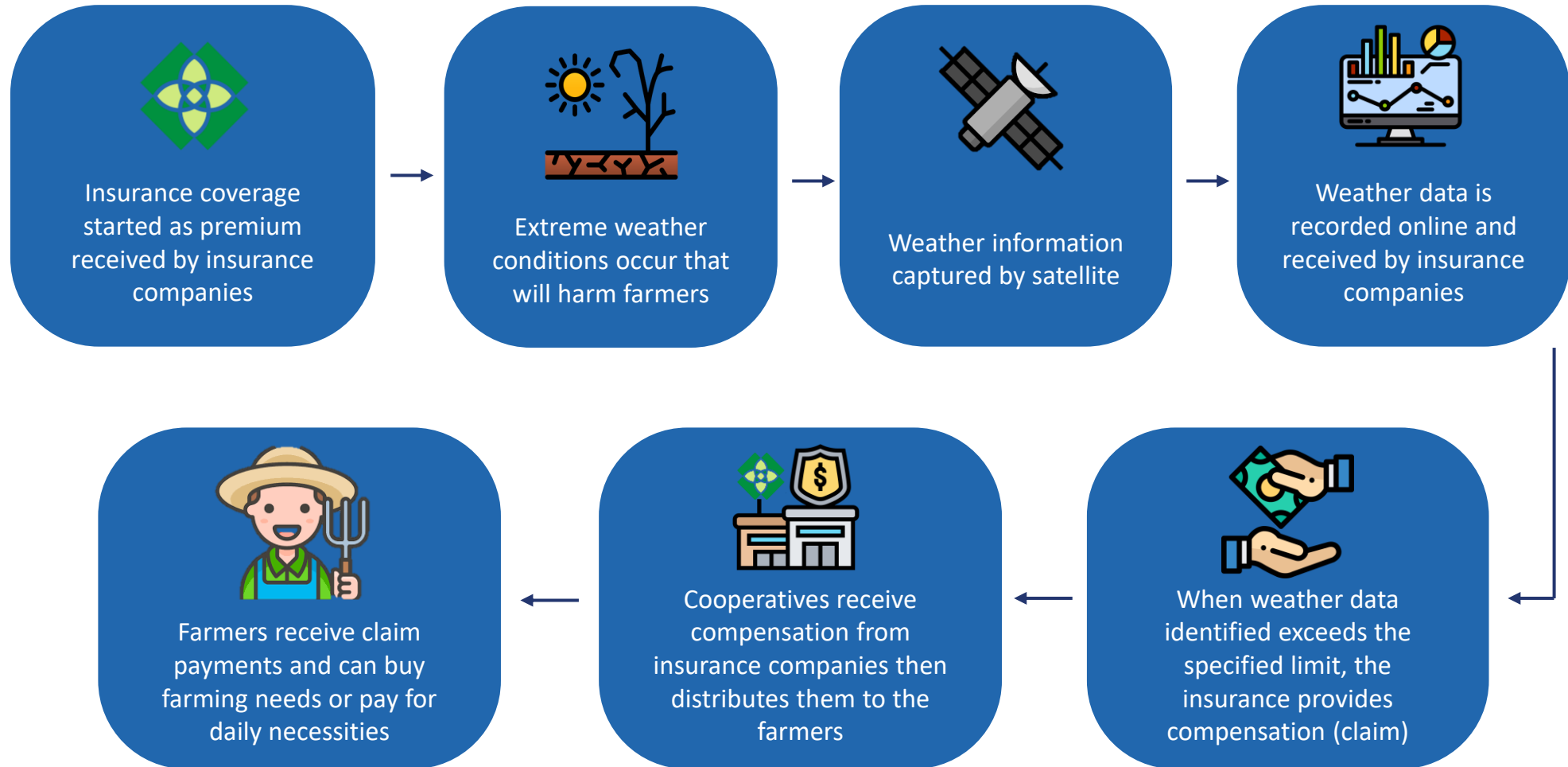
Zurich Syariah has partnered with cooperatives to reach farmers community and distribute parametric insurance products through them.



#### Note:

- Premium ranged 10-15% from coverage.

# How Parametric Sharia Weather Index works in Zurich Syariah?



# Key Messages

## Why Parametric Insurance Works for Indonesia

- ✓ Indonesia's coffee plantation covers a total area of approximately 1.24 million hectares.
- ✓ More than 90% of total plantations are cultivated by small-scale growers who own relatively small plantations of about 1-2 hectares, each.
- ✓ Approximately 70% of Indonesia's total annual coffee bean production was exported, mainly to customers in Japan, South Africa, Western Europe and USA.
- ✓ The Indonesian government has shown support for the agricultural sector and for insurance as a risk management tool – to expand its coverage to other commodities in Indonesia

## Impact Parametric Insurance for The Insured Farmers

- ✓ **Financial Protection.** Claims payment can prevent farmers falling into poverty due to bad harvest.
- ✓ **Literacy.** Increase understanding of the importance of safeguarding assets through insurance to the farmers.
- ✓ **Sustainability.** Provide better life for the farmers while providing a sustainable product.

## Challenge on The Implementation

- ✓ **Lack of insurance awareness:** the concept of risk transfer is not well understood.
- ✓ **Underestimating the potential loss:** loss is alleged as a destiny by the farmers.
- ✓ **Distribution of the farmers** and vast area with accessibility problems.
- ✓ **Business development:** challenge in finding suitable partners (coffee stakeholders) in relation with the sustainability of the business.

Empowering  
agricultural  
sustainability  
through  
Parametric Sharia  
Weather Index  
Insurance

# Takaful for Social Impact

## Wajahat Khawaja

Executive Director, Head of Strategic Initiatives,  
Chief Underwriting, Claims & Re-Takaful Officer-  
Nonmotor, Salaam Takaful, Pakistan



# Agenda

---

Introduction

---

Takaful Models in Pakistan

---

Agriculture in Pakistan

---

Takaful in Pakistan

---

- Challenges

---

- Opportunities

---

Case Studies

---

Pilot Projects

---

Components for Successful Implementation

---

Building Resilience

---

Solutions

---

Questions and Answers



# Wajahat Khawaja

## Executive Director

- Head of Strategic Initiatives
- Chief Underwriting, Claims & Re-Takaful Officer – Nonmotor

- A passionate Takaful & Inclusive Finance Champion
- A veteran of the insurance industry with 3 decades of diverse international experience gained while working amongst three of the largest global insurers – Allianz, AXA XL & Swiss Re Corporate Solutions.
- Skilled at establishing and managing cross cultural senior-level stakeholder relationships, leading teams through transformation and mentoring & coaching.
- Member of and representing Salaam Takaful Limited at Insurance Development Forum's (IDF) Law Regulation & Risk Modelling and Inclusive Finance Working Groups
- Member of and representing Salaam Takaful Limited at UNEP's Nature Positive Insurance Working Group
- Member of and representing Salaam Takaful Limited as Secretary to the Climate Change Group, Institute of Risk Management, UK

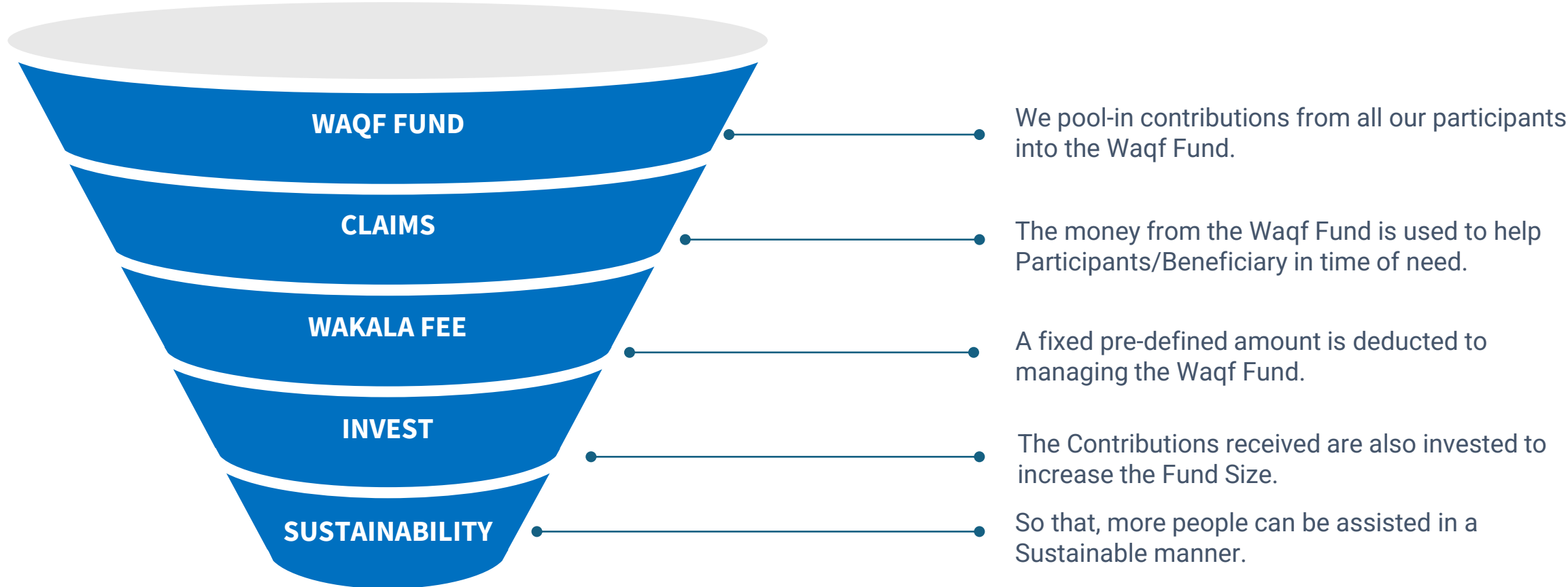




# Salaam Takaful Limited – Our Legacy

Mission & Vision	Key Focus	Governance	Strategic Initiatives
To provide Takaful as a leading, ethical, and competitive alternative to conventional insurance, fostering employee growth, and actively contributing to societal welfare and environmental preservation.	<ul style="list-style-type: none"> <li>Financial Inclusion.</li> <li>Micro/ Embedded Insurance.</li> <li>Creating Financial Resilience.</li> <li>Customer Centricity</li> </ul>	<ul style="list-style-type: none"> <li>Consecutive Winner for Best Corporate and Sustainability Report Award (ICAP ICMA) &amp; Certificate of Merit from SAFA</li> <li>ISO 9001:2015 certification.</li> <li>Appointed Big 4 Firms for Audit &amp; Consultancy.</li> <li>IFRS-17 Implementation with PWC.</li> <li>UNEP's PSI Signatory.</li> <li>Participant to the (UNGC).</li> </ul>	<ul style="list-style-type: none"> <li>Established Shariah Board.</li> <li>Surplus Distribution</li> <li>Launched Virtual Clinic (24/7 free audio &amp; video doctor consultation)</li> <li>Incorporated Salaam Digital Family Takaful.</li> <li>Established Salaam Properties(Pvt.) Ltd.</li> <li>Acquired Salaam Tower</li> <li>Robust engagement with UNDP, UNEP, &amp; IDF</li> </ul>
Sustainability Successes	Dedication to ESG	Innovative Products	Technology
<ul style="list-style-type: none"> <li>98% paper reduction, 15.4% water reduction</li> <li>10,000+ lives covered in underserved communities</li> <li>35% environment-friendly vehicle portfolio</li> </ul>	<ul style="list-style-type: none"> <li>Formation of ESG board committee</li> <li>Gender diversity (20% female workforce with women representation in board)</li> <li>Promoting Environmental Savy Products (Parametric Crop Insurance)</li> <li>Supporting good health &amp; wellbeing in communities</li> <li>Providing Qard e Hasana to students at multiple universities</li> </ul>	<ul style="list-style-type: none"> <li>Weather Index Based Crop Insurance (Parametric Based)</li> <li>Pay As You Drive (pay per mile model)</li> <li>Parametric Travel (Flight Disruption Cover)</li> <li>Cashless OPD.</li> <li>Loss of Employment</li> </ul>	<ul style="list-style-type: none"> <li>Salaam Application (enabling smooth onboarding &amp; claim process)</li> <li>Dedicated Agent &amp; Client Portals.</li> <li>Predictive Underwriting.</li> <li>Diverse E-Commerce Portal</li> <li>Highly optimized service delivery</li> <li>Separate Board Level IT Steering Committee</li> </ul>

# Salaam's Business Model



# Agriculture In Pakistan

**19%**

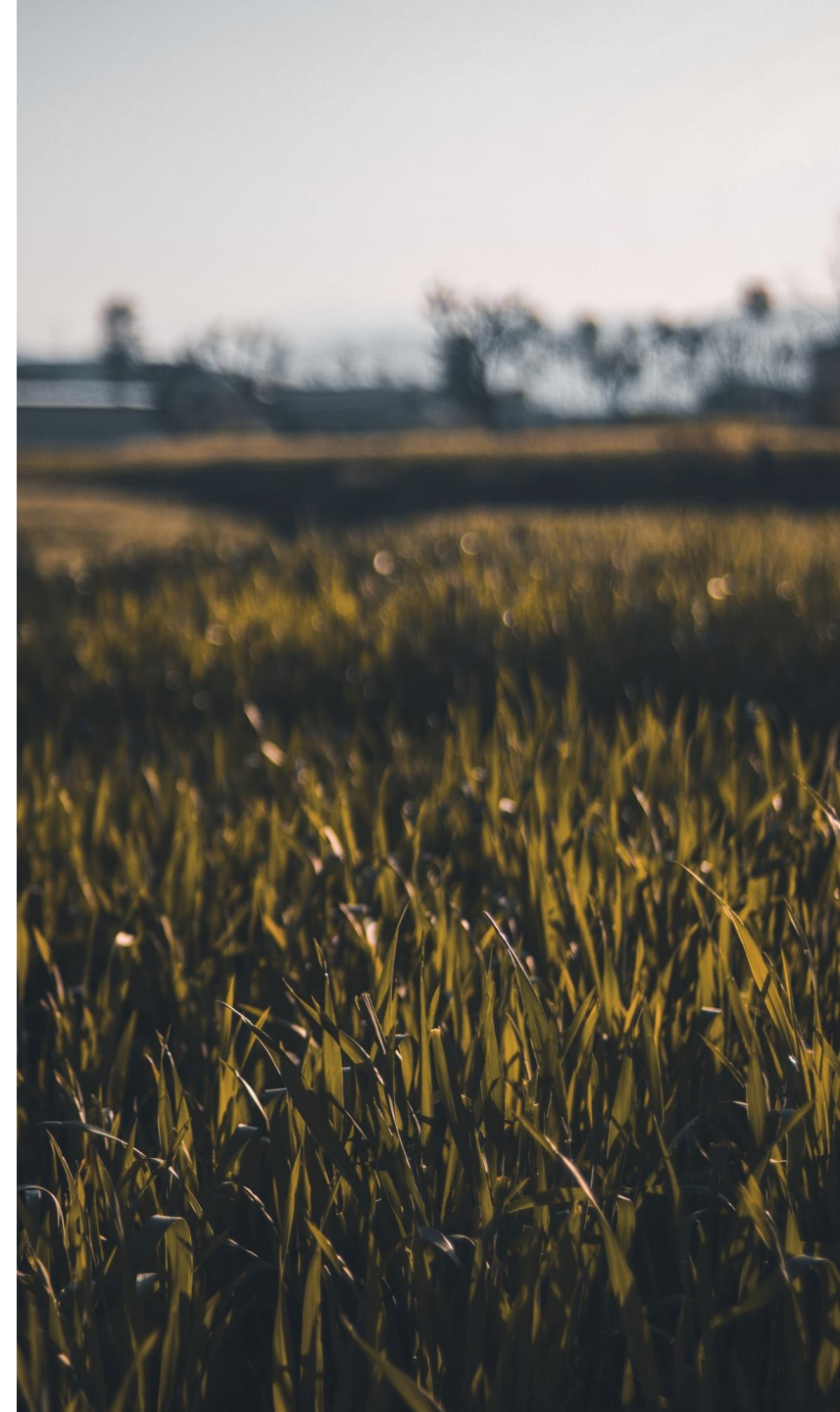
Agri Contribution to GDP

**38%**

Labour force employed in agriculture sector

**65%**

Population dependency on agriculture



# Need Of Climate Risk Takaful



**By 2040, Climate Change** will potentially decrease Agricultural productivity by 8-10%



A 50% Drop In Mango Production due to **Climate Change** – **High Temperatures**.



Wheat Crop area has decreased By **2.1%** resulting in decreased production.



4-6% of Wheat production loss expected due to **Climate Change**

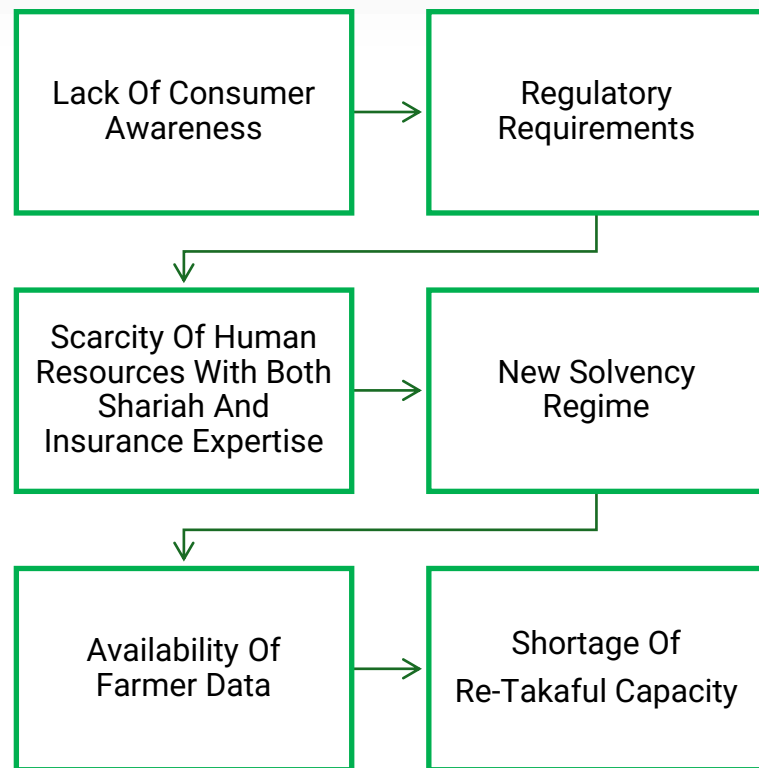


Decrease of 14.7% & 20.5% of Wheat and Rice Crop respectively due to **Climate Change** has been observed in the past few years with market price going up.





# Challenges

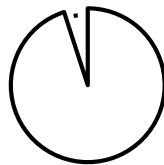


# Opportunities



## Disaster Risk Resilience And Financing

Lack of structure disaster risk resilience, risk financing, risk model, and financing capabilities



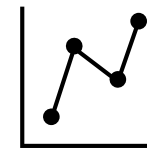
## Muslim Population

Pakistan's substantial Muslim population, comprising 96.47% of the country, creates a robust market for Shariah-compliant financial services like takaful.



## Government Endorsement of Riba Elimination

The government's alignment with the Federal Shariat Court's decision to eliminate Riba (interest) from the banking system highlights its dedication to Islamic finance, presenting significant potential for Salaam Takaful's growth.



## Islamic Preference & Growth

With a substantial Muslim population, there is a preference for Shariah-compliant financial services, positioning Salaam Takaful to thrive in this market. Meezan Bank's success in Islamic banking serves as a promising example.

# International Case Studies

Countries	Project Details	Number of Farmers Covered	Parties Involved
<a href="#"><u>Nigeria</u></a>	Sub-sovereign risk transfer scheme to provide flood risk cover	1.7 million households (8.5 million people)	Insurance Development Forum (IDF), United Nations Development Programme (UNDP), Lagos State Government, AXA Climate, Swiss Re, AXA Mansard, Africa Risk Capacity Ltd., JBA Risk Management, ICEYE, and Insuresilience Fund.
<a href="#"><u>Bangladesh</u></a>	Weather Index-Based Crop Insurance	Approximately 5,300 farmers	Japan Fund for Poverty Reduction (JFPR), small and marginal farmers, local insurance partners, Government of Bangladesh, and Japan Aerospace Exploration Agency (JAXA)
<a href="#"><u>Mexico</u></a>	Project in which parametric coverage was offered to farmers against droughts and floods.	Around 10,000 farmers	Secretariat of Treasury and Public Credit, Secretariat of Agriculture and Rural Development, IRFF, and the Government of Mexico.
<a href="#"><u>Ghana</u></a>	Building capacity in insurance and risk finance. Parametric coverage against severe flood for low-income individuals	Expected to benefit around 5.67 million farmers	Ministry of Finance, National Disaster Management Organisation, and IRFF.



# Pilot Projects

## On-ground Partners

REEDs & Syngenta

## Technology Partner

Watersprint

## Total

131 farms

## Beneficiaries

Farmers with < 5 Acres

## Perils

Heat, Wind, Rainfall & Locust Attack

Crops	Districts	No of Acres Covered	Gross Contribution	No.of Claims
Wheat	Rahimyar Khan	170	Rs. 346,744	Nil
Maize	Arifwala, Vehari, Okara	300	Rs. 300,000	Ongoing
Total		470	Rs. 646,744	





# Partners



**INFARMERS**

Weather & Data Tech  
Partner



**BAKHABAR KISSAN**

Service Provider



**U BANK**

Micro Finance Bank



**SYNGENTA PAKISTAN**

Input Provider

# Components for Successful Implementation

- ☐ Scalability
- ☐ Awareness
- ☐ Trust
- ☐ Technology
- ☐ Communication



# Building Resilience

- ☐ Economical Product
- ☐ Awareness Sessions
- ☐ Communication
- ☐ Trust

# The Solution

Climate Smart Agriculture

Transparent

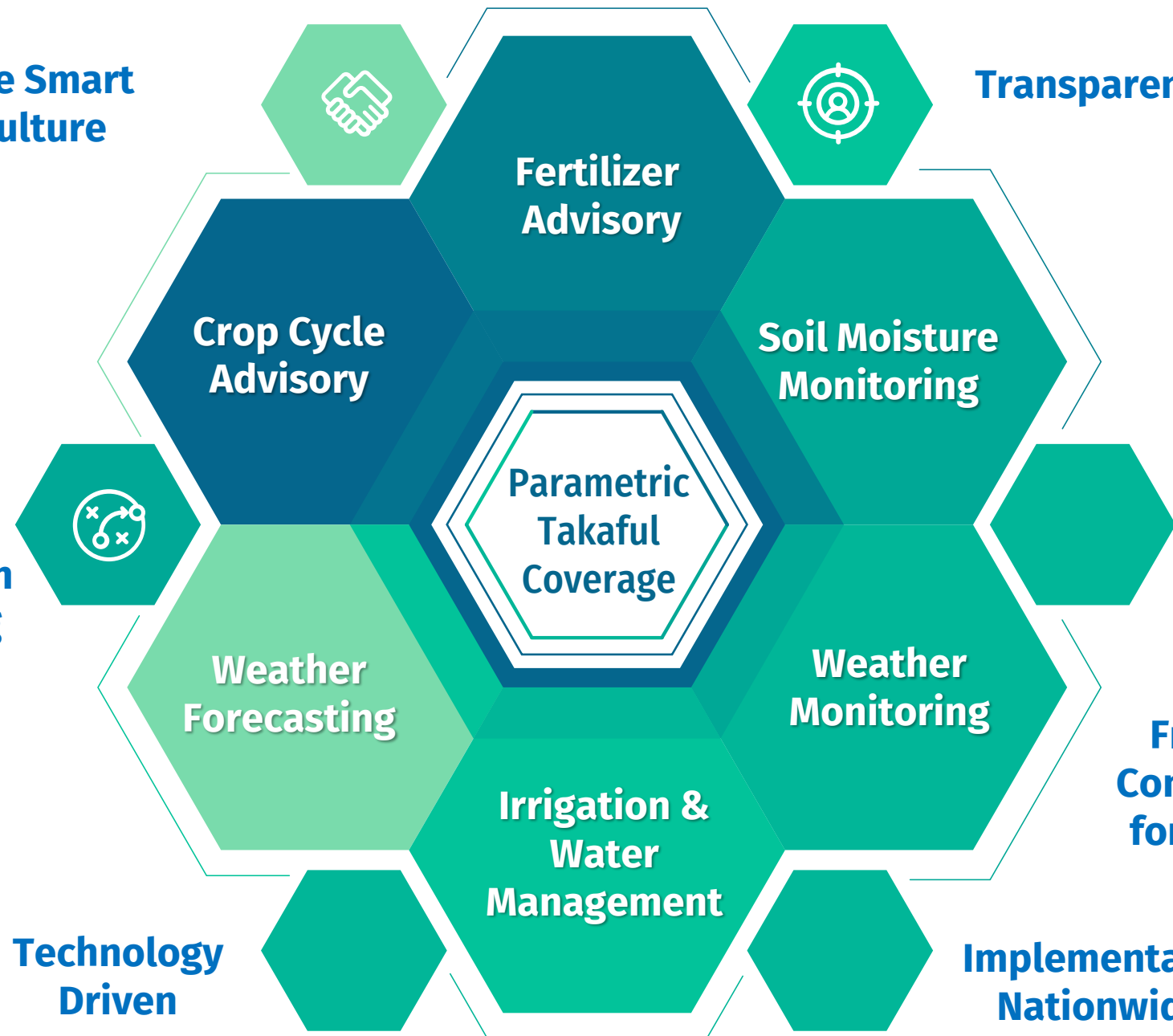
Claim Payout During Crop Cycle

Free OPD Consultation for farmers

Implementable Nationwide

Technology Driven

Precision Farming



# Roundtable discussion

**What are the major constraints to developing domestic  
Takaful markets?**

# Q&A

## Qhelile Ndlovu

Financial Sector Specialist,  
Disaster Risk Financing and Insurance  
Program, World Bank

Disaster Risk Financing  
& Insurance Program



SUPPORTED BY  
WORLD BANK GROUP



Global Shield  
Financing Facility

# Closing Remarks

**Ekhosuehi Iyahen**  
IDF Secretary General



**Disaster Risk Financing  
& Insurance Program**



# Thank you

**Disaster Risk Financing  
& Insurance Program**



**Global Shield**  
Financing Facility