TAKAFUL TECHNICAL NOTE

Lessons learned from the use of parametric takaful for climate risk in the HoA DRIVE project

Disaster Risk Financing & Insurance Program

SUPPORTED BY WORLD BANK GROUP

Global Shield Financing Facility

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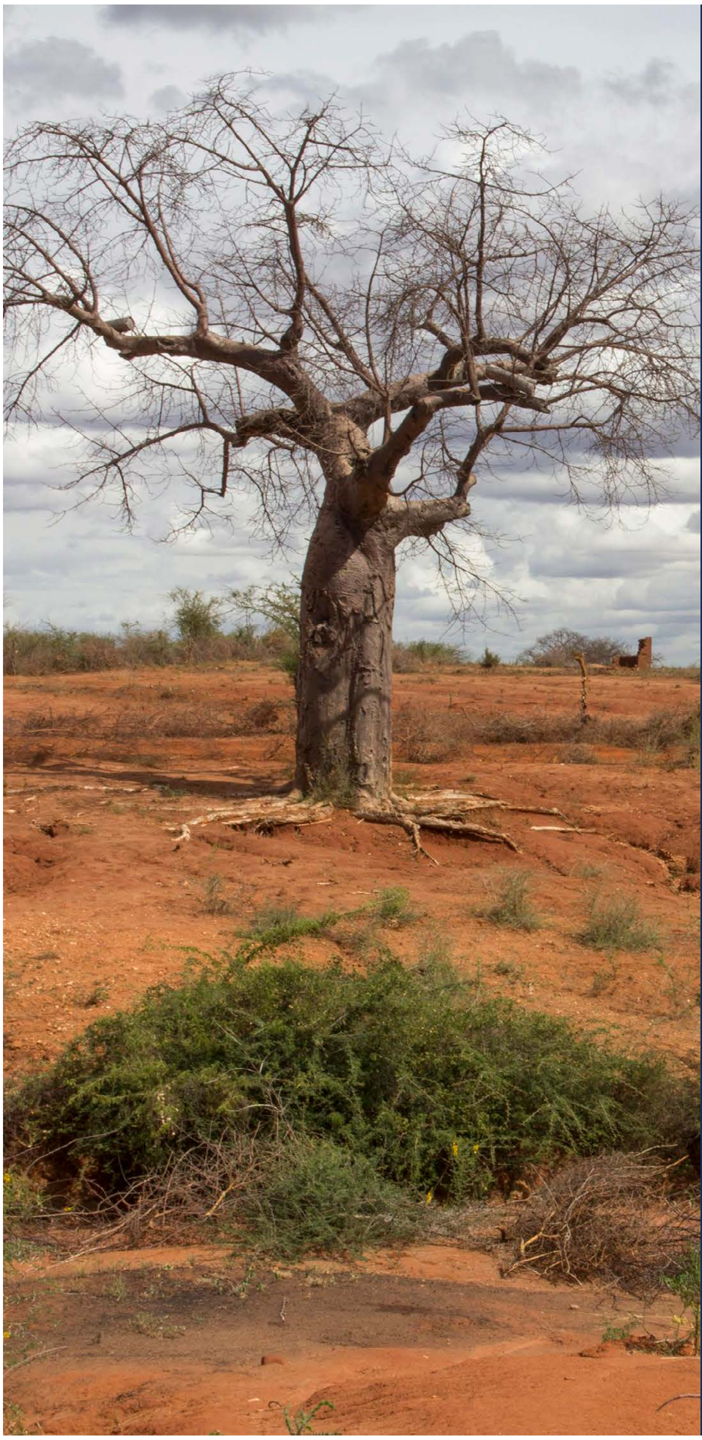
Acknowledgments



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Introduction

This note highlights lessons learned on implementing parametric takaful[1] to protect pastoralists against drought under the Horn of Africa De-Risking, Inclusion and Value Enhancement of Pastoral Economies (DRIVE) Project, which is being implemented by the governments of Djibouti, Ethiopia, Kenya, and Somalia with the World Bank's support. Takaful is an emerging area of focus within the World Bank, and parametric takaful for climate risk is a significant innovation. The DRIVE project provides compelling lessons for other development projects and takaful regulators globally. This emerging product line will strengthen the World Bank's crisis preparedness tool kit by expanding the range and relevance of risk transfer instruments that provide timely resources without adding to household or public debt. This work also makes an important contribution to improving financial inclusion. This work is important for about 25% of the world's population that are Muslim and reside in some of the world's most disaster-prone countries, see Table 1. Financial protection may stem the tide of climate-induced fragility and enable the mobilization of private risk capital in fragile contexts. The high correlation between FCS and climate vulnerability is telling; 95% of all conflict-related displacements in 2020 occurred in countries that are already vulnerable to climate change, such as Yemen, Syria, Somalia, South Sudan, and Bangladesh.[2]

Table 1: Correlation between global disaster risk and proportion of Muslim populations

Rank	Country	World Risk Index*	Population [m.]	Muslim share[%]	Muslim population[m.]	% of world population
1	Philippines	46.86	116	5.1	6	0.1
2	Indonesia	43.50	276	87.0	240	3.0
3	India	41.52	1,417	14.6	207	2.6
4	Mexico	38.17	128	0.1	-	0.0
5	Colombia	37.64	52	0.2	-	0.0
6	Myanmar	36.16	54	3.8	2	0.0
7	Mozambique	34.61	33	22.8	8	0.1
8	Russian Federation	28.20	144	11.7	17	0.2
9	Bangladesh	27.29	171	90.8	155	2.0
10	China	27.10	1,412	1.8	25	0.3
11	Pakistan	26.45	236	96.5	228	2.9
12	Papua New Guinea	26.30	10	0.0	-	0.0
13	Peru	25.55	34	0.0	-	0.0
14	Somalia	25.09	18	99.7	18	0.2
15	Yemen	24.39	33	99.1	33	0.4
15	Vietnam	24.39	98	0.2	-	0.0
	Total top 15	---	4,232	---	938	11.8

* The WorldRiskIndex 2023 assesses the disaster risk for 193 countries. The index considers exposure to extreme natural events such as earth quakes or cyclones, and calculates a society's capacity to respond to such events. All indicators are normalized to a range of values from 0 to 100, in which higher values indicate more adverse circumstances or initial conditions.

1- Takaful is derived from the Arabic root word "kafala," which means guarantee. Therefore takaful means guaranteeing each other.

2- See UNHCR's Global Trends Report 2020, page 26, which cites IDMC and the Notre Dame Global Adaptation Index, and states that "95 per cent of all conflict displacements in 2020 occurred in countries vulnerable or highly vulnerable to climate change.

The first chapter details the DRIVE project and highlights the global footprint of takaful. The second chapter describes and assesses the principles and features of takaful. The third chapter details the state of the takaful markets in Ethiopia, Kenya, and Somalia with a deep dive into Somalia before describing the index-based livestock (IBLT) product and retakaful arrangement under the HoA DRIVE project and the merging positive impact of the IBLT under DRIVE in advancing development of Somalia's nascent takaful market. Finally, the last chapter features the key lessons learned as well as policy and operational implications from ongoing progress towards sustainably scaling up takaful for climate-related risks.

The note does not provide an in-depth analysis of the size of the insurable takaful market nor delve into technical nuances of Shariah rulings and Shariah compliance aspects, which are beyond the objectives of the note.

For a more in-depth understanding of Shariah compliance principles and processes, please read the DRIVE FAQ available here.

Context and overview of DRIVE

The Horn of Africa (HoA), one of the world's most disaster-prone and most fragile regions, faces severe droughts, which pose severe challenges for resilient economic growth and sustained poverty reduction. The 2023 World Risk Report[3] ranked Somalia 14th out of 193 countries in terms of disaster risk; Kenya 39th and Ethiopia 86th. Pastoralism and livestock production are the primary livelihoods, accounting for over one-third of agricultural GDP in most countries and around 80% in Djibouti and Somalia. In Somalia, GDP growth fell from 4.7 % in 2016 to 2.2% in 2017 due to severe drought in 2016-2017. The prolonged drought from 2020 to 2022 resulted in GDP decline of 1.7%. During droughts, pastoral communities lose a significant share of their livestock or sell at extremely low prices to fund emergency needs. In 2017 Somalia lost over 6.4 millions of livestock valued at over US$350 million in addition to milk yield and body weight loss valued at about US$1.2 billion.[4] In 2022, there were 42,000 excess deaths, and between 2021 and 2023, at least 3.5 million livestock died while an estimated 1.4 million people were displaced.[5]

The insurance industry in Somalia is underdeveloped and faces numerous challenges, including a weak regulatory framework, low public awareness, inadequate capitalization, and limited availability of reinsurance capacity. A feasibility study on drought index insurance for livestock in Somalia conducted by the World Bank in 2019 identified the need for the proposed drought insurance to be Shariah compliant. Further, in response to a request from the Central Bank of Somalia (CBS) in 2022, the World Bank undertook an insurance sector assessment and developed a roadmap for the sector's growth, which identified short-, medium- and long-term priorities. Overall, the lack of an insurance law and associated regulatory and supervision framework was the most binding constraint to the development of the sector. In response to this finding, the Federal Government of Somalia, through the Central Bank of Somalia, and supported by the World Bank, took action by initiating the drafting of a National Takaful Bill.

3- https://weltrisikobericht.De/en/
4- Drought Impact and Needs Assessment, https://documents1.worldbank.org/curated/en/901031516986381462/pdf/122991-v1-GSURR-Somalia-DINA-Report-Volume-I-180116-Digital.pdf
5-https://www.preventionweb.net/news/preventing-droughts-floods-and-soil-erosion-land-desperately-needed-some-poorest-farmers-and#:~:text=Somalia%20is%20threatened%20by%20its,million%20people%20have%20been%20displaced.

The Bill was approved by the Cabinet in October 2023 and marks a significant milestone in enabling the development of drought index insurance for livestock and other insurance products that can improve the resilience of households and businesses in Somalia. Official implementation of the roadmap is expected to kick off upon enactment of the Takaful Bill. In preparation, the World Bank has been supporting CBS through drafting of takaful regulations and guidelines. A set of 19 market conduct regulations and guidelines has been drafted, while drafting of prudential regulations is underway.

DRIVE is a regional project that was launched in August 2022 to enable a more sustainable private sector led response to drought and to ensure pastoralists get more value for their livestock trade. It aims to help pastoralists adapt to the impacts of climate change by enabling access to integrated financial services, promoting commercialization of livestock production, and crowding in private investments in livestock value chains. Furthermore, during the project, Central Bank of Somalia requested the World Bank to support training and capacity building for the new division, the Non-Banking Division, which faces challenges such as limited staff skills and technical capacity to supervise and monitor the insurance sector. As part of the World Bank's support for the development of the insurance sector in Somalia, efforts have been underway to address these capacity gaps by providing technical assistance and training to the Non-Banking Supervision Division of the CBS. See Figure 1 for a summary of the project objectives and components. Up to 1.6 million pastoralists stand to benefit from this regional project.

Figure 1: Overview of DRIVE project objectives and components

DE-RISKING INCLUSION AND VALUE ENHANCEMENT OF PASTORAL ECONOMIES (DRIVE) PROJECT

To enhance pastoralists' access to financial services for drought risk mitigation, include them in the value chains, and facilitate the livestock trade in the HOA

COMPONENT 1

Support the provision of an integrated package of financial services to build climate resilience: US$179M

ACTIVITIES: Scaling up financial protection.

Package of financial services, including (i) drought insurance that provides rapid payouts in severe droughts, (ii) savings to address moderate droughts, (iii) digital payment and savings accounts, and (iv) financial literacy.

Implemented by

Global Risk Financing Facility

CO-FINANCING $28 MILLION GRANT

COMPONENT 2

Livestock Value Chains and Trade Facilitation US$181.5M

ACTIVITIES: Better include pastoralists in the livestock value chain and facilitate trade in the HoA.

Upgrade quality infrastructure; Improve trade logistics; de-risk private investment in the Livestock Value Chain and support local productive capacities.

Implemented by national agencies

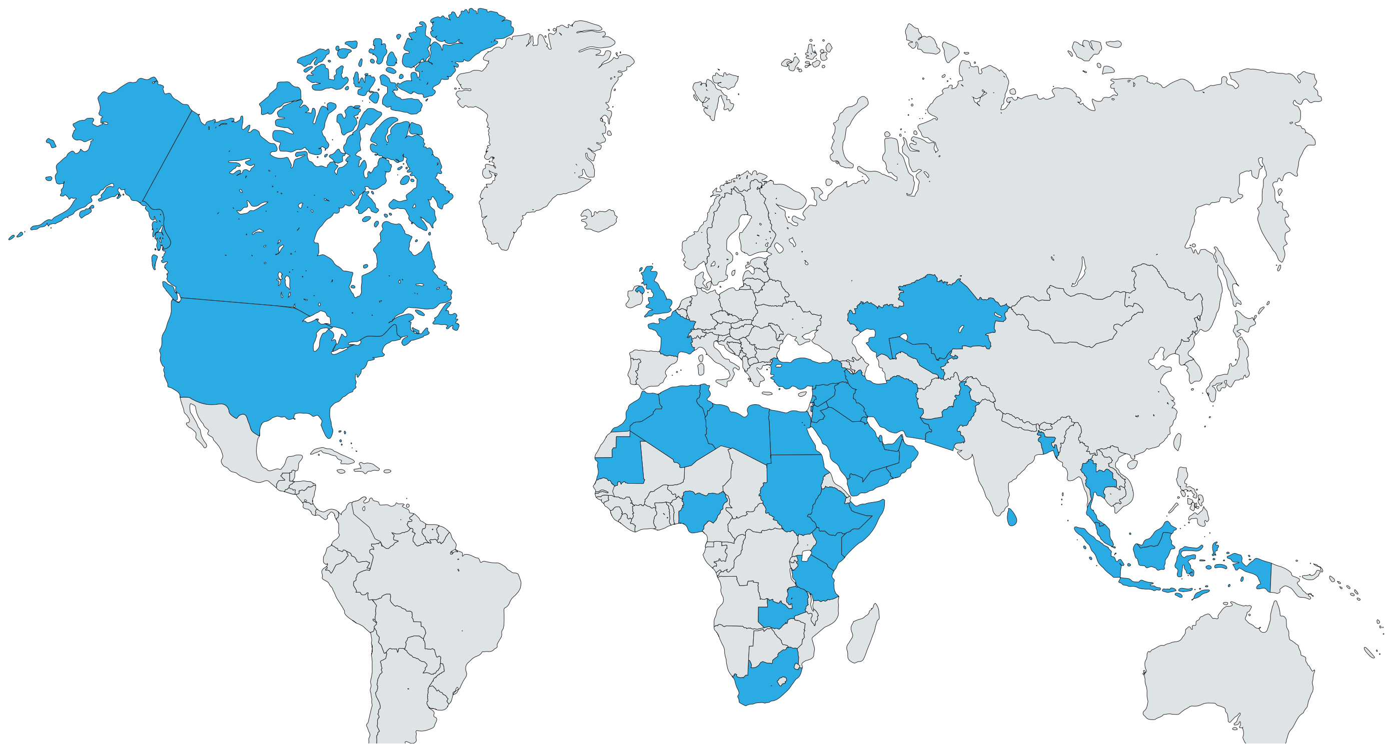
The global landscape of takaful

Takaful is a relatively young sector that evolved out of the need for Islamic banks to have insurance cover that was consistent with Islamic principles (Gönülal, 2013). To date, takaful is available in only 47 jurisdictions globally, beginning with Sudan and the UAE in 1979 to Morocco and Iran, the most recent additions in December 2021 (Figure 2). Of these, nearly half (22 jurisdictions) do not have takaful regulations. Malaysia, which issued its Takaful Act in 1984 is considered the first country to have takaful regulations (Alshammari, A.A., Altwijry, O. and Abdul-Wahab, A.-H. , 2023). Most of these countries are also highly climate vulnerable and ranked in the top 15 globally in terms of disaster risk (Table 1); however, to date the DRIVE project is the first to implement parametric takaful for climate-related risks at scale. The use of parametric takaful to protect climate vulnerable populations is nascent and faces challenges in accessing international retakaful.

Global takaful contributions are estimated at US$31.7 billion in 2022 (Islamic Finance Development Report 2023) up from US$8.3 billion in 2010, having grown nearly 30 percent annually from 2007 to 2010 (Gönülal, 2013). The market is projected to reach US$126.8 billion by 2032, growing at a CAGR of 15.2% from 2023 to 2032 (Allied Market Research).

Meanwhile, takaful assets reached US$77 billion[6] in 2022, accounting for 2% of total global Islamic finance assets. The sector experienced a double-digit growth rate of 17% in 2021, an increase of 1% from 2020. The GCC dominates due to its significant Muslim populations, robust regulatory systems, and high affluence. However, Asia-Pacific is projected to have the fastest growth at a CAGR of 18.4% from 2023 to 2032, due to increasing awareness of Islamic financial concepts, and rising demand for Shariah-compliant financial products.

Figure 2: Global landscape of takaful



Source: Alshammari, A.A., Altwijry, O. and Abdul-Wahab, A.-H. (2023); Link and CIA Factbook; https://www.cia.gov/the-world-factbook/about/archives/2021/field/religions/, Nation Master; Pew 2020 and 2010; https://worldpopulationreview.com/country-rankings/muslim-majority-countries

6- ICD – LSEG Islamic Finance Development Report 2023; https://solutions.lseg.com/IslamicFinance_ICD_LSEG

Understanding Takaful

This section begins by discussing the process and principles of Shariah compliance and assesses aspects that make insurance non-compliant with Shariah. The section then proceeds to describe takaful, the contractual relationships that govern its practice, the roles of the different stakeholders and the range of operational models in use.

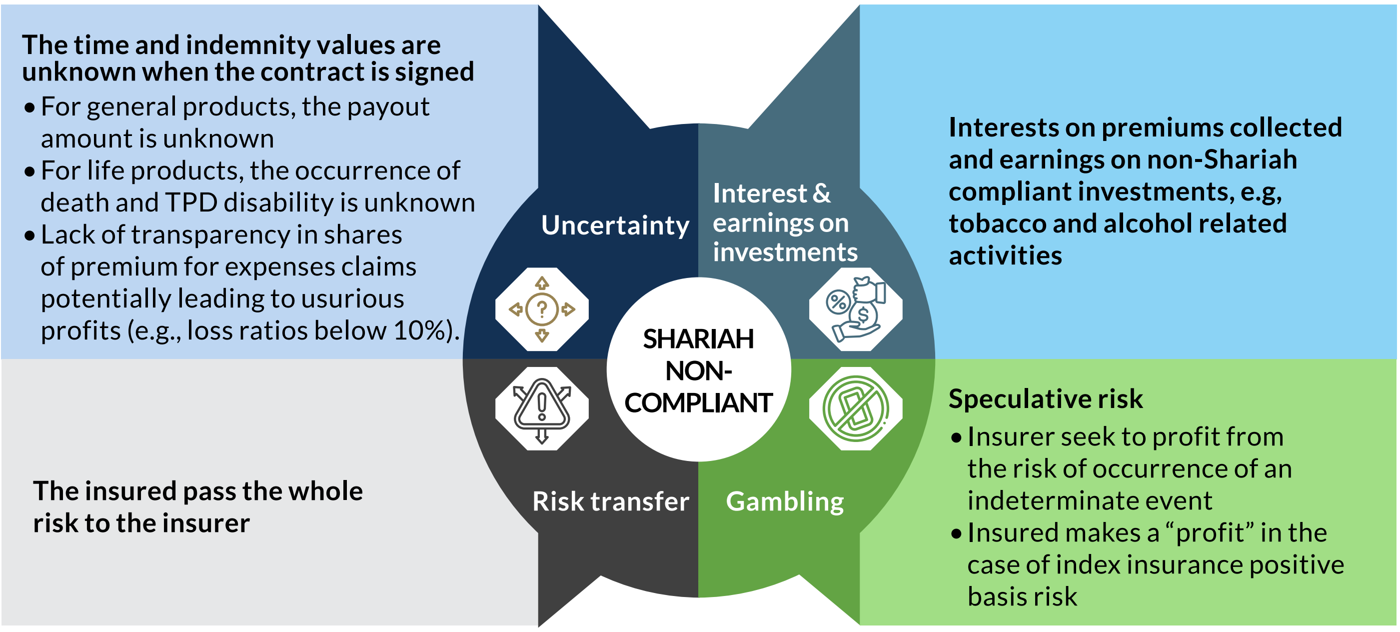
SHARIAH COMPLIANCE

Shariah[7] compliance is a process of determining adherence to Shariah rulings. In Islamic finance jurisdictions, Shariah rulings governing financial transactions are determined by Shariah scholars who are either appointed at the national level or at the institutional level (see IFSB 10[8]). Such rulings are based on Shariah law and or on ijtihad (these are decisions based on independent reasoning rooted in Islamic principles). Interpretations on aspects of family law, finance law (such as in banking and insurance), and religious rituals are not necessarily agreeable among all Shariah authorities and scholars. Differences of opinion on the same issue do exist and are acknowledged as jurisprudential diversity and dynamism that consider the specificities of various societies and needs.

Besides certain definitive Shariah rulings that are unchanged and permanent, the status of whether a particular action or process, based on ijtihad, is Shariah compliance can change over time depending on circumstances at the time the ruling was made based on the five overriding objectives of Shariah law. These five objectives can be summarized as safeguarding one's Religion, Selves, Minds, Progeny, and wealth.

Insurance and reinsurance are deemed non-compliant with Shariah because they are contracts of exchange characterized by excessive uncertainty, risk transfer, with earnings from non-Shariah accepted investments.

Figure 3: Factors on which insurance and reinsurance are deemed non-compliant with Shariah



Source: Authors, adapted from Gonulal, 2013.
Notes: Excessive uncertainty can be mitigated if the insurance market is transparent and competitive.

7- Shariah (an Arabic word loosely interpreted as "the way" or "the way to water") law is derived from the teachings of the Quran and from the hadith (the sayings) and sunnah (the actions) of Prophet Muhammad (peace be upon him). It is a set of principles on all aspects of life, including marriage, divorce, finance, and religious rituals (such as fasting and prayer).
8- https://www.ifsb.org/wp-content/uploads/2023/10/IFSB-10-December-2009_En.pdf

Takaful is Shariah-compliant by virtue of its contract of donation and operating in accordance with Islamic principles, which are based on fairness, transparency, and social responsibility and aimed to eliminate excessive uncertainty (*gharar*), gambling (*maysir*) and usury (*riba*).

"Islamic insurance is a system through which the participants donate part or all of their contributions which are used to pay claims for damages suffered by some of the participants."

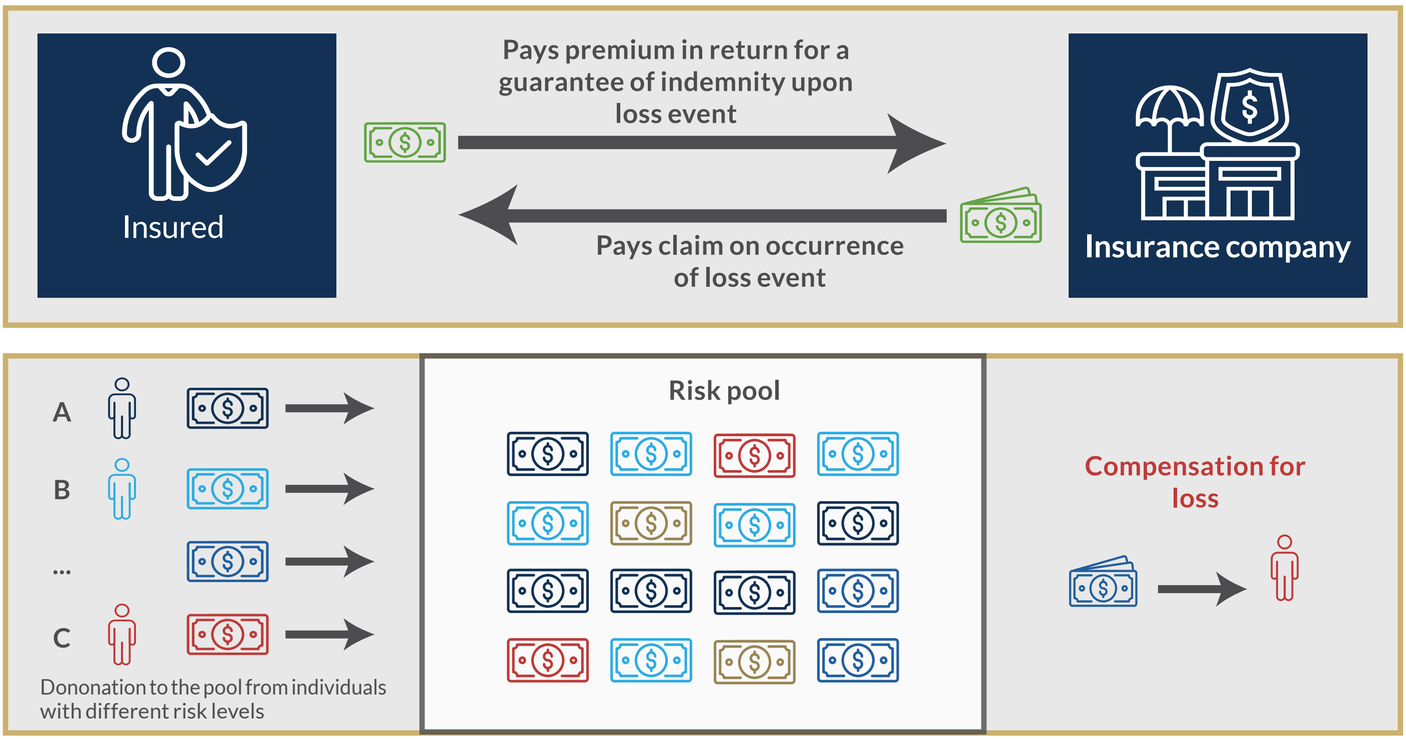
AAOIFI definition of Takaful

DESCRIPTION AND COMPARISON OF CONVENTIONAL INSURANCE AND TAKAFUL

Insurance is a system of transfer of risk from individuals to an insurance company in exchange for a specific premium. Therefore, insurance entails a contract of exchange (of risk and payment) between the insured and the insurance company. There is a transfer of risk from the insured to the insurer. The insured pays a premium in exchange for financial protection in the event of a covered event. The insurer is taking speculative risk wherein it expects that the total premiums it collects will exceed the sum of the expenses it incurs and total claims it pays out, Figure 4. This is akin to the practice of *maysir*, or gambling, which is forbidden under Shariah law.

Takaful is a mutual insurance system where participants share risk by making specific contributions to a fund used to pay for losses suffered by its members. Takaful entails a contract of donation between the takaful participants and different contractual arrangements between takaful participants, the takaful fund operator and the shareholders of the takaful operator. Participants donate into a common pool based on cooperation and shared responsibility to mutually guarantee protection to each other in the event of a covered event. The amount of the donation is determined by actuarial underwriting techniques as in conventional insurance. Figure 4 depicts this risk sharing arrangement where participants A, B, and C donate to the Risk Pool, which in turn compensates C for his or her loss.

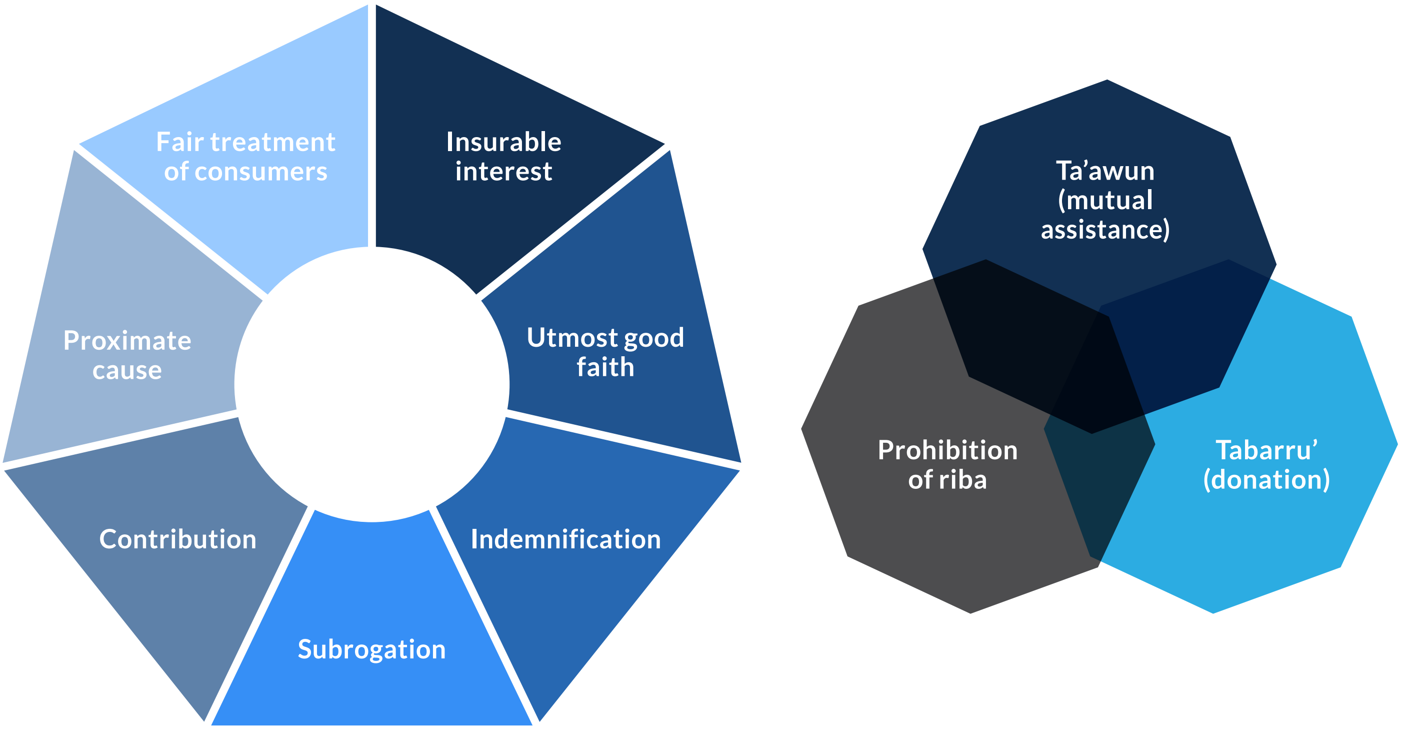
Figure 4: Risk transfer under insurance (Top) and Risk sharing under takaful (Bottom)



Source: Authors

Figure 5 shows that the main principles of insurance are the same for takaful and conventional insurance, while cooperation and spiritual and material benefits could be considered distinct to takaful.

Figure 5: Common principles between conventional insurance and takaful (left) and Distinct principles of takaful (right)



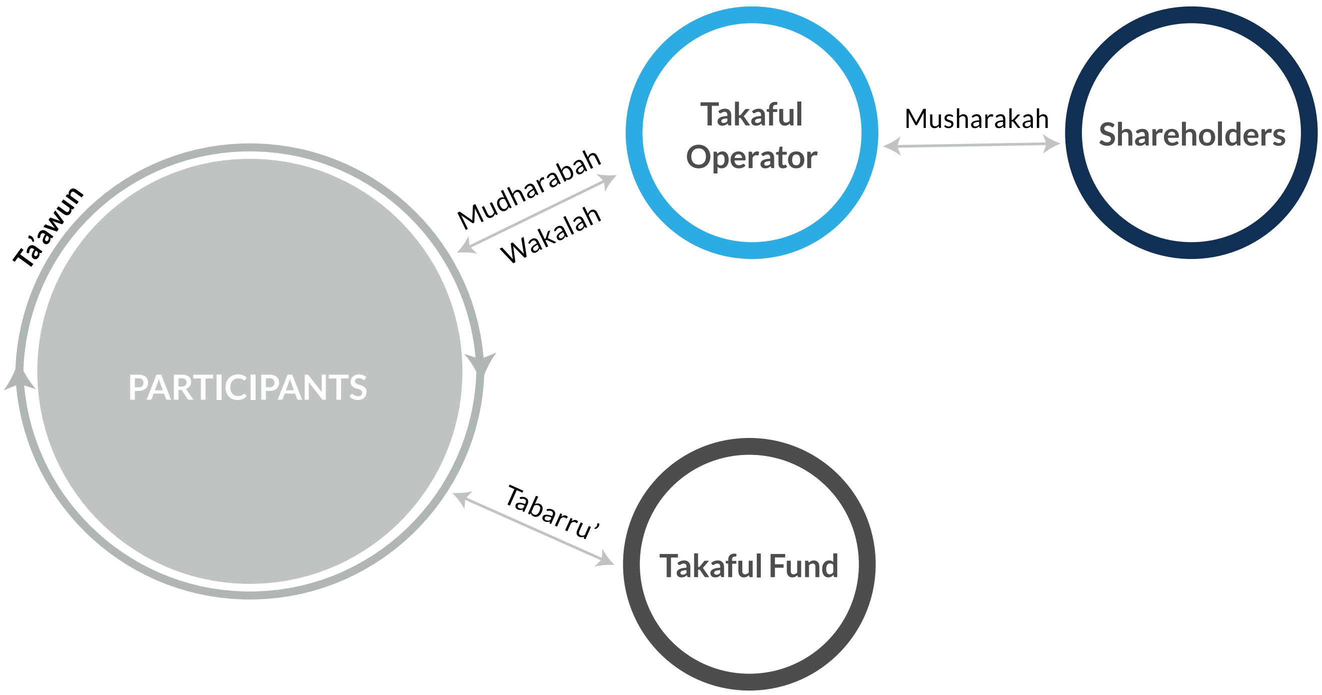
Source: Authors and IFSB 8: https://www.ifsb.org/wp-content/uploads/2023/10/IFSB-8-December-2009_En.pdf

CONTRACTUAL RELATIONSHIPS AND SHARIAH APPROVED CONTRACTS

Takaful is operationalized through specific contracts applicable between the various stakeholders. These Shariah-approved contracts are standardized "contract types," unlike conventional legal contracts. Each named contract type predetermines the obligations of each party and only the financial terms are left to the parties to agree on. Figure 6 demonstrates the key contract types, which include:

- **Ta'awun:** represents mutual guarantees among participants.
- **Wakalah:** This is an agency contract. The takaful operator is an agent of the participants, thus a *wakalah* contract governs the relationship between the takaful operator and the participants.
- **Mudharabah:** This is a profit-sharing contract between an investment manager (*mudharib*) and a funder or investor (*rab al-maal*). The takaful operator may share profits from investments of part of the participants' contributions to the risk pool or fund. In this case the relationship between the operator and participants is governed by a Mudharabah contract.
- **Tabarru' :** This is a contract of mutual guarantee or donation from one party to another.
- **Musharakah:** This is a partnership contract where investors combine capital to form a business and share profits and losses in a specified ratio. The shareholders of the takaful operator are joint investors governed by a Musharakah contract.

Figure 6: Contractual relationships under takaful



Source: Authors based on information from Gonulal, 2013.

THE TAKAFUL OPERATOR AND ITS DUTIES

In exchange for the wakalah fee (which must be disclosed, and thus agreed, with the participants), the takaful operator is responsible for:

- Ensuring that the takaful contributions, net of the wakalah fee is actuarially fair and sufficient for the takaful risk fund to meet net claims and retakaful contributions.
- Ensuring that a proper retakaful program is in place for the takaful risk pool.
- Ensuring that all aspects of the takaful operation are Shariah-compliant (as attested by the takaful operator's Shariah Board).
- Meeting all its operational expenses.
- Providing an interest free loan to the takaful risk fund when there are insufficient funds to meet claims. This loan is the first charge on future surpluses in the risk fund.

Should any deficits in the risk pool be because of the takaful operator's negligence in its duties, the takaful operator would be required to compensate the risk fund for the losses incurred (i.e., not a loan but an outright transfer).

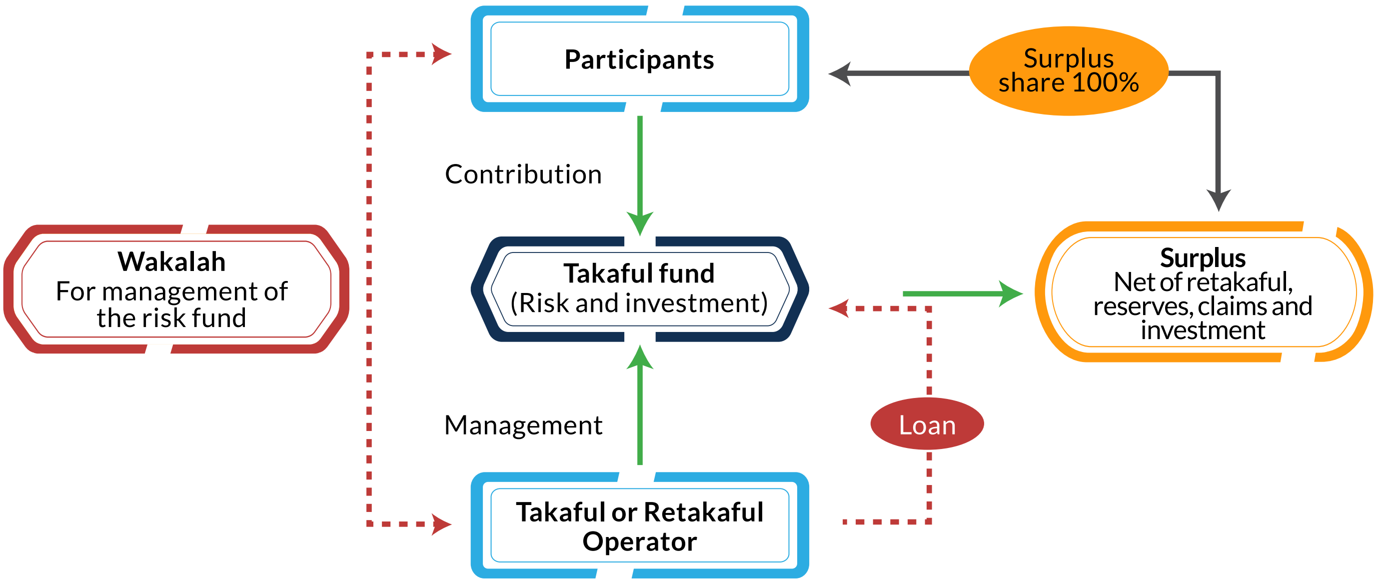
TAKAFUL OPERATING MODELS

While there are a range of takaful models, the flow of funds is essentially consistent. Wakalah fee is deducted from the participants' contribution. The amount is specified, hence transparent to the participant. The contribution net of wakalah fee is retained in the takaful fund as tabarru'(donations). A portion of the takaful fund is invested in Shariah compliant investments, and the proceeds from investments are returned to the takaful fund.

In a pure wakalah model all investment proceeds belong to the participants. However, in a Mudharabah contract, the takaful operator and participants share the profits in a prespecified ratio, usually 50%. See Figure 8: Hybrid wakalah and mudharabah model. The takaful fund is also used to build reserves and to contribute to a retakaful fund. This is done to ensure the sustainability of the takaful fund. The amounts are determined based on actuarial principles.

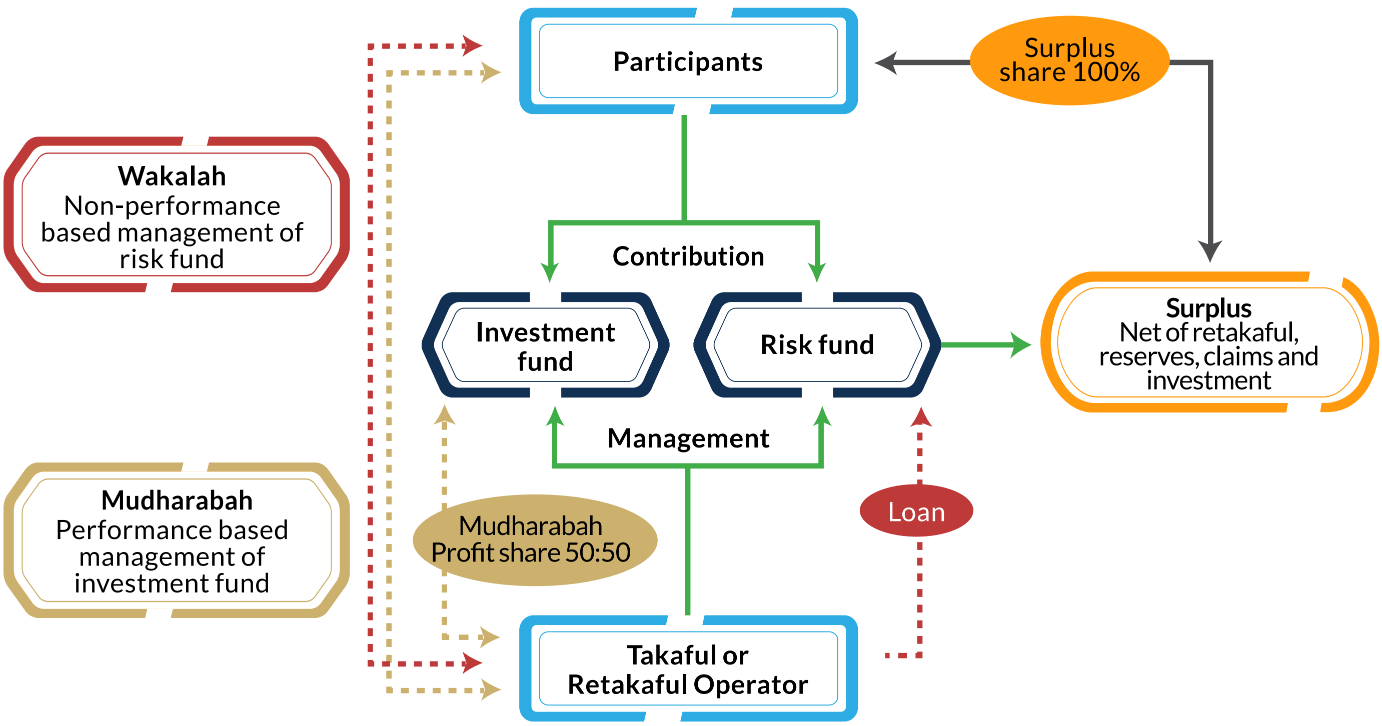
Finally, the takaful fund is used to pay claims net of retakaful recoveries. Any surplus may be distributed to current and/or future participants of the takaful fund. However, this is not obligatory and based on the actuarial evaluation of the viability of the fund. In the case of Malaysia, the surplus is shared by the takaful operator and the participants, see Figure 9: Modified wakalah and mudharabah model.

Figure 7: Pure wakalah model



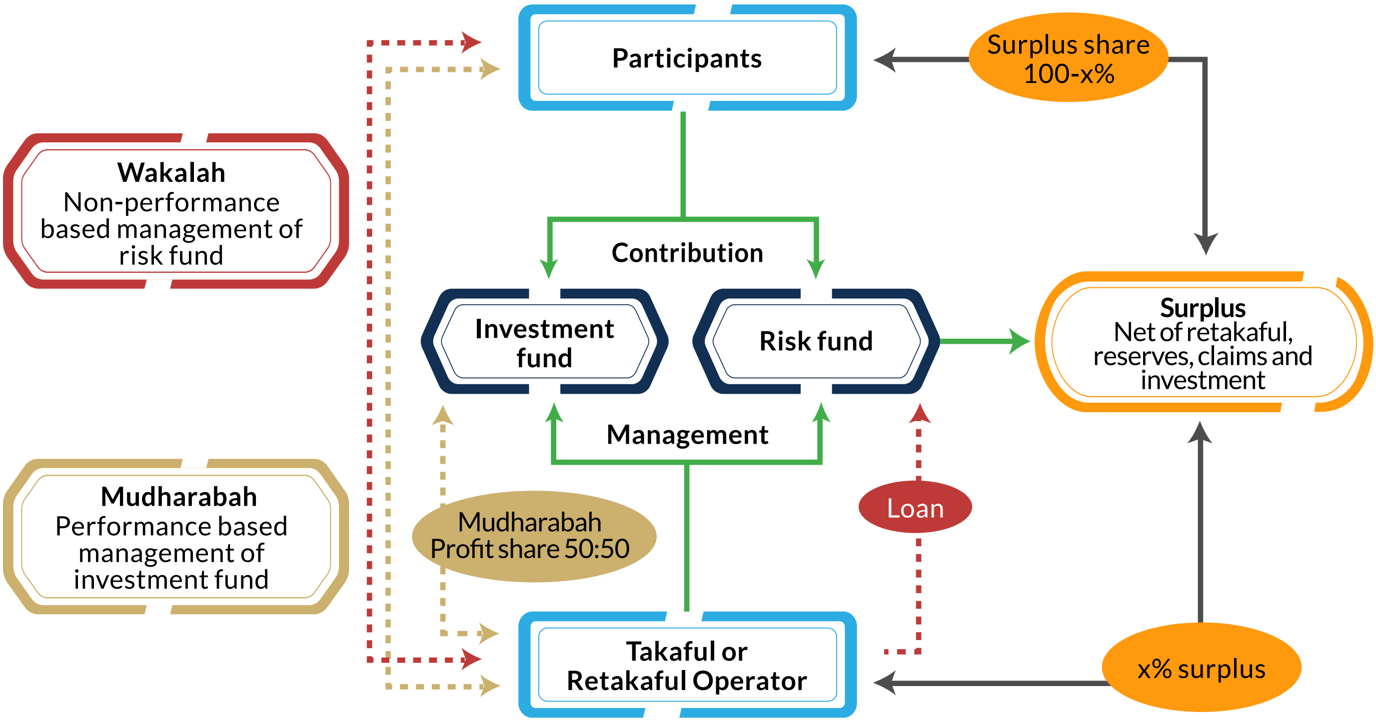
Source: Adapted from IFSB-8.
Note: Applied in some countries of the MENA region; Charts are focused on general takaful.

Figure 8: Hybrid wakalah and mudharabah model



Source: Adapted from IFSB-8.
Note: Applied in most countries; Charts are focused on general takaful.

Figure 9: Modified wakalah and mudharabah model



Source: Adapted from IFSB-8.
Note: Mainly practiced in Malaysia. Charts are focused on general takaful.

The waqf (endowment[9]) model is a variation that was introduced in Pakistan to strengthen the legal status of the risk or takaful fund. The waqf model was introduced to create an independent legal entity (Waqf) not owned by the participants, neither individually nor collectively. The introduction of waqf in takaful is a major variation, which changes the ownership of the risk fund (not owned collectively by the participants as ascertained by takaful regulations) and the role of the takaful operator to waqf manager (Nazir al-Waqf) where he is entrusted to protect the waqf as per the shariah rules of waqf. The waqf is instituted by the shareholders by making a small waqf contribution (which cannot be repaid to the shareholders) to the pool, effectively to capitalize the waqf. The waqf would be instituted with certain rules and conditions as to what contributions participants should make to the pool (these contributions are still deemed as tabarru') and what payments can be made out of the waqf pool (Source: World Bank & IFSB). Waqf is an integral part of the takaful model in in some countries such as Pakistan, whereby the risk fund is established as waqf.

The State of Takaful Markets in HoA DRIVE countries

Takaful regulatory landscape in the Horn of Africa is mixed, with Kenya being more advanced and Ethiopia being comprehensive at micro-takaful (inclusive takaful), while Somalia's Takaful Bill is pending adoption by parliament to pave the way for its enactment into law. The objectives of regulations are to establish a mechanism for regulating insurance business in the country; and set requirements and minimum standards for operations and disclosures by operators with the aim of protecting the interests of participants or policyholders. Table 2 presents a summary of the state of regulations in the Horn of Africa DRIVE countries.

9- As per IFSB

Table 2: State of takaful market and regulations in Ethiopia, Kenya and Somalia

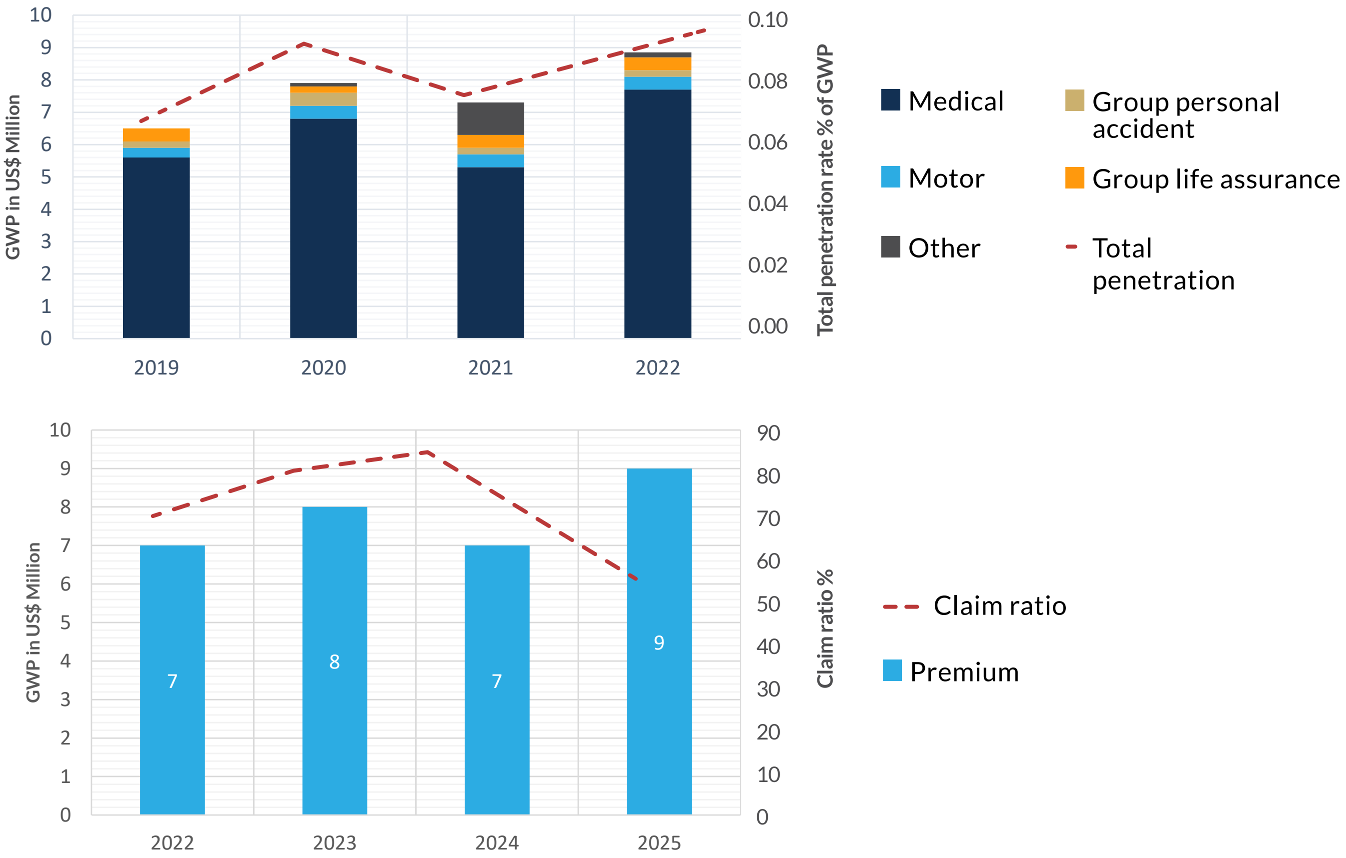
Country	Somalia	Ethiopia	Kenya
Number of Takaful Operators	12 relatively (young, between 2 to 9 years in existence). One broker.	Two newly registered takaful windows in 2020. Four General Takaful Operators.	One takaful Operator (established in 2011). No takaful windows.
Market size and trends	Between 2019 and 2022 premium increased by 50% from US$6.5m to US$9.2m. However, bulk is for expats medical cover and IDS.	Total contributions of US$2.3m (ETB 127.6 million) in 2022/23, approximately 2.23% of their total GWP portfolio and 0.56% of the total insurance market.	Takaful Insurance of Africa, only takaful operator in Kenya, GWP US$7.3m in 2022
Reinsurer or Retakaful operators	No local reinsurer.	One local reinsurer.	Retakaful operations started in 2013 by Kenya Re, which is a composite Retakaful operator offering Retakaful support. Five locally licensed reinsurance companies (one with retakaful window). Four international based reinsurers (two with retakaful windows).
Takaful law or regulations	Bill adopted by Cabinet in 2023. Enactment due in Q1 2024 and regulations in draft.	Yes, regulations issued in 2020.	No, regulations drafted in 2018.
Conventional Insurance Law	No	Yes	Yes
Provision for Takaful window	N/A	Yes, with separate registration required for microtakaful.	Yes
Reference to Index Insurance in the Law	Reference in Bill and draft regulations developed.	Law is silent and no regulations in force.	Reference in law but no regulations.

Sources: Kenya – public reports, Ethiopia public reports and Somalia - Central Bank of Somalia shared with the WB team, The Feasibility of Establishing Takaful in Uganda: Lessons from the Experience of Malaysia and Kenya (Muhammedi et al., 2023), 5th Global Takaful and Re-Takaful Forum 2023 (Tsegaye)

The takaful market in Somalia is nascent and growing albeit with a very low insurance penetration rate under 0.1% of GDP. Between 2019 and 2022, total contributions increased by 50% from US$6.5 million to US$9.2 million. The increase in the uptake of insurance covers is attributed to the increase in the product range. It is notable, however, that five classes accounted for more than 95% of the number of policies written over the 4 years analyzed (Table 3). Uptake and use of insurance remains low due to the overall low level of awareness of insurance and an underdeveloped insurance market[10]. With limited brokers and no registered insurance sales agents, it is estimated that 85% of the business is distributed directly, while the remaining 15% is placed through intermediaries. Overall, takaful operators interviewed as part of the insurance sector assessment demonstrated a mixed level of understanding about takaful operational and business models.

10- Notably a government-run national insurance company operated before the 1991 civil war, namely the State Insurance Company of Somalia SICOS (Shirkadda Ceymiska Qaranka Soomaaliyeed).

Figure 10: Gross written premium 2019 – 2022 and total penetration (Top), and claim ratio (Bottom)



Source: Insurance Sector Assessment Report 2023, World Bank, CBS

Table 3: Classes of business in Somalia takaful market

Motor Insurance	Money Insurance	Aviation Insurance
Medical Insurance	Theft/Burglary Insurance	Professional Indemnity
Marine Insurance	Domestic package/risks	Pollution Liability Insurance
Travel Insurance	Contract All risks	Oil & Gas Energy Insurance
Group Personal accident (GPA)	All risks	Employers Liability
Workmen Injury Benefit	Public Liability	General Liability
Goods in Transit	Erection All risk	Combined Liability
Fire and Perils	Group Life Assurance (GLA)	Property Insurance
Machinery breakdown	Contractors All risk	Livestock Insurance

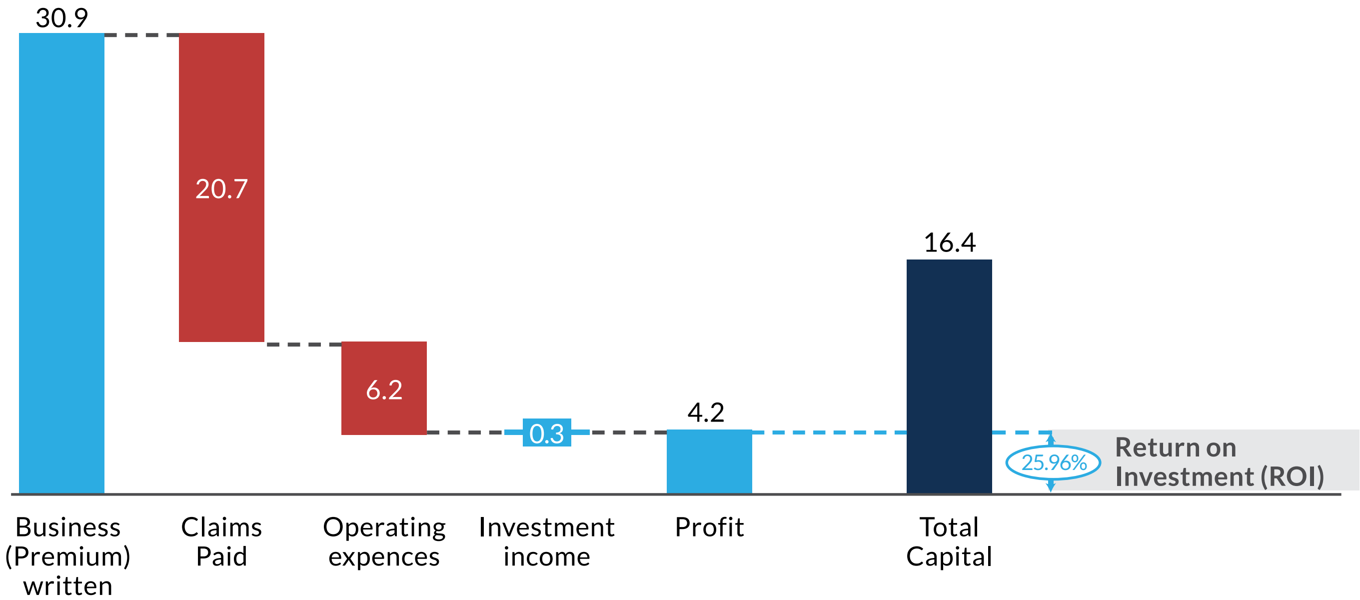
Source: Insurance Sector Assessment Report 2023, World Bank, CBS
Note: The grey shaded classes of business could potentially be leveraged for DRF.

While investment appetite seems limited, overall market performance based on analysis of the 4-year return on investments (ROI) suggests that the industry has been operating profitably. There is a wide variation in the level of capital invested with one operator accounting for 73% of the total industry capital at about US$12 million. This marks a significant shareholder investment and is comparable with other insurance investments in the region. For instance, in Kenya, the regulatory regime mandates that composite insurers must have a minimum capitalization of KES 1 billion, equivalent to approximately US$7.5 million to be licensed.

As shown in the figure below, the industry's cumulative profit including underwriting surplus and investment income amounts to US$ 4.2 million, which compared to an investment cost (capital provided) of US$16.4 million generated a 4-year ROI of nearly 26%, or approximately 6.49% annually.

Figure 11: Return on investment (ROI) on Somalia takaful market (2019-2022)

(US$Million)



Insurance Sector Assessment Report 2023, World Bank, CBS
Note: The calculation of ROI is based on Gross Written Premium (GWP), assuming full earned premiums written from 2019-2021.

THE INDEX-BASED LIVESTOCK TAKAFUL (IBLT) PRODUCT UNDER DRIVE

The IBLT product

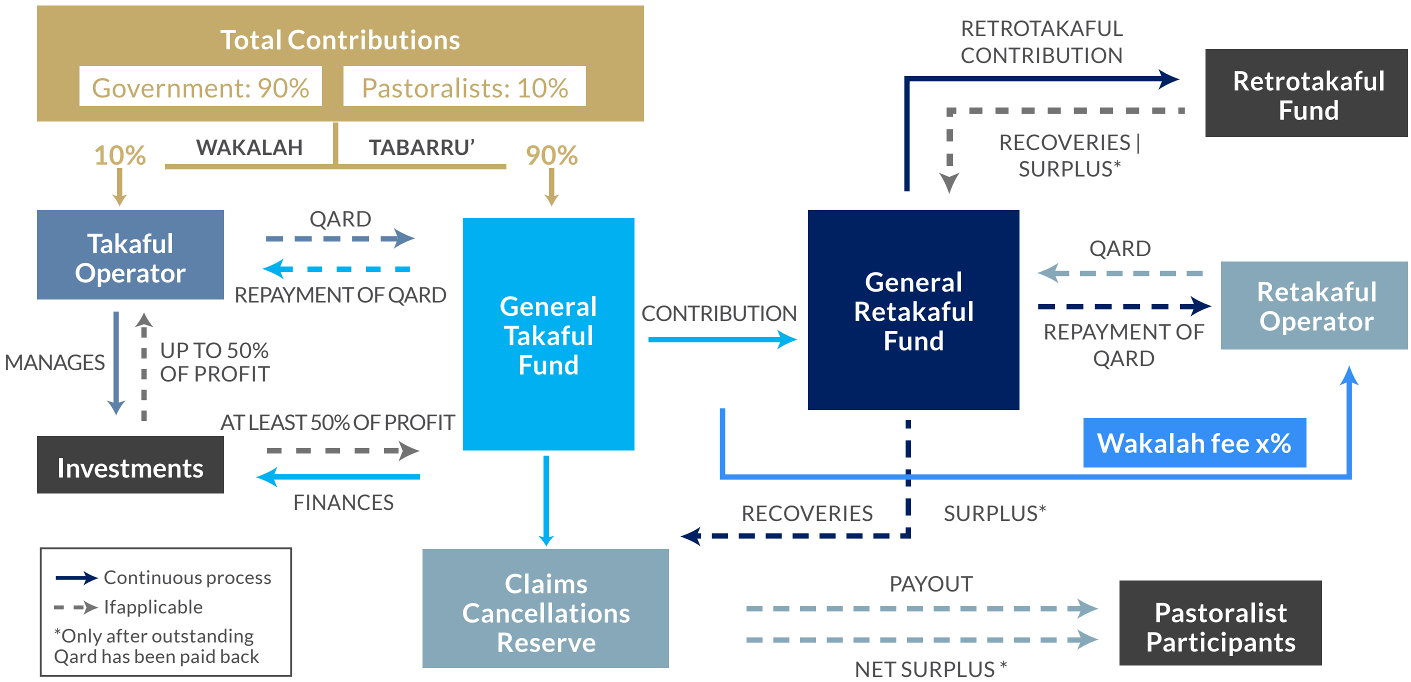
Providing IBLT under DRIVE has increased outreach to more beneficiaries due to its relevance for Muslim populations. The IBLT is designed to prevent livestock death due to drought by providing funds for pastoralists to feed their livestock when there is inadequate pasture. The level of pasture is measured using a vegetation index.

If the vegetation index falls below a minimum level of greenness, this indicates that the pasture available for livestock is too low to sustain the livestock and the insurance makes a payout. To ensure an affordable product, the amount of cover is enough to keep the livestock alive during the dry months but less than the total value of a livestock. Therefore, the product is aimed at maintaining a livestock alive (asset protection) rather than replacing a lost livestock (asset replacement).

TAKAFUL AND RETAKAFUL STRUCTURE UNDER DRIVE

Figure 12 summarizes how the takaful and retakaful under DRIVE operate based on a hybrid wakalah and mudharabah model. Total contributions from the government and pastoralists are first split between a wakalah fee and a tabarru'. It subsequently shows how the risks are pooled in the general takaful fund and how after claims are paid, surpluses may be refunded to pastoralists subject to an actuarial assessment that the remaining balance in the Fund is adequate to cover the future risk.

Figure 12: The takaful operational model adopted by DRIVE



Note: the general takaful funds of operators in Somali are not yet being used to pay claims because this is a new product and will require time for the Funds to being enough reserves

The general takaful fund pays a contribution into a retakaful fund, to manage the risk of the general takaful fund being inadequate to cover all the members' losses.

A portion of the general takaful fund is used to invest in Shariah-compliant investments, which increases the total amount of funds available in the general takaful fund to cover members' losses. The Takaful operator manages the investment on behalf of the members, therefore the proceeds from investments are shared equally by the takaful operator and the takaful fund.

In the event of a loss by a contributing member, the takaful operator pays the claim from the general takaful fund and the retakaful fund.

If the total available in the takaful fund is not enough to cover the losses, the takaful operator and retakaful operator pay an interest free loan (*Qard*) to the respective funds. In the event of a surplus takaful fund first pays back the Qard. Once the Qard is completely paid back. Members of the Fund may receive a share of the surplus.

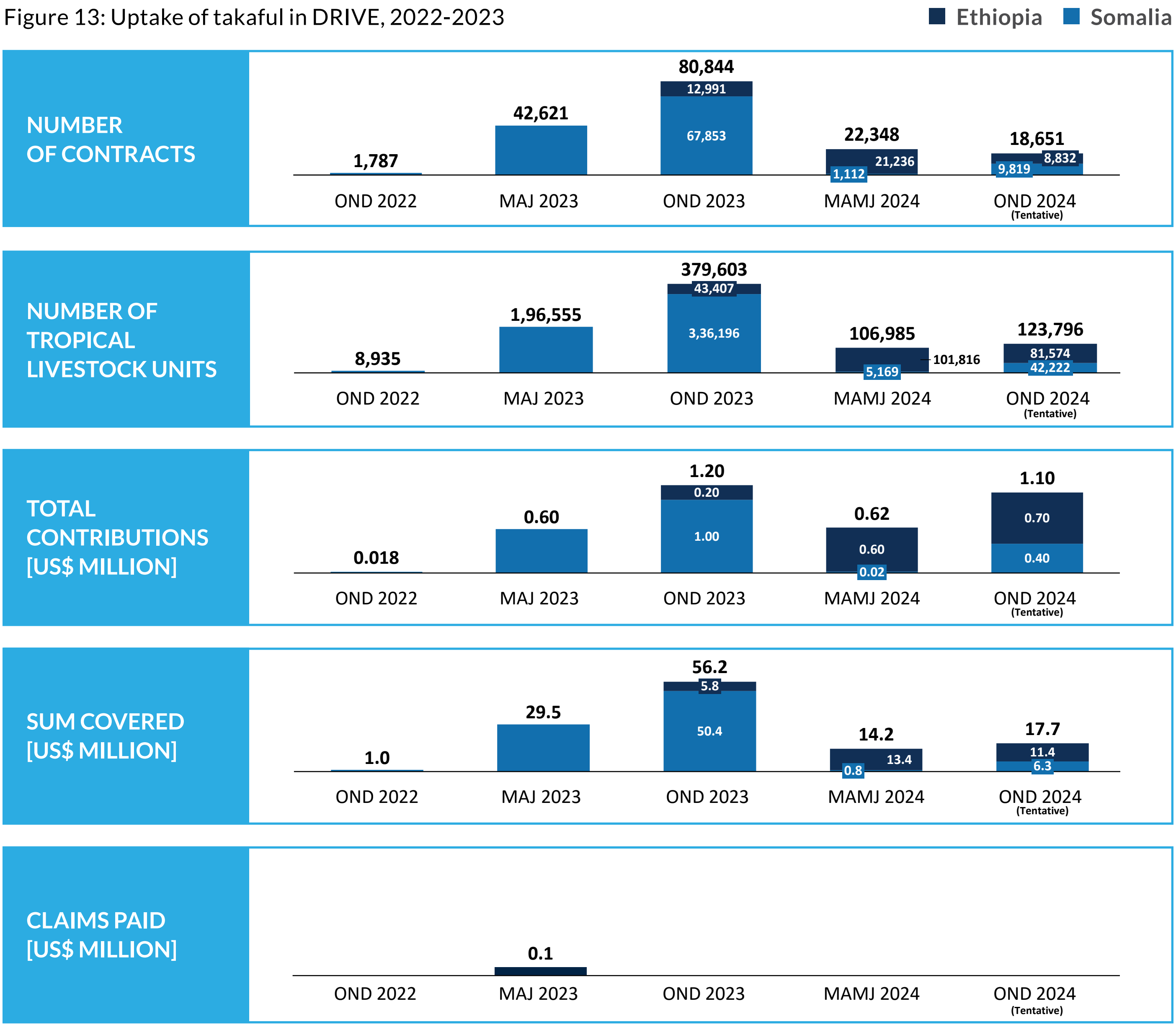
The much smaller takaful and retakaful risk fund means that the loss absorbing capacity is still very limited compared to that of re/insurance. Due to this, Shariah has provided some temporary dispensation to allow the use of conventional reinsurance[11]. Given the nascent nature of the takaful operators in Somalia, their takaful funds are not being used to cover the losses. Instead, the losses are being paid from the retakaful funds of participation retakaful operators through ZEP-Re. In time, it is expected that local takaful operators will keep some of the contributions and pay some of the losses from the domestic takakul funds. This temporary arrangement has been considered Shariah-compliant on an exemption basis by the ZEP-Re Shariah advisor. This exemption is on the retro insurance arrangement as takaful operators are ceding to a Shariah approved retakaful window of ZEP-Re.

11- The Shariah ruling which allows the temporary use conventional instruments in the absence of a shariah-compliant option is agreed upon in most Islamic finance jurisdictions.

IMPACT OF A NICHE PRODUCT ON DEVELOPMENT OF SOMALIA'S NASCENT TAKAFUL MARKET

Despite a longer history and awareness of index livestock by pastoralists in Ethiopia and Kenya, as well as a more developed insurance market, uptake of the livestock insurance product has been strongest in Somalia, Figure 13. This is likely a combination of multiple factors. Firstly, the people centric approach taken to ensure that the religious and ethical needs of the majority Muslim communities are met. Secondly, the last mile distribution partnership for the package of financial services between banking institutions and takaful operators is helping to overcome mistrust in insurance. Effectively insurance is borrowing households' trust in banks and microfinance institutions. Lastly, the region was coming out of a prolonged drought and the enrollment bonus provided immediate liquidity for households to cope.

Figure 13: Uptake of takaful in DRIVE, 2022-2023



Source: DRIVE project reports

OND = October to December coverage season & MAMJ = March to June coverage season

Lessons Learnt

This section presents lessons across conventional insurance and takaful as well as takaful-specific lessons, which highlight the specific challenges (and opportunities) of parametric takaful. Table 4 gives a summary of these lessons and implications for policymakers and practitioners.

Four key lessons learnt relevant to the insurance sector:

I. **Insurance growth strategies must incentivize investment in last mile distribution channels to address demand-side barriers. This can be done by leveraging national financial inclusion efforts and partnership with microfinance institutions and other lenders**. Insurers, including takaful operators, need incentives to invest in last mile distribution channels and intelligence to better understand clients' needs. This is an essential feedback loop to ensure that the products developed meet the needs of participants and that participants understand what they are purchasing in contrast to macro-level solutions where beneficiaries are registered by the Government through a registry. Effective distribution is critical for building sufficient volumes to attract international reinsurance and retakaful operators.

II. **Insurance regulators must encourage insurance companies and takaful operators (underwriters) to retain some risk, without which limited availability of reinsurance and retakaful capacity will remain a binding constraint for sustainable growth of insurance and takaful markets in the long-term.** Further, there is a need to encourage underwriters to retain some of the risk instead of fronting. By doing so, underwriters can help ensure the continued provision of reinsurance and retakaful capacity from international markets. CBS has taken an inclusive and collaborative approach to developing its regulatory framework and its insurance growth strategy. The first ever interaction between the regulator and the takaful operators was enabled through technical support from the World Bank as part of the DRIVE project. This included a series of consultation and validation workshops to assess the status of the takaful market and develop a road map for the development and growth of the market.

III. **Strong ownership of the insurance development agenda by the regulator is critical for a successful implementation and scale up of inclusive insurance.** By taking a strong role, regulators can ensure customer protection and foster trust by the insuring public; they can better leverage limited public funds that are provided in the form of premium subsidies for wider financial sector development and deepening, and lastly, by putting in place regulations they create market certainty that is necessary for private investors to make long term investments in this sector. The Insurance Regulatory Authority of Kenya was a driving force behind the inception of Kenya's agricultural insurance programs in 2015. The Central Bank of Somalia has been the driving force behind Somalia, leveraging the DRIVE project to strengthen the takaful regulatory framework and thereby enable strong private sector participation. Through the World Bank's technical assistance and advisory services, CBS prioritized drafting a Takaful law in line with its national constitution and international good practice. The National Takaful Bill was adopted by the Cabinet in October 2023 and is pending adoption into law by parliament in 2024. The World Bank is providing technical assistance to help the CBS to draft takaful regulations and guidelines, while providing practical hands-on training to strengthen the CBS' technical and operational capacity to enforce these regulations.

IV. **Regulators must combine strategic long-term foresight and pragmatic opportunism to leverage medium-term donor programs that often have a narrow focus to achieve specific development objectives.** Fostering growth and development of any market, more so a tertiary financial market, is a long-term commitment. It requires sustained investments in building the technical expertise of both practitioners and regulators. In the case of takaful, there is an additional need to develop understanding among Shariah scholars and leaders. Such investments are often difficult to commit to in the face of competing social and real economy development needs. Pragmatic opportunism helps to strengthen alignment between government and development partners' objectives. Thereby killing two birds with one stone.

While the takaful sector faces similar challenges to conventional insurance, there are 5 key lessons learned specific to takaful:

I. **Even low-income vulnerable populations prefer people-centric and value-based solutions, and the financial sector must rise to meet this demand.** Over the last decade, many other sectors, including health[12], education[13], and even entertainment, have responded to the increasing demand for personalized and value-based solutions. In Somalia, 99 percent of the population is Muslim, and in Ethiopia, more than 30 percent is Muslim. With this vast Muslim population, DRIVE takes a people-centric approach by ensuring that the index-based livestock insurance delivered under DRIVE is Shariah compliant. This was achieved through extensive consultation with the Shariah scholars and leaders in Somalia. Shariah rulings differ from one region to another. In majority Muslim countries like Sudan and the Middle East Shariah ruling is more stringent, whilst in countries with a smaller proportion of Muslim populations Shariah takes a more liberal approach. Somalia is unique in that although a majority Muslim country, it is exploring a more pragmatic approach focused on people within the context of values and needs. While expensive and typically a preserve of middle-income earners, customer centric customization at scale must be done.

II. **Top-down and bottom-up approaches are needed simultaneously to crowd-in international retakaful capacity.** The DRIVE project has been supporting the project implementing partner, ZEP-Re, to obtain retakaful capacity while simultaneously supporting the regulator to put in place key building blocks to enable development and growth of the domestic takaful market. This has allowed the project to bypass the chicken and egg trap, which faces many nascent markets. International investors tend to seek evidence of market growth before investing, whereas investments are needed to enable growth.

III. **Takaful is not a charity and, therefore, does not compromise on robust actuarial underwriting and profitability; with the lower availability of retakaful cover, takaful is potentially more costly.** Takaful and insurance are identical from a technical underwriting standpoint. Takaful operators seek to make a profit by efficient management of the risk pool on behalf of the takaful participants. Investors in takaful operators, seek the same return on their investment as do investors in insurance, yet in takaful, some "investors' profit" is distributed to takaful participants as surplus. In addition, retakaful cover is scarcer, which impacts the cost of the final product. Development partners seeking to facilitate low-income households' access to takaful (inclusive takaful) need to consider this in their programming.

IV. **The need for separate governance and operational systems and procedures to ensure Shariah compliance adds to the costs of takaful but is extremely critical for the public's acceptance and private investor confidence.** This is another factor that development partners would do well to consider. A takaful operator must have a Shariah advisor, auditor, and board in place. In addition, there are direct costs related to non-compliance with Shariah, for example regulatory fines. The risk of products being subsequently deemed non-compliant, particularly for long-term products, is material and must be addressed at the market level. Hence, the IFSB recommends certainty in the Shariah governance process.[14]

12- Personalized health, precision medicine or individualized medicine uses information about a person's genes, lifestyle, and environment to guide disease prevention, diagnosis, and treatment.
13- Personalized learning is an educational approach that customizes learning for each student's strengths, needs, skills, and interests.
14- In Malaysia, each takaful operator has its own Shariah Board. However, there is a central authority that has the final say on Shariah compliance, with a legal framework that compels the industry to follow directives of the Central Authority.

In Somalia, there is a need to have a legally authorized National Shariah Board. In minority jurisdictions, there is a need for credible and certified Shariah advisors. Overall, this requires necessary trade-offs between investing in fit-for-purpose solutions to mobilize private risk capital in the long term compared to traditional use of humanitarian assistance in the short term, which is increasingly under pressure from growing humanitarian needs. The DRIVE project demonstrates the viability of investing public funds to enable more sustainable market-based solutions.

V. **Takaful is part of a tripartite ecosystem and requires a functioning Islamic banking and Islamic capital market to grow sustainably.** Contributions collected by takaful operators require suitable investments in order to manage investment-related risks. This means Sukuks (Shariah compliant bonds) and deposits in Islamic Banks are important prerequisites for takaful to be able to offer competitive products to the consumer. Therefore, public officials seeking to develop takaful markets need to make a concerted effort to work across typical sub-sector silos. Regulators of the takaful market tend to be mapped to ministries of finance or central banks, while capital markets regulators tend to be established as standalone entities. These regulatory bodies need to collaborate and build synergies to maximize return on every dollar of public funds invested in either leg of the tripartite Islamic finance ecosystem. Development partners supporting financial sector development may have a role to play in fostering such cross-sector collaboration.

Overall, the implementation of parametric takaful must advance alongside the development of regulations and strengthening of regulators' capacity. The index-based nature of parametric insurance and its complexity, the low levels of financial capability among farmers and herders and the potential of the insured "profiting" due to a payout when the insured has not suffered a loss under parametric insurance creates unique combination of regulatory and Shariah challenges.

There is a need to secure insurance regulators' recognition of parametric insurance as insurance and to ensure that parametric insurance is subject to provisions of the insurance law. Parametric insurance has proven to be the most affordable form of climate risk insurance to protect low-income vulnerable populations. It significantly lowers the insurance claims assessment costs and underwriting risks, which reduces insurance premiums and increases affordability. However, by virtue of being based on a proxy for the actual loss, it is not a contract of indemnity and unless explicitly stated, it is typically not covered under insurance laws. Without this recognition, insurance customers will not enjoy the protection afforded by law, and private investors will not have the certainty they need to invest in the sector.

It is critical for the regulator to be informed of the risks associated with parametric insurance and that appropriate efforts are taken to manage these risks. These include the risk of misselling, product failure, as well as, basis risk. The technical complexity of the product, low financial capability of the target population, and availability of premium funding may increase incentives for misselling. The product may fail in a new market due to technological and operational challenges. While technological advancement is helping minimize the potential mismatch between the insurance payout and policyholder experience - basis risk – it cannot be eliminated and rather requires the performance of the index to be closely monitored and refined over time.

Lastly, there are inherent Shariah risks related to long-term acceptance of index-based products as Shariah compliant and applicable in the takaful market by communities, Shariah scholars, and Shariah authorities. Shariah law is subject to interpretation and varies from country to country in issues that are not definitive by Shariah legal texts or confirmed by consensus. Apart from the definitive rules of Shariah, something deemed Shariah compliant may change with time and change in situations. Shariah leaders in the three DRIVE countries have accepted IBLT as Shariah compliant. However, only Kenya's national Insurance Law provides for Index Based Insurance.

While the Ethiopian and Somalian insurance regulators are informed of IBLI and IBLT and have authorized its sale, there are no index insurance regulations in these markets. This means that there is a risk of this product being deemed a derivative, which is an investment class that is prohibited in some markets. While there are markets where the use of index-based products not for speculative purposes is permissible in capital markets, this would make index-based climate risk management solutions even more inaccessible to low-income households. There is therefore, an urgent need for such regulatory gaps to be addressed.

Table 4: Summary of lessons learned and implications for policy and operations

	Lessons	Policy Implications	Market Implications
Market development lessons	PPP approaches are needed to expand last mile distribution channels	Support insurers investment in last mile channels through tax incentives and consider alternative channels like banks through bancassurance/ bancatakaful and MNOs	Operators should consider adopting digital options to reduce cost, this could leverage high mobile penetration rates in some markets and for specific products
	Leverage donor programs by combining medium-term goals with long-term strategic objectives	Ministries of finance should work with national regulators on activities to strengthen the insurance regulations and capacity in financial sector development projects	Insurance associations should lobby for dedicated capacity building in financial sector development projects
	Takaful requires a functioning Islamic banking and Islamic capital market to grow sustainably	Include related insurance and capital market development initiatives under comprehensive financial sector development plans to leverage limited public investments and attract more FDI	
	Top-down and bottom-up approaches are needed simultaneously to crowd-in international retakaful capacity	Regulations on minimum capital requirements should be proportionate and ensure adequate capital is held for direct underwriters to retain some risk for standard covers	Insurance companies and takaful operators ideally should retain some risk, to ensure long-term sustainable growth of takaful market
Regulation and supervision	Strong ownership of the insurance development agenda by the regulator is critical for successful implementation and scale up of inclusive insurance	Include insurance market development within comprehensive financial sector development plans to address supply constraints with limited public investment. Include insurance awareness and promotion in financial inclusion strategies to leverage public funds and improve demand	
	Implementation of parametric takaful must advance alongside the development of regulations and strengthening of regulators' capacity	Regulators should reconsider reliance on sandbox approaches as these do not allow for the certainty by investors. Instead, a gradual and iterative approach could be implemented	Insurers should communicate results and experiences consistently with regulators
	The need for regulatory certainty through clear regulations and guidelines alongside strong enforcement	Regulators must ensure certainty in both technical and Shariah governance to enable private sector investments, particularly in FCV contexts that need FDI and private capital more	Operators to consider having a Shariah advisor, auditor, and board in place as a takaful operator, to minimize Shariah non-compliance costs

Going forward

Parametric takaful will become more important in strengthening financial resilience against increasing climate shocks and the rising impact of climate change. Its importance is heightened by the need for private sector solutions, even in fragile contexts. While parametric conventional insurance is now common practice, parametric takaful is underdeveloped and will become increasingly important to meet the ethical and religious needs of Muslim populations in climate-vulnerable regions and to stem the tide of climate-induced fragility. The product is still in its early stages, and ongoing investment in empirical evidence on its welfare and resilience impact is critical to inform widescale policy dialogue and market reforms. Notwithstanding the relative success of parametric takaful in the HoA market inspires cautious optimism of replicability in other countries such as Bangladesh, India, Indonesia, Mozambique, and Pakistan, which are among the 15 countries that face the highest level of disaster risk and have a Muslim population of at least 14 percent.

The World Bank's FCI team will continue to support development of takaful solutions to strengthen the financial resilience of climate vulnerable populations.

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