



Insurance and
Risk Finance
Facility



BUILDING CLIMATE RESILIENCE THROUGH TAKAFUL

Part 2: Developing Takaful Market Systems

About this paper

This publication marks the second release of a collaborative series produced by the United Nations Development Programme (UNDP), the Islamic Development Bank (IsDB) and the Islamic Development Bank Institute (IsDBI) focused on leveraging Takaful for building financial resilience and mitigating climate risks for Muslim majority communities and countries. This edition follows the [high-level advocacy report](#) that was launched at COP28 in 2023. Convening for this effort has been provided by UNDP's Insurance and Risk Finance Facility (IRFF).



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Developing Takaful Market Systems: At a Glance

1	<p>Rising risks for Muslim-majority communities</p>	<ul style="list-style-type: none"> • Increased risks from conflict, economic insecurity, trade disruptions and global health crises are posing threats to development, and climate change is exacerbating those threats. • More than 50% of 30 countries most affected by changing climate have Muslim-majority populations.
2	<p>Limited financial resilience</p>	<ul style="list-style-type: none"> • Less than 2% of 1 billion people living in the top 5 Muslim-majority countries have financial protection.
3	<p>Takaful (mutual-type insurance) can help</p>	<ul style="list-style-type: none"> • \$30 billion in gross written Takaful market contributions, but traditional insurance premium volumes were \$7.1 trillion in 2023.

Promoting Takaful for financial resilience to rising risks

<p>Strengthening support functions</p>	<ul style="list-style-type: none"> • Reinsurance/Retakaful • Interoperability • Distribution channels • Data and digitalization • Marketing and consumer education
<p>Build the enabling environment</p>	<ul style="list-style-type: none"> • Create tailored regulations • Integrate Takaful into national financial inclusion plans • Harmonize Shari'ah standards • Address sociocultural barriers • Build trust through community engagement
<p>Drive innovation in product design</p>	<ul style="list-style-type: none"> • Use client-centric processes to create climate resilience products
<p>Engage stakeholders</p>	<ul style="list-style-type: none"> • Governments Takaful operators • Reinsurers/Retakaful operators • Community organizations • International organizations
<p>Develop a global Takaful alliance</p>	<ul style="list-style-type: none"> • Increase stakeholder collaboration to build Takaful markets and products

Executive summary

Around the world, risks are rising: increasing conflict, economic insecurity, trade disruptions and global health crises are posing threats to development, and climate change is exacerbating those threats. Vulnerable communities, particularly in developing nations, are facing severe impacts on food security, water resources and livelihoods. Without financial protection to manage risk and mitigate the impacts of shocks and hazards, these communities may see their development gains overturned, and cycles of vulnerability and poverty perpetuated.

Muslim communities are among the most at risk, and among the least protected. In the top five countries with Muslim-majority populations, out of a combined population of 1 billion people, less than 2 percent have access to financial protection of any kind¹ – yet of the 30 countries most affected by the changing climate, more than half have majority-Muslim populations.²

Insurance and risk finance can provide important tools to create resilience in the face of the world's increasing hazards. But in Muslim communities, there can be additional, faith-based barriers to the spread of conventional insurance, which may be seen as inconsistent with the tenets of Shari'ah (Islamic law). For Muslim-majority regions, Takaful, a form of Shari'ah-compliant mutual insurance, offers a culturally aligned approach to risk protection. Rooted in shared responsibility, Takaful, combined with other adaptation measures, helps communities build resilience while respecting their values and beliefs. Takaful offers an alternative to conventional insurance models that could help extend protection to those who need it most.

The Takaful market is growing, particularly in South-East Asia, the Middle East and North Africa. By the end of 2022, the global Takaful market reached US\$30 billion in terms of gross written contributions,³ growing with a compounded annual growth rate of 11.6 percent during the last decade, significantly higher than the 2.6 percent growth of conventional

insurance during the same period.⁴ Saudi Arabia and Malaysia are key markets, comprising 82.6 percent of the total Takaful market contributions.⁵ However, the overall volume of premiums of Takaful is dwarfed by those of traditional insurance, which in 2023 were an estimated \$7.1 trillion.⁶ And need continues to far outmatch current supply: in 2022, for example, flooding in Pakistan exceeded \$30 billion in economic losses, just one disaster in one country, equivalent to the entirety of gross written contributions in the Takaful sector.⁷

Much remains to be done to enable Takaful to fulfil its potential in protecting those most vulnerable, but several challenges hold it back. Its market penetration is limited in part by low awareness and cultural misconceptions about Takaful among potential customers. Takaful operators, relying on traditional agency models and facing operational inefficiencies, struggle to adopt the latest technologies, meet capital adequacy requirements, ensure regulatory compliance and maintain adequate commercial capacities. These challenges affect their ability to offer larger-scale financial protection and maintain financial stability.

Improving support functions to support Takaful growth

To unleash growth in the sector, support functions need to be strengthened. Regional and global Re-Takaful firms, pools and risk-sharing mechanisms need to be established to efficiently distribute risk across diverse geographies. Clear regulatory guidance is needed on permissible Re-Takaful arrangements, to ensure that operators can navigate complex compliance landscapes while continuing to adhere to Islamic law.

Digital transformation is a key potential driver

of growth, significantly enhancing operational efficiency and customer experience in the Takaful sector. Seamless interoperability needs to be established between Takaful operators and Islamic banks, and digital payment gateways and mobile solutions aligning with Shari'ah principles should be developed. Distribution channels and client servicing capabilities need to be upgraded, through building a skilled agency workforce, expanding bancatakaful partnerships, which leverage the extensive branch networks and customer bases of Islamic banks, and developing innovative digital distribution models.

Better data and technology capabilities could ensure greater operational efficiency and competitiveness in the Takaful sector, modernizing operations and delivering better outcomes for operators and customers. Digital and insurtech distribution models, such as Takaful robo-advisory and distribution platforms, should be used to improve reach and efficiency, while blockchain-based smart contracts can streamline Takaful operations by automating policy issuance, contributions collection and claims processing. For underserved populations, particularly in rural areas, mobile-based micro-Takaful solutions, integrated with popular mobile money platforms, could facilitate easy premium payments and claims disbursements. Leveraging artificial intelligence and machine learning for risk assessment and fraud detection could further enhance the efficiency and accuracy of underwriting and claims processes.

Marketing and consumer education are needed to increase awareness and understanding of Takaful products, including through developing comprehensive financial literacy programmes and launching targeted and responsible marketing campaigns.

Building an enabling environment for Takaful

Regulatory support will be pivotal for the sustained growth and development of the Takaful sector. The industry needs tailored regulations that address the unique characteristics of Takaful, such as on

capital adequacy, corporate governance and Shari'ah compliance. Clear guidelines for digital transformation, including the adoption of insurtech and blockchain technologies, could enhance operational efficiency and customer service, positioning Takaful for future growth. Countries like Malaysia, with their advanced regulatory frameworks, demonstrate how clear and consistent regulations can foster sector development by ensuring that Takaful operations are both compliant and competitive on a global scale.

The introduction of regulatory sandboxes could allow for the safe testing of innovative products and business models, fostering innovation while maintaining consumer protection. Integrating Takaful into national financial inclusion strategies can help reach underserved populations, supported by incentives such as tax breaks or subsidies.

Harmonizing Shari'ah standards across jurisdictions can help to ensure consistency and build trust among operators and consumers. To enable this, national or regional Shari'ah boards could be established to provide consistent interpretations and rulings that can be applied across the sector. Initiatives on professional training and certification programmes for Shari'ah scholars would increase available capacity.

Strategies to address sociocultural barriers and raise awareness of Takaful should be based on research that provides a nuanced understanding of community perceptions and beliefs. Community engagement can help to build trust: collaboration with local religious leaders, NGOs and community groups, as well as multimedia content in local languages, can be effective in reaching target populations.

The way forward

The development of the Takaful sector relies on the active engagement and collaboration of a diverse range of stakeholders.

Government entities, including financial regulators and policymakers, should create a supportive

regulatory environment that facilitates the establishment and operation of Takaful entities while ensuring compliance with Shari'ah principles.

Takaful operators can grow the sector by driving product innovation, improving operational efficiencies and expanding the reach of markets. New product types can provide increased protection for vulnerable groups in the face of environmental collapse, business disruption, conflict and extreme weather events, and operators should take advantage of proven methodologies to spark innovation, opening up business opportunities while boosting resilience for groups that need it most. Climate-related Takaful products, for example, can address the growing demand for insurance solutions that cater to environmental risks. These products can be tailored to communities' specific needs, providing not only financial protection in response to shock events but also enhancing their resilience ex ante.

Industry associations serve as vital knowledge hubs, promoting best practices and fostering collaboration among members to address common challenges. Reinsurers or Re-Takaful providers contribute by offering essential risk management solutions, enabling Takaful operators to manage larger and more complex risks. Islamic banks and other financial institutions are instrumental in integrating Takaful products into broader financial ecosystems, particularly through bancassurance/bancatakaful partnerships that enhance distribution channels and through integrating Takaful products in the bank products and offerings.

Community organizations, non-profits and religious bodies play a key role in raising awareness and building trust within local communities, helping to overcome sociocultural barriers and misconceptions about Takaful.

International organizations and multilateral agencies can provide technical assistance, funding and strategic guidance, supporting the global expansion of the Takaful industry. Their involvement can facilitate capacity-building, promote best

practices, fund pilot projects and boost innovation within the sector.

Finally, **academics and research institutions** contribute by conducting research and providing insights that inform policy and operational strategies. The combined efforts of these stakeholders are essential for creating a resilient, inclusive and sustainable Takaful sector that can effectively meet the diverse needs of its target markets

Above all, cooperation and coordination are essential. All stakeholders, from public and private sector, at national, regional and global levels, need to work together to develop and champion innovative Takaful solutions, facilitate replication of successful models, accelerate digital transformation, build financial literacy and customer awareness, strengthen enabling environments and standards, and share knowledge.

The development of a global Takaful Alliance could effectively drive these initiatives forward by serving as a central hub for coordination, product development, research, global advocacy and support across all facets of the Takaful industry. By working together, stakeholders can ensure that the full potential of Takaful is realized, enabling the sector to remain relevant, competitive and aligned with the needs of its consumers, while contributing to global economic growth and resilience in the face of the challenges to come.

The Takaful sector stands at a pivotal point of growth. Challenges remain, but the potential for expansion is substantial. Through developing support functions, innovating on products and building a strong regulatory framework, the Takaful industry has room to thrive, enhancing financial resilience and inclusivity across markets and paving the way for a more diverse and supportive global insurance landscape.

This report analyses the Takaful market, its structures, challenges and growth potential, providing insights into how it can be further developed to meet the needs of Muslim-majority countries, regions with significant Muslim populations and non-Muslims seeking alternative financing modalities.

Abbreviations and acronyms

AAOIFI	Accounting and Auditing Organization for Islamic Financial Institutions
ACORD	Association for Cooperative Operations Research and Development
ACRE	Agriculture and Climate Risk Enterprise
ADB	Asian Development Bank
AI	Artificial intelligence
API	Application Programming Interfaces
ARC	African Risk Capacity
BNM	Bank Negara Malaysia
CAGR	Compound annual growth rate
CCRIF	The Caribbean Catastrophe Risk Insurance Facility
CPD	Continuous professional development
CRM	Customer relationship management
CSAA	Certified Shari'ah Adviser and Auditor
CSP	Cloud service providers
DITOs	Digital Insurers & Takaful Operators framework
EIOPA	European Insurance and Occupational Pensions Authority
FCA	Financial Conduct Authority
FSMP	Financial Sector Master Plan
GAIF	General Arab Insurance Federation
GCC	Gulf Cooperation Council
GIS	Geographic Information Systems
HCD	Human-centred design
IAIS	International Association of Insurance Supervisors
IBLI	Index-Based Livestock Insurance
ICPs	Insurance Core Principles
IDF	Insurance Development Forum
IFI	Islamic finance institution
IFSA	Islamic Financial Services Act
IFSB	Islamic Financial Services Board
INCEIF	International Centre for Education in Islamic Finance
IoT	Internet of things
IsDB	Islamic Development Bank
IsDBI	Islamic Development Bank Institute
KPI	Key performance indicator
KYC	Know Your Customer
MDB	Multilateral development bank
MIFC	Malaysia International Islamic Financial Centre
MII	Malaysian Insurance Institute
MSMEs	Micro-, small and medium-sized enterprises
MTA	Malaysian Takaful Association
NGO	Non-governmental organization
NLP	Natural language processing
OECD	Organisation for Economic Co-operation and Development
PDC	Professional Development Certification
PRA	Prudential Regulation Authority
RBC	Risk-based capital
RBCT	Risk-Based Capital Framework for Takaful Operators
ROA	Return on assets
ROE	Return on equity
RPA	Robotic process automation
SDGs	Sustainable Development Goals
SGF	Shari'ah governance frameworks
SSB	Shari'ah supervisory board
TCFD	Task Force on Climate-related Financial Disclosure
UNDP	United Nations Development Programme
V20	Vulnerable Twenty Group
VBIT	Value-Based Intermediation for Takaful



1

The Takaful market system today



Around the world, risks and hazards are rising, putting in jeopardy the development gains that countries and communities have worked so hard to achieve. Increasing conflict, economic insecurity, disruptions to global trade, the recent pandemic and the threat of further global crises are destabilizing factors overshadowed only by the climate catastrophe. As water and heat stress threaten food security and food supply, and biodiversity collapses at an unprecedented rate, climate change is wreaking havoc on development across the world. Muslim communities are on the front line. Of the 30 countries most affected by the changing climate, more than half have Muslim-majority populations.⁸ Of low-income countries with significant Muslim populations, two-thirds are ranked in the bottom half of the world's countries on climate vulnerability and preparedness.⁹

Insurance and risk finance can be powerful tools to mitigate the financial impacts of increasing hazards and protect progress in the face of shocks. But for Muslim communities, it can be important to have financial solutions that comply with faith-based tenets derived from Shari'ah (Islamic law), which prohibits interest-based investments, among other aspects of conventional insurance. This means that those most in need are also often those least protected: in the top five countries with Muslim-majority populations (Bangladesh, Egypt, Indonesia, Nigeria and Pakistan), out of a combined population of 1 billion people, less than 2 percent have access to financial protection of any kind.¹⁰ In the 20 most populous Muslim-majority countries, the average insurance penetration is less than 0.9 percent,¹¹ leaving aspects of life, society and the economy

essentially without financial protection. Providing Shari'ah-compliant financial solutions, therefore, is an essential step in building financial protection for the most vulnerable, de-risking investments and ensuring sustainable development.

Islamic finance, which offers Shari'ah-compliant financial instruments for a growing population segment and is becoming a significant global force alongside conventional finance models, and Takaful, a form of Shari'ah-compliant mutual insurance, are key parts of this financial evolution. Takaful offers a unique approach to risk mutualization,¹² building financial security while promoting a sense of community and shared responsibility.

Takaful is based on the principles of shared responsibility, joint indemnity and mutual protection. Participants contribute to a common fund to cover each other's losses, in a model that promotes a community-based approach to risk management, emphasizing fairness, transparency and collective well-being. Takaful also complies with guidelines such as prohibitions on excessive uncertainty and interest, aligning it with Shari'ah law and principles.

This paper examines the current state of the Takaful sector, and from there, highlights actions that can be taken to promote the sector's growth, including shoring up supporting functions, building the enabling environment and designing innovative climate resilience products. Finally, it lays out recommendations for stakeholders and suggests a way forward for the Takaful industry.

CASE STUDY

Evolution and success of Sudan's Takaful sector development and integration



INTRODUCTION

Sudan holds the distinction of being the birthplace of Takaful, with the first Shari'ah-compliant insurance products emerging in 1979. Despite facing economic and regulatory challenges, Sudan's Takaful sector has played a pivotal role in the broader development of Islamic finance in Africa. This case study outlines the key milestones, regulatory frameworks and challenges faced by the Takaful market in Sudan, offering lessons for other markets.¹³

Key milestones and regulatory developments

Foundational phase (1970s–1990s):¹⁴

- **1979:** The first Takaful company in Sudan was introduced, laying the foundation for Shari'ah-compliant insurance across Africa.
- **1992:** Sudan applied Shari'ah principles comprehensively to its economy, including insurance, becoming the first country to implement nationwide Islamic finance regulations.¹⁵

Expansion and diversification (2000s):

- **2001:** Sudan's insurance law (Insurance Supervision Act of 2001 and its regulation in 2002) was enacted, explicitly emphasizing the Takaful model. This law structured strict guidelines on investment returns, surplus distribution and commissions to ensure Shari'ah compliance.
- **Micro-Takaful initiatives:** From the mid-2000s, micro-Takaful gained traction, particularly in agriculture and microfinance. One of the most successful projects launched by Shiekan Insurance covered over 66,000 farmers against loan-related risks.¹⁶

Modern regulatory framework (2010s and beyond):

- While the legal framework has remained consistent, the government has been considering amendments to further develop surplus distribution mechanisms and strengthen the industry's governance.
- **2018:** A new insurance law (Insurance Control Law 2018 & regulations in 2019) was proposed to streamline Takaful operations in the face of economic challenges.

Market development and performance indicators

Market growth:¹⁷

- The Sudanese Takaful market saw significant growth in the early 2010s, with contributions increasing by over 78% in 2020 as compared to 2019. The total market value reached approximately 22.3 billion Sudanese pounds in 2020 (at the time, around \$405 million)¹⁸.
- Family Takaful: Despite growth in the general insurance sector, family Takaful accounts for a smaller share of the market, with only a few players offering such products.

Micro-Takaful success:	<ul style="list-style-type: none"> Sudan's focus on micro-Takaful has been one of its greatest successes. Driven by agriculture and low-income coverage, micro-Takaful is growing rapidly. For example, the sum insured through micro-Takaful increased from SDG 800,000 to SDG 45 million within just a few years.¹⁹
Industry challenges:	<ul style="list-style-type: none"> Despite its growth, Sudan's Takaful sector faces several challenges, including low insurance penetration, economic instability, inflation and inadequate regulatory support for risk management.²⁰
Key success factors and recommendations	
Government support and Shari'ah compliance:	<ul style="list-style-type: none"> Sudan's commitment to a Shari'ah-based economic system was instrumental in establishing Takaful. This level of governmental backing is crucial for other countries seeking to develop similar systems.
Micro-Takaful innovations:	<ul style="list-style-type: none"> Sudan has demonstrated how micro-Takaful can be leveraged to support agriculture and microfinance, offering a blueprint for other countries with large rural populations.
Regulatory enhancements:	<ul style="list-style-type: none"> Ongoing regulatory reforms are essential for the long-term sustainability of Sudan's Takaful market. Future amendments should focus on transparency in surplus distribution and more flexible financial products to accommodate the needs of diverse sectors.
CONCLUSION	
<p>Sudan's journey in establishing Takaful has been marked by both pioneering achievements and enduring challenges. Its experience with micro-Takaful is a significant success, particularly in serving underserved populations. Other markets can learn from Sudan's regulatory model and microfinance innovations to build robust and inclusive Takaful systems.</p>	

Supply, demand and market performance in the Takaful sector

This section provides a comprehensive overview of the current Takaful market system, exploring supply and demand for Takaful across the world and analysing market performance.

Supply side analysis

Takaful operations are present in 47 countries and territories, with a significant presence in South-East Asia, the Middle East and North Africa. Sudan and the United Arab Emirates were the first countries to implement Takaful, introducing it in 1979, while the Islamic Republic of Iran and Morocco are the most recent adopters, starting Takaful operations in December 2021.

The global Takaful market has seen steady growth over the past decade: global Takaful assets increased threefold, from \$30 billion in 2012 to \$90 billion in 2022,²¹ while gross written contributions²² increased by 11.6 percent (compound annual growth rate, CAGR) to reach \$30 billion by the end of 2022.²³ This growth is primarily driven by strong performance in key markets such as Saudi Arabia and other Gulf Cooperation Council (GCC) countries, which account for 55.7 percent of the global Takaful market (\$16.7 billion). The rest of the Middle East and South Asia accounts for 20 percent (\$6.0 billion), while South-East Asia makes up 19.6 percent (\$5.9 billion), Africa accounts for 2.6 percent (\$800 million) and others comprise 2 percent (\$600 million).²⁴ It should be noted, however, that despite growth, total Takaful business remains extremely low compared to conventional insurance: global insurance premium volumes in 2023 were an estimated \$7.1 trillion.²⁵

In the majority of the Muslim countries where Takaful is offered, both Islamic and conventional insurance options are available, and Takaful contributions constitute less than 10 percent of total insurance market premiums. Notable exceptions are the Islamic Republic of Iran, Saudi Arabia and Sudan, which operate entirely on Islamic insurance models. The top seven markets (in order, Saudi Arabia, the Islamic Republic of Iran, Sudan, Brunei Darussalam, Kuwait, Malaysia and Indonesia) account for approximately 95 percent of global Takaful contributions. General Takaful business, particularly in property and casualty insurance, remains dominant, making up an estimated \$22.4 billion or 82.6 percent of total contributions in 2022.²⁶

Takaful operators differ from conventional insurance companies in that they operate in a Shari'ah-compliant way, on a cooperative system in which participants mutually contribute to a shared fund to protect against specific risks. Unlike traditional insurers, which assume risk for a premium, Takaful operators manage the fund on behalf of the participants, ensuring contributions are treated as donations, segregating operational funds and making investments aligned with Shari'ah principles.²⁷ Some Takaful operators only offer Takaful products, while

some conventional insurance companies offer Takaful products through a separate division or "window" within their existing structure. These window Takaful operations are typically registered under the same regulatory framework as conventional insurance, but the Takaful products are governed by Shari'ah compliance rules.²⁸

The number of Takaful operators has been steadily increasing, with over 344 operators worldwide as of 2022, as compared to 274 in 2012.²⁹ These operators are primarily concentrated in GCC countries and South-East Asia.³⁰ The scale of operators varies significantly, ranging from large, established companies with assets exceeding \$1 billion, such as Saudi Arabia's Tawuniya and Malaysia's Syarikat Takaful Malaysia, to smaller firms that cater to specific regional or product markets.³¹

Takaful firms operate under different models,³² including:

- Taawuni (cooperative) model: Participants collectively own the Takaful fund and share profits and losses. This model emphasizes mutual cooperation, without a profit motive for the operator.
- Wakalah (agency) model: The Takaful operator acts as an agent (Wakil) for the participants, earning a fee for managing the fund. Surplus or deficit belongs to the participants.
- Mudarabah (profit-sharing) model: In this partnership, participants provide the capital and the Takaful operator manages the fund. Profits are shared between the operator and participants according to a pre-agreed ratio, while losses are borne by the participants.
- Wakalah-Mudarabah (hybrid) model: This model combines elements of both the Wakalah and Mudarabah models. The operator earns an agency fee and shares in the investment profits, offering flexibility in management and profit distribution.
- Waqf (endowments) model: A portion of the contributions is donated to an endowment trust (Waqf) managed by the Takaful operator. The Waqf fund is used to support participants in need, ensuring solidarity and communal support.

Product offerings in the sector have diversified significantly, and Takaful solutions that offer natural hazard coverage are becoming more widespread, particularly in regions vulnerable to climate change impacts.³³ The availability of these products remains limited, but as climate change events increase in frequency and severity, there is a growing awareness of the need for risk mitigation solutions, which represents a significant growth opportunity for the sector.

The financial strength of Takaful operators varies widely across regions and individual companies. Some operators in mature markets like Malaysia and the United Arab Emirates demonstrate robust financial metrics. But others, particularly in emerging markets, face challenges related to scale, regulatory compliance and risk management.³⁴ Geographic coverage is most extensive in Muslim-majority countries, though penetration is growing in countries with significant Muslim minority populations, but overall coverage remains limited compared to conventional insurance.³⁵

Key constraints for Takaful market development: **SUPPLY SIDE**



LIMITED NUMBER OF OPERATORS

- Concentrated market structure, leading to reduced competition
- Lack of economies of scale, potentially resulting in higher operational costs
- Limited geographical coverage, particularly in rural and underserved areas

LACK OF DIVERSIFICATION IN PRODUCT OFFERINGS

- Overreliance on basic life and general Takaful products
- Insufficient tailoring to specific industry or demographic needs
- Limited innovation in product design and features

FINANCIAL INSTABILITY IN SMALLER OPERATORS

- Insufficient capital reserves to withstand major claims or market shocks
- Challenges in meeting increasingly stringent regulatory capital requirements
- Limited access to Re-Takaful arrangements, increasing risk exposure

Demand side analysis

Demand for Takaful products is driven by particular demographics and economic activity in Muslim-majority countries and regions with significant Muslim populations. A survey conducted in Pakistan in 2012 found that the key demographic factors influencing Takaful demand included age, income

level, education and religious adherence.³⁶ Younger, more educated individuals with higher incomes were more likely to participate in Takaful schemes, suggesting a potential target market for Takaful providers. Similarly, a 2019 study showed that factors such as Islamic finance literacy, perceived usefulness and religious obligation significantly influenced the intention to use Takaful products.³⁷

Awareness levels and cultural affinity for Takaful vary considerably across different markets. A 2011 study³⁸ found that while there was a general preference for Islamic financial products in Malaysia, awareness of specific Takaful products was relatively low, highlighting a need for increased consumer education and marketing efforts. A 2024 study in Malaysia indicated that improving Takaful agent performance was key to increasing awareness of and demand for Takaful.³⁹ A 2015 study showed that in Saudi Arabia, there was a high level of awareness and cultural affinity for Takaful, primarily due to its perceived alignment with Islamic principles.⁴⁰ However, the study noted that this awareness did not always translate into uptake, suggesting that other factors could be at play in consumer decision-making, such as affordability, product complexity, clear communication and accessible distribution.

Risk perceptions and needs, particularly in relation to climate-related products, are important factors in Takaful demand. A comprehensive study in 2016

examined the potential for climate insurance in developing countries.⁴¹ The report showed that demand for climate insurance products was influenced by factors including prior experience with climate-related losses, trust in the provider and the perceived value of the insurance. These findings on risk perception and demand for climate-related insurance products help shed light on opportunity areas for Takaful. Another 2016 study explored the potential for micro-Takaful in agriculture, finding significant demand for products that could protect against climate-related risks, particularly among smallholder farmers. However, the study also highlighted challenges in product design and distribution, including in ensuring affordability, tailoring products to the specific needs of underserved groups, integrating technology for wider reach, relying on banks for initial promotion, raising awareness and maintaining high service quality to build trust. These challenges need to be addressed to meet demand effectively.⁴²

Key constraints for Takaful market development: DEMAND SIDE



LOW AWARENESS LEVELS

- Limited understanding of Takaful concepts among potential customers
- Insufficient knowledge about the differences between Takaful and conventional insurance
- Lack of awareness about available Takaful products and their benefits

CULTURAL MISCONCEPTIONS

- Misinterpretation of insurance concepts within Islamic contexts
- Misconceptions about the Shari'ah compliance of Takaful products
- Cultural resistance to the idea of financial planning for unforeseen events

VARYING RISK PERCEPTIONS

- Differences in risk assessment between urban and rural populations
- Generational gaps in understanding the importance of financial protection
- Differences in perceptions of risk across different socioeconomic groups

Market performance

Takaful penetration rates vary significantly across different markets. In the Islamic Republic of Iran, Saudi Arabia and Sudan, Takaful penetration rates are 0.8 percent, 1.6 percent and 2 percent respectively.⁴³ However, in these countries, markets operate on fully Shari'ah-compliant models. In most of the rest of the Muslim-majority countries, where Takaful operates side by side with conventional insurance, Takaful penetration rates can be assumed to be less than 1 percent, since overall insurance penetration (both conventional and Islamic) in these countries is less than 1 percent.⁴⁴ The exception is Malaysia, where insurance penetration is 5 percent and Takaful contributes about 27 percent of premiums.⁴⁵

Growth prospects for Takaful are promising, as awareness increases and products become more accessible and affordable, particularly among the Muslim populations most affected by climate risk. The COVID-19 pandemic has had an effect on these growth trends: although it initially slowed growth in

many markets, it also increased awareness of the need for insurance, potentially driving future growth in the sector.⁴⁶

Profitability indicators for Takaful operators present a mixed picture. A study analysing the financial performance of Takaful companies in Malaysia from 2006 to 2010 found that while the industry showed overall growth, profitability as measured by return on assets (ROA) and return on equity (ROE) was generally lower than that of conventional insurers.⁴⁷ These findings are consistent with another study that examined the financial health of Takaful and conventional insurance companies in Bahrain between 2006 and 2011 by applying financial ratios to assess solvency, liquidity, profitability, underwriting performance and efficiency. The study found that conventional companies were more profitable and efficient than their Takaful counterparts.⁴⁸ However, more recent research suggests that Takaful operators' efficiency as compared to that of conventional insurance companies in Saudi Arabia improved between 2014 and 2017.⁴⁹

Key constraints for Takaful market development: MARKET PERFORMANCE



LOW PENETRATION RATES

- Limited adoption of Takaful products compared to conventional insurance
- Geographical disparities in Takaful uptake within and across countries
- Challenges in reaching underserved populations, especially in rural areas

INCONSISTENT GROWTH TRENDS

- Variability in Takaful growth rates across different regions and markets
- Fluctuations in growth due to economic factors and regulatory changes
- Uneven development of different Takaful segments (e.g., general vs. family Takaful)

PROFITABILITY CHALLENGES

- High operational costs relative to conventional insurance
- Difficulties in achieving economies of scale due to market size
- Challenges in investment returns while maintaining Shari'ah compliance
- Potential for higher claims ratios in some Takaful models

Supporting functions in the Takaful industry

To operate smoothly, the Takaful sector requires a network of critical support functions, from risk management to customer service. This section examines the support functions of reinsurance, payment systems, data, distribution, client servicing and marketing – all essential for a robust Takaful market.

Takaful reinsurance

Takaful reinsurance, or Re-Takaful, is a core part of the risk management strategies of Takaful operators, enabling them to transfer risk while remaining in compliance with Islamic law. The global Re-Takaful market remains relatively small compared to conventional reinsurance. There are only a few dedicated Re-Takaful providers worldwide, including Africa Re, Malaysian Re and Saudi Re, although Re-Takaful services are also offered by major global reinsurers like Hannover Re, Munich Re and Swiss Re. The regulatory treatment of Re-Takaful

varies across jurisdictions, with some markets like Malaysia mandating a preference for Re-Takaful over conventional reinsurance.⁵⁰

Limited capacity in Re-Takaful has led many Takaful operators to rely on conventional reinsurance or Re-Takaful offered by conventional reinsurers, particularly for large and complex risks, which has raised Shari'ah compliance concerns, though Islamic law holds that it is permissible in certain circumstances.⁵¹ Research has found that the restricted availability of Re-Takaful significantly impacts the efficiency of Takaful operators.⁵²

The limited capacity of Re-Takaful providers to cover large-scale climate risks remains a significant hurdle for the expansion of climate-related Takaful products. One study demonstrated that reinsuring climate risks in developing countries involved many challenges, including lack of comprehensive climate risk data, strain on reinsurance capacity due to the increasing intensity of weather events and limited government capacity to subsidize reinsurance. These challenges are equally applicable to the Re-Takaful sector.⁵³

Key constraints for Takaful market development: REINSURANCE/RE-TAKAFUL



LIMITED RE-TAKAFUL CAPACITY

- Insufficient number of dedicated Re-Takaful operators in the market
- Limited financial capacity of existing Re-Takaful providers
- Concentration risk due to reliance on a small number of Re-Takaful operators

INADEQUATE RISK DIVERSIFICATION MECHANISMS

- Challenges in spreading risks across different geographical regions
- Limited options for risk transfer in specialized or high-risk sectors
- Difficulties in managing catastrophic risks due to capacity constraints

Payment systems

The Takaful industry is working on ways to make the most effective use of digital payment infrastructure. Bancatakaful partnerships, where Takaful products are distributed through Islamic banks, are still few, but their number is increasing. These partnerships are important in facilitating seamless payment integration,⁵⁴ increasing uptake and enhancing overall performance.⁵⁵ The adoption of digital

payment systems is accelerating and mobile payment platforms are increasingly being used for premium collections and claim disbursements in most markets.⁵⁶ This digital transformation is enhancing operational efficiency and improving customer experience in the Takaful sector, but it remains a work in progress.

Key constraints for Takaful market development: PAYMENT SYSTEMS



LIMITED INTEGRATION WITH ISLAMIC FINANCE

- Greater connectivity needed between Takaful operators and Islamic banks
- Insufficient cross-selling arrangements with other Islamic financial products
- Challenges in aligning Takaful products with broader Islamic financial ecosystem

INSUFFICIENT DIGITAL PAYMENT INFRASTRUCTURE

- Absence of regulatory environment for enabling integration of digital payments with Takaful processes
- Inadequate digital payment options for premium collection and claims disbursement
- Limited adoption of mobile payment solutions in some Takaful markets
- Technological gaps in integrating Takaful systems with modern payment platforms

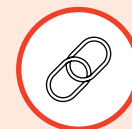
Data and technology

Data and technology are becoming central to Takaful operations, particularly in underwriting and process digitization. Insurtech, big data and artificial intelligence (AI) are increasingly being used in Takaful in underwriting, allowing for more accurate risk assessment and pricing.⁵⁷ Research shows that the adoption of technology has positively impacted the performance of Takaful companies in the GCC region.⁵⁸ The digitization of operations and processes is ongoing and Takaful operators are increasingly

investing in digital platforms for policy issuance, claims management and customer service.⁵⁹

Access to high-quality climate data is critical for designing and pricing climate-related insurance/Takaful products.⁶⁰ However, a significant gap exists in data availability, particularly in developing countries, which poses challenges for insurance companies and Takaful operators looking to expand their climate-related offerings.⁶¹

Key constraints for Takaful market development: DATA AND TECHNOLOGY



GAPS IN DATA FOR RISK PRICING

- Insufficient historical data for accurate risk assessment in some markets
- Limited access to comprehensive demographic and actuarial data
- Challenges in collecting and analysing data specific to Islamic finance contexts

LACK OF TECHNOLOGICAL MODERNIZATION

- Outdated legacy systems (software, hardware and processes) in many Takaful operations
- Limited adoption of advanced analytics and AI in underwriting processes
- Inadequate digital infrastructure for customer engagement and service delivery

Distribution

The distribution function in the Takaful market system is made up of traditional agency networks, bancatakaful partnerships and emerging digital distribution capabilities. A survey showed that agency models, including direct sales teams, were the preferred distribution channel in many insurance and Takaful markets, accounting for up to 63 percent of respondents, emphasizing the importance of agents.⁶² However, this channel is often made less efficient by high acquisition costs and limited reach, particularly in rural areas.⁶³ Insurance sales are currently shifting from agent-driven models to a multi-access approach, catering to customers who now expect seamless online and offline channels for research and purchase.⁶⁴

Bancatakaful partnerships offer a promising distribution alternative, just as bancassurance does in the conventional insurance market. These partnerships can leverage the extensive branch networks and customer bases of Islamic banks, significantly reducing distribution costs while enhancing market penetration. For example, in Pakistan, 54 percent of life insurance and family Takaful business was sourced through bancassurance/bancatakaful channels in the private sector in 2022.

However, the public sector still relies heavily on an agency model.⁶⁵

Bundling Takaful with other retail financial products is also a common practice. Life insurance/Takaful for housing finance customers protects the bank from default caused by the death of the borrower and protects the family from losing their home in the case of the death of the main breadwinner. For commercial clients, coverage for goods in transit or in storage as well for productive assets and collateral can provide the bank with an additional level of comfort. This is different from bancatakaful, where the bank acts as an agent for selling insurance to the client or even finances that insurance.

At the same time, research shows that digital distribution capabilities are swiftly advancing due to technological innovations and shifting consumer preferences.⁶⁶ In this context, it could be assumed that around 20 percent of Takaful business could be generated through these channels. The COVID-19 pandemic accelerated the trend, necessitating as it did a shift towards contactless distribution methods.⁶⁷ However, digital distribution uptake faces challenges that include regulatory constraints, cybersecurity concerns and the need for significant technological investments.⁶⁸ To optimize distribution, Takaful

operators must adopt a multichannel strategy that integrates traditional and digital channels, tailored to local market conditions and consumer preferences.

This approach should be underpinned by robust data analytics to personalize offerings and improve customer targeting.⁶⁹

Key constraints for Takaful market development: DISTRIBUTION CHANNELS



LIMITED DISTRIBUTION CHANNELS

- Overreliance on traditional agency models
- Insufficient diversification of distribution methods
- Lack of specialized channels for different market segments

INADEQUATE REACH

- Limited geographical coverage, especially in rural or remote areas
- Difficulty in penetrating underserved communities
- Challenges in reaching younger, tech-savvy demographics

Marketing

Marketing shapes consumer perceptions, driving adoption and differentiating products in the increasingly competitive Takaful landscape. Effective Takaful marketing strategies should address unique challenges, including low awareness levels, misconceptions about Islamic finance, and the need to communicate complex Shari'ah compliance concepts to diverse audiences.⁷⁰ Branding efforts in the Takaful sector often focus on emphasizing values-based and religious alignment, with successful operators leveraging Islamic values to create strong brand identities.⁷¹ Promotion campaigns frequently use a mix of traditional and digital channels, and place a growing emphasis on social media and content marketing to reach younger demographics. Integrating social marketing elements into Takaful strategies can enhance awareness, understanding and adoption through leveraging community

influencers, emphasizing social impact, engaging through targeted social media and providing tailored educational content.

Word-of-mouth referrals and endorsements from religious leaders can significantly influence Takaful adoption, which indicates the importance of community-based marketing approaches.⁷² Consumer education efforts are especially important in the Takaful sector, given the knowledge gap regarding the fundamental differences between Takaful and conventional insurance.⁷³ However, a persistent challenge in Takaful marketing is striking the right balance between emphasizing religious compliance and communicating product benefits. While Shari'ah compliance is a key motivator for Takaful adoption, consumers also prioritize factors such as service quality and perceived value.⁷⁴

Key constraints for Takaful market development: **MARKETING**



WEAK BRANDING

- Limited brand visibility and recognition of Takaful operators compared to conventional insurers
- Inconsistent brand messaging across different markets, particularly in the case of window Takaful operations
- Reliance on traditional channels may not fully capture the potential of community-based marketing or the influence of religious leaders

INSUFFICIENT CONSUMER EDUCATION EFFORTS

- Lack of comprehensive programmes to explain Takaful principles and benefits
- Limited resources allocated to financial literacy initiatives
- Challenges in communicating complex Shari'ah compliance concepts to the general public

Client servicing

Client servicing in the Takaful industry encompasses product awareness, claims management and customer relationships. A 2023 study in Malaysia found that product awareness significantly influences Takaful adoption, pointing up the importance of effective communication strategies.⁷⁵ However, product awareness remains a challenge in many developing markets, particularly for complex or innovative Takaful products.⁷⁶

Efficient claims processing significantly impacts customer satisfaction and loyalty, as shown in a report on the insurance industry, which emphasized the increasing importance of digital claims processing in enhancing customer experience.⁷⁷ Customer relationships also have an effect on consumer satisfaction: one study found that relationship marketing practices positively influenced customer retention in the Takaful sector in Pakistan.⁷⁸ Similarly, other research has spotlighted the trend towards personalized customer engagement in Takaful, in which data analytics and digital platforms are leveraged to enhance customer relationships.⁷⁹

Key constraints for Takaful market development: **CLIENT SERVICING**



CHALLENGES IN CUSTOMER RELATIONSHIPS

- Ineffective communication strategies, leading to insufficient understanding of Takaful products among potential customers
- Complex Takaful structures, making it challenging for client service teams to effectively communicate product value
- Underuse of data analytics and digital platforms in personalizing customer engagement and improving relationships

INEFFICIENT CLAIMS MANAGEMENT

- Lengthy and complex claims processes, lowering trust
- Lack of transparency in claims handling procedures, causing client dissatisfaction and perceptions of unfairness
- Inadequate technology adoption, making claims processing less efficient and resulting in delayed settlements and poor customer experiences

The Takaful regulatory environment

The Takaful market operates within a legal and regulatory framework that outlines the rules and regulations governing its activities. This section explores these guidelines, including Takaful regulations, Shari'ah compliance requirements, relevant public policies, standards and best practices, and informal rules.

Takaful regulations

Of the 47 countries and territories where Takaful is present, 22 still lack Takaful regulations. Where regulations exist, they vary significantly across jurisdictions, reflecting countries' diverse stages of market development and regulatory approaches.⁸⁰ Malaysia's Takaful Act of 1984 was the first regulation on Takaful and it established the foundation for subsequent Takaful regulations elsewhere.⁸¹ The country's Islamic Financial Service Act 2013 provides a comprehensive regulatory framework for Takaful in

Malaysia, including principles that promote financial stability and Shari'ah compliance in Islamic finance institutions (IFIs).⁸² In other countries, regulatory frameworks are less developed, and further work is needed to introduce key elements such as consumer dispute resolution mechanisms, formal training for sales professionals and effective Shari'ah governance mechanisms.⁸³

Different jurisdictions have different capital requirements. In the GCC countries, higher capital requirements have contributed to improved financial stability among Takaful operators, but could potentially have limited market entry.⁸⁴

Investment guidelines for Takaful operators are another important regulatory issue. Takaful operators face challenges in finding Shari'ah-compliant investment opportunities, particularly in markets with less developed Islamic financial sectors (i.e., banks, capital market and investment funds).⁸⁵ This can hinder their ability to generate competitive returns on investments, thereby affecting overall

profitability and sustainability. It also limits their capacity to invest in local climate infrastructure and sustainable projects aligned with the Sustainable Development Goals (SDGs) and the Paris Agreement.

The scarcity of Shari'ah-compliant instruments may force operators to rely on conventional markets, which could compromise their adherence to Islamic guidelines.

Key constraints for Takaful market development: TAKAFUL REGULATIONS



ABSENCE OF COMPREHENSIVE TAKAFUL LAWS

- Lack of specific legislation addressing unique aspects of Takaful operations
- Reliance on conventional insurance laws that may not fully accommodate Takaful principles in Muslim-majority countries
- Inconsistencies in legal treatment of Takaful across different jurisdictions

INCOMPLETE REGULATORY FRAMEWORKS

- Gaps in regulations addressing Shari'ah governance in Takaful operations
- Insufficient guidelines on capital adequacy and solvency requirements specific to Takaful
- Lack of standardized accounting and reporting standards for Takaful operators

Shari'ah compliance

Shari'ah compliance measures include governance frameworks, Shari'ah boards and standardization of practices. Shari'ah governance practices in the Malaysian Takaful industry demonstrate that, although robust frameworks exist, they are inconsistently implemented across different companies.⁸⁶

Shari'ah boards play a crucial role in ensuring compliance. A Shari'ah board (or Shari'ah supervisory board, SSB) is a panel of distinguished Islamic law experts who ensure financial products and operations comply with Shari'ah principles. In Takaful operations, the board serves as a critical governance body by certifying product structures and operational frameworks, overseeing equitable risk-sharing mechanisms, validating Shari'ah-compliant investments, providing real-time operational guidance, conducting annual compliance audits and reinforcing market confidence and credibility. Shari'ah board certification is a regulatory requirement in most jurisdictions, serving as the

fundamental differentiator between Takaful and conventional insurance through ensuring rigorous Islamic legal oversight. An analysis of their legal status and functions in Islamic financial institutions, including Takaful operators, shows their centrality in product approval and overall Shari'ah governance.⁸⁷

Standardizing Shari'ah practices is an ongoing challenge in the Takaful industry. There are significant variations in Shari'ah interpretations across different markets, potentially hindering cross-border Takaful operations.⁸⁸ Efforts towards standardization are under way: organizations such as the Accounting and Auditing Organization for Islamic Financial Institutions (AAOIFI) and the Islamic Financial Services Board (IFSB) are developing global standards for Islamic financial institutions, including Takaful operators. However, the adoption of these standards remains voluntary in many jurisdictions, leading to continued divergences in practices.⁸⁹

Key constraints for Takaful market development: **SHARI'AH COMPLIANCE**



LACK OF HARMONIZED SHARI'AH GOVERNANCE STANDARDS

- Variations in Shari'ah interpretations across different markets and schools of thought
- Inconsistent Shari'ah compliance practices among Takaful operators
- Challenges in cross-border Takaful operations due to differing Shari'ah standards

CHALLENGES IN CROSS-BORDER OPERATIONS

- Restricted Re-Takaful due to inconsistent Shari'ah standards
- Standardized product challenges from varying Shari'ah interpretations
- Regulatory hurdles for cross-border Takaful operations

Public policies

Public policies shape the Takaful landscape, particularly through financial inclusion strategies and incentives for Takaful adoption. Targeted financial inclusion policies can significantly boost the uptake of insurance, including Takaful, in emerging markets.⁹⁰ Integrating Takaful into national financial inclusion strategies can also improve uptake and extend Takaful's reach. This has been completed in countries such as Malaysia and Indonesia, where Takaful is seen as a key tool for expanding financial access to underserved populations.⁹¹

Countries offering incentives for Takaful adoption, such as tax breaks or mandatory Takaful coverage for certain sectors, have seen higher growth rates in their Takaful markets. For instance, Saudi Arabia's mandatory health insurance policy significantly boosted Takaful penetration.⁹² Policy initiatives by the Malaysian government such as tax incentives and regulatory preferences are widely considered to have significantly contributed to the growth of the Takaful industry in the country.⁹³ While these kinds of supportive policies can fuel growth in the Takaful industry, they need to be accompanied by appropriate prudential regulations to safeguard the industry's long-term viability.⁹⁴

Key constraints for Takaful market development: **PUBLIC POLICIES**



INADEQUATE FINANCIAL INCLUSION STRATEGIES

- Limited recognition of Takaful's role in national financial inclusion plans
- Insufficient focus on Takaful in government-led financial literacy programmes
- Lack of targeted initiatives to promote Takaful adoption among underserved populations

LACK OF INCENTIVES

- Absence of tax benefits for Takaful policyholders in many jurisdictions
- Limited government support for Takaful operators compared to conventional insurers
- Insufficient incentives for businesses to offer Takaful coverage to employees

Industry standards and best practices

Standard-setting bodies like the IFSB and AAOIFI establish best practices and global guidelines for Islamic finance institutions, in order to promote robustness, stability and overall growth.⁹⁵ The IFSB's "Guiding Principles on Governance for Takaful (Islamic Insurance) Undertakings" (IFSB-8) has been widely adopted as a benchmark for Takaful governance frameworks across various jurisdictions.⁹⁶

Industry associations in the Takaful sector have been instrumental in providing knowledge sources, support and coordination mechanisms, contributing significantly to the sector's development and the

regulatory landscape. Local industry associations like the Malaysian Takaful Association (MTA) work to promote the interests of their members, including Takaful operators, and contribute to self-regulation within the industry.⁹⁷ At the regional level, the General Arab Insurance Federation (GAIF) is a key player in fostering the growth of the Takaful industry across the Arab world. This Arab international organization actively supports the development and integration of the Arab insurance industry, including the Takaful sector, by promoting best practices and advocating for policies that benefit its members.⁹⁸ However, challenges remain in standardization across different regions, and there are disparities in the influence and effectiveness of Takaful associations across markets, particularly in emerging Takaful jurisdictions.

Key constraints for Takaful market development: INDUSTRY STANDARDS AND BEST PRACTICES



INADEQUATE SUPPORT AND COORDINATION MECHANISMS

- Limited collaboration among Takaful operators within the industry
- Insufficient platforms for sharing best practices and addressing common challenges
- Lack of a unified industry voice in regulatory and policy discussions
- Fragmented efforts in research and development across the sector
- Limited industry-wide initiatives and coordination to develop Takaful products addressing climate risks and sustainability challenges

Informal rules

Informal rules that influence Takaful adoption and market development include sociocultural norms, religious beliefs and levels of financial literacy. A strong positive correlation exists between religious adherence and Takaful participation in Malaysia, suggesting that individuals with a stronger religious commitment are more likely to participate in Takaful

schemes.⁹⁹ This aligns with the observation that markets with strong Islamic cultural identities tend to have higher Takaful penetration rates.¹⁰⁰ However, sociocultural norms can also present challenges: cultural barriers, such as gender considerations, can hinder Takaful distribution and uptake.

Key constraints for Takaful market development: INFORMAL RULES



SOCIOCULTURAL BARRIERS

- Cultural misconceptions about insurance and risk management
- Religious concerns about the compatibility of Takaful with Islamic principles
- Traditional reliance on family or community support rather than formal financial products
- Gender-based disparities in access to financial services

LOW FINANCIAL LITERACY

- Limited understanding of basic financial concepts and risk management
- Insufficient knowledge about the differences between Takaful and conventional insurance

The Takaful market system shows potential for growth, driven by a growing Muslim population, rising incomes in Muslim-majority countries¹⁰¹ and gradually increasing awareness. Premium contributions, asset base, profitability and geographic reach have notably increased. But significant challenges persist in scaling operational and commercial capacities, and these barriers need to be addressed to fully capitalize on the opportunities within the Takaful sector. Supporting functions like reinsurance, payment systems, data, technology, distribution and marketing

are crucial for the market's infrastructure, but require further development to meet evolving needs. The regulatory environment, including Takaful-specific laws and Shari'ah compliance frameworks, provides a foundation for growth, although inconsistencies and gaps exist. Overall, the Takaful market is on an upward trajectory, driven by both supply and demand, but must continue evolving if it is to fully serve diverse demographics and address risks, including those related to the changing climate.



2

Developing supporting functions for the Takaful sector

2

This section outlines strategic actions that could strengthen the various supporting functions that underpin the Takaful sector, and by so doing, foster an environment conducive to the sector's growth and sustainability. To create more robust support functions, reinsurance solutions need to be enhanced, digital payment systems should be integrated, data and technology should be leveraged for better risk management, distribution channels should be expanded and client servicing needs to be improved. By focusing on these areas, the Takaful industry can achieve greater operational efficiency, reach a wider audience and offer more tailored and effective products.

Expanding Takaful reinsurance solutions

In the dynamic Takaful industry, effective Re-Takaful (Islamic reinsurance) solutions are essential for bolstering financial resilience and managing emerging risks, particularly those linked to climate change. As the sector grows, there is an urgent need to develop regional and global Re-Takaful firms, pools and risk-sharing mechanisms that can efficiently distribute risk across diverse geographies. Equally important is the need for clear regulatory guidance on permissible Re-Takaful arrangements, to ensure that operators can navigate complex compliance landscapes while continuing to adhere to Islamic law. This section provides strategic recommendations to advance these critical areas, aiming to strengthen the overall stability and sustainability of the Takaful sector.

Facilitate the development of regional/global Re-Takaful firms, pools and risk-sharing mechanisms

Developing the Re-Takaful market must include increasing capacity, establishing regulation and fostering innovation. Increasing Re-Takaful capacity can be achieved by encouraging the establishment of new Re-Takaful operators through supportive regulatory frameworks and by promoting capital investment in existing companies. At the same time, creating regional and global Re-Takaful pools can improve risk-diversifying capabilities across larger geographical areas.¹⁰² To support these efforts, regulatory frameworks should be enhanced, and these frameworks should provide clear guidelines on acceptable Re-Takaful structures and operations, harmonized across different jurisdictions to facilitate cross-border transactions.¹⁰³ Standardizing contracts, documentation and accounting practices will further improve efficiency and reduce legal uncertainties in the market.

Technological advancement and human capital development can act as important drivers for growth in the Re-Takaful sector. Investing in advanced technologies for improved risk modelling and pricing, developing shared data platforms¹⁰⁴ and implementing blockchain solutions¹⁰⁵ could dramatically enhance operational efficiency and risk assessment capabilities. To support market expansion, innovation must be fostered through the development of new Re-Takaful products addressing emerging risks, such as climate, cyber and pandemic risks.¹⁰⁶ These

technological advancements must be complemented by robust human capital development initiatives, including specialized training programmes, academic partnerships and international knowledge exchange programmes to build a skilled workforce capable of navigating the complex Re-Takaful landscape.

Finally, strengthening Shari'ah governance and improving market transparency are vital for building trust and credibility in the Re-Takaful sector. To ensure consistency and reliability in the market, clear Shari'ah guidelines specific to Re-Takaful operations should be established and standardized Shari'ah-compliant structures should be promoted. The IFSB could play a crucial role in developing Shari'ah guidelines,¹⁰⁷ while AAOIFI could contribute to standardizing accounting practices for Re-Takaful operations.¹⁰⁸ Instating enhanced disclosure requirements, conducting regular industry-wide stress tests and developing performance benchmarks, potentially overseen by the IFSB, would improve transparency and build market confidence. In parallel, international cooperation should be strengthened: collaboration

should be fostered between Re-Takaful hubs in different regions and Re-Takaful actors should actively participate in international forums. The IFSB and AAOIFI could serve as platforms for this international dialogue and standard-setting.

By implementing these interconnected strategies, and with the support of key institutions like the IFSB and AAOIFI, the Re-Takaful market can overcome its current limitations and evolve into a robust, efficient and globally competitive sector within the Islamic financial system. The Caribbean Catastrophe Risk Insurance Facility (CCRIF) offers a successful model that could serve as a reference for risk pools, as shown in the blueprint below.¹⁰⁹ One key feature is the use of parametric triggers. Parametric or index-based insurance, which pays out based on predetermined weather or climate indicators rather than actual losses, has demonstrated potential in overcoming challenges associated with conventional indemnity-based insurance in developing countries, and its methodology could be adapted for use with Takaful and Re-Takaful.¹¹⁰





BLUEPRINT

Establishing a Shari'ah-compliant Re-Takaful pool

OBJECTIVE:

To establish a Shari'ah-compliant Re-Takaful pool, inspired by the CCRIF model, that provides coverage for catastrophic events.

Key elements

- 1
- 2
- 3
- 4
- 5
- 6
- 7

Risk pooling: Multiple Takaful operators contribute to a pool that provides coverage for catastrophic events (e.g., droughts, floods, typhoons, earthquakes).

Parametric triggers: Payouts are based on pre-agreed indices (e.g., water level rise, rainfall index, livestock average weight index, wind speed, earthquake magnitude) rather than actual losses, ensuring quick and transparent disbursements.

Shari'ah compliance: A Shari'ah board oversees the pool, ensuring adherence to Islamic laws. Investments are made in Shari'ah-compliant instruments.

Governance: A robust governance structure is established, involving participating Takaful operators, Shari'ah scholars and relevant regulatory bodies.

Risk assessment: A comprehensive risk assessment is conducted to identify potential catastrophic events and determine appropriate coverage levels.

Pricing: Pricing mechanisms are developed based on actuarial calculations and risk assessment, ensuring fair contributions from participating Takaful operators.

Re-Takaful: Re-Takaful arrangements with global Re-Takaful companies could enhance capacity and diversify risks.



Benefits

- 1
- 2
- 3
- 4

Enhanced resilience: Provides Takaful operators with protection against catastrophic events, improving financial stability.

Quick disbursements: Parametric triggers enable rapid payouts, offering immediate relief to affected communities.

Shari'ah compliance: Adheres to Islamic principles, making it suitable for Takaful operators and their clients.

Regional collaboration: Fosters cooperation among Takaful operators, strengthening the sector's capacity.

Implementation steps

- 1
- 2
- 3
- 4
- 5

Feasibility study: Conduct a feasibility study to assess the demand for such a Re-Takaful pool and identify potential challenges.

Regulatory approval: Seek approval from relevant regulatory authorities in participating countries.

Establish governance structure: Set up a Shari'ah board and governance framework.

Develop product structure: Define coverage parameters, risk assessment methodology and pricing mechanisms.

Start operations: Commence operations once sufficient participation and funding are secured.

Innovative thinking will be needed to facilitate the development of regional and global Re-Takaful pools and risk-sharing mechanisms for climate action. One approach could be the creation of a “climate resilience Sukuk”,¹¹¹ which would enable climate risk transfer using the principles of Islamic finance. This instrument could be structured to provide Re-Takaful coverage for climate-related risks while also funding climate adaptation projects, similar to the concept of resilience bonds, but in a format compliant with Shari'ah.¹¹² Another strategy could be establishing partnerships between Re-Takaful pools and climate research institutions to enhance risk modelling

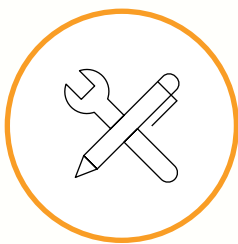
capabilities for climate-related perils in Muslim-majority countries. The collaboration between the Insurance Development Forum (IDF) and the V20 group of vulnerable countries could provide a template that would enable these partnerships to ensure local ownership and increase capacity for risk analysis in climate-vulnerable countries, thereby laying the groundwork for integrating insurance-based methodologies into mainstream climate and disaster risk finance.¹¹³ Finally, integrating micro-Takaful schemes into larger Re-Takaful pools could extend climate risk protection to vulnerable communities while also diversifying the risk pool.

Provide regulatory clarity on admissible reinsurance/ Re-Takaful arrangements

To ensure growth and stability in the Takaful industry, regulatory clarity is needed on the reinsurance and Re-Takaful arrangements that are admissible under Islamic law. Regulators should provide clear guidelines on the permissible structures for risk transfer, including on the use of conventional reinsurance when Shari'ah-compliant alternatives are not available. This could involve specifying acceptable ratios of conventional to Islamic reinsurance and the conditions under which conventional reinsurance can be used.¹¹⁴ Regulators should also clarify the treatment of different Re-

Takaful models (e.g., Wakalah, Mudarabah and hybrid structures) in terms of capital requirements and risk transfer recognition.

In relation to climate action, regulatory frameworks should address the unique characteristics of climate-related risks and risk transfer mechanisms. This could include providing guidance on the use of parametric triggers in Re-Takaful contracts, the treatment of long-term climate risks in solvency calculations and the recognition of nature-based solutions as valid risk mitigation measures. The approach taken by the Bank of England's Prudential Regulation Authority (PRA) in managing climate-related financial risks in the insurance sector provides a useful reference for developing these guidelines.¹¹⁵



BLUEPRINT

Developing guidelines for managing climate-related financial risks in the Takaful sector

Adapt the PRA framework, taking Shari'ah considerations into account

1

Analyse the key elements of the PRA's Supervisory Statement SS3/19,¹⁴⁶ adapting them to incorporate Shari'ah principles.

2

Integrate Shari'ah-compliant risk assessment methodologies to evaluate the impact of climate change on Takaful operations.

Consider local context and Islamic finance landscape

1

Consider the specific climate risks, regulatory environment and Takaful market dynamics of the country/region.

2

Account for factors such as weather patterns, existing Islamic financial regulations and unique Takaful product offerings.

Ensure stakeholder engagement

1

Engage relevant stakeholders, including Takaful operators, Shari'ah scholars, regulatory bodies, climate risk experts and policyholder representatives.

2

Using a collaborative approach, ensure the guidelines are comprehensive, practical and address the specific needs of the Takaful sector.

Include key considerations for Takaful and climate risk management

1

Risk identification and assessment:

- Develop guidelines that encourage Takaful operators to identify and assess climate risks across all operations: underwriting, Shari'ah-compliant investments and claims management.
- Integrate Shari'ah considerations into risk assessment, ensuring investments are values-based and environmentally responsible.

2

Scenario analysis:

- Emphasize the importance of scenario analysis that considers both the financial and Shari'ah-compliant implications of different climate change outcomes.

3

Risk management strategies:

- Outline best practices for risk mitigation and adaptation, including:
 - Development of Takaful products that address climate risks (e.g., weather insurance)
 - Pricing adjustments that reflect climate risk exposure
 - Risk-sharing mechanisms that promote Takaful principles of mutuality
 - Use of catastrophe risk modeling tools adapted for Islamic finance considerations.

4

Governance and disclosure:

- Promote strong governance practices with clear oversight of climate risks.
- Encourage transparent disclosure of climate-related risks and financial exposures, aligned with international initiatives such as the Task Force on Climate-related Financial Disclosures (TCFD) and potentially incorporating specific Takaful sector reporting requirements.

Conduct a phased implementation and ensure capacity-building

1

Consider a phased approach to implementation, allowing Takaful operators time to adjust and build capacity for managing climate risks effectively.

2

Facilitate workshops and training programmes to enhance understanding and capabilities in managing climate risks within the Shari'ah framework.

Carry out continuous improvement and review

1

Establish a mechanism for ongoing monitoring and review of the guidelines.

2

Ensure the guidelines remain relevant and adapt to evolving climate risks, regulatory developments and best practices in Islamic finance.

Regulators should also establish clear rules for cross-border operations in Re-Takaful pools, addressing issues such as licensing requirements, dispute resolution mechanisms and supervisory cooperation.

Improving payment systems and integrating with Islamic finance

To make Takaful services more efficient and accessible, payment systems need to be enhanced and integrated with Islamic finance. This section outlines practical ways to enable seamless interoperability between Takaful operators and Islamic banks, and to develop digital payment gateways and mobile solutions that align with Shari'ah principles. Doing so should simplify transactions, enhance customer experience and foster greater trust in the Takaful sector.

Enable interoperability between Takaful operators and Islamic banks

Several steps need to be taken to enable interoperability between Takaful operators and Islamic banks. Standardized APIs (Application Programming Interfaces) should be developed to allow seamless data exchange and transaction processing between Takaful and banking systems. To streamline KYC (Know Your Customer) processes, a unified customer identification system could be implemented across Takaful operators and Islamic banks, reducing redundancy and improving customer experience. Creating a shared blockchain network for Islamic financial institutions could enhance transparency, security and efficiency in cross-entity transactions.

Making the purchase process seamless, from the point of the decision to buy coverage to paying for it from a bank account, would be valuable in facilitating the spread of Takaful. Bank customers are already connected with their bank's digital channels, and

their familiarity with them could make selling and collecting contributions over these channels easier than establishing new bespoke channels.

Collaboration between Takaful operators and Islamic banks to develop joint products, such as bancatakaful offerings, could further incentivize interoperability.

To ensure successful uptake, operators and banks will need to invest in staff training and customer education about the benefits and use of integrated services. Regulatory bodies should also establish clear guidelines for data sharing and privacy protection in integrated systems.

CASE STUDY

Allianz's partnership with HSBC



Allianz's bankassurance partnership with HSBC covers several key markets in Asia. In these markets, a customer using HSBC's online banking platform may be offered personalized insurance product suggestions from Allianz. The customer can click on these suggestions to learn more and purchase a policy. Payment for the policy can be set up using the customer's HSBC account, with options to set up automatic premium payments. All policy documents and management tools are accessible through the same online platform, providing a unified and seamless experience.

These features highlight how the integration of Allianz products into HSBC's digital platforms offers a streamlined and user-friendly experience for customers, enhancing the value of the partnership for both the bank and the insurance company.¹¹⁶ Takaful providers and Islamic banks could set up similar collaborative interfaces, with scope for the inclusion of climate resilience products.

Develop digital payment gateways¹¹⁷ and mobile payment solutions for premiums/claims

To develop digital payment gateways and mobile payment solutions for Takaful contributions and claims, Takaful operators should partner with established payment service providers to integrate secure, Shari'ah-compliant payment gateways into their digital platforms. These gateways should support a wide range of payment methods, including bank transfers, debit cards and e-wallets, to ensure accessibility for diverse customer segments.

User-friendly mobile apps should be developed to allow policyholders to make contributions and file claims seamlessly. These apps should incorporate features such as automated recurring payments,

push notifications for due dates and real-time claim status updates. Implementing blockchain technology could enhance the transparency and traceability of transactions, particularly in claims processing. Robust cybersecurity measures and compliance with data protection regulations must be prioritized to meet legal and regulatory obligations and build trust among users.

To ensure widespread adoption, incentives should be offered for making payments digitally, for example cashback or reduced fees. Integrating these payment solutions with popular mobile banking apps and e-commerce could also significantly expand their reach. Lastly, conducting thorough user testing and gathering feedback can enable these digital payment solutions to be continuously improved, ensuring they meet the evolving needs of Takaful participants.

Enhancing distribution channels and client servicing capabilities

To expand the reach and effectiveness of Takafaul services, distribution channels and client servicing capabilities need to be upgraded. This section outlines key strategies to build a skilled agency workforce, expand bancatakaful partnerships and develop innovative digital distribution models. These initiatives should improve access, streamline operations and ensure that Takaful products meet the needs of their diverse customer base.

Build agency workforce through training and incentive programmes

Effective Takaful agent training needs to include not only product knowledge and sales techniques but also Islamic finance principles and considerations specific to Takaful. Implementing a tiered certification programme, similar to the Professional Development Certification (PDC) programme offered by the Malaysian Insurance Institute (MII), could provide a structured pathway for agent development.¹¹⁸ This programme could be customized for Takaful agents, incorporating modules on Shari'ah compliance, risk assessment and customer needs analysis. MII leverages technology to deliver training through mobile learning platforms and virtual reality simulations, a technique that could also be used to enhance engagement and knowledge retention among Takaful agents.

Incentive programmes should be carefully designed to align with Shari'ah principles, avoiding excessive uncertainty. Performance-based incentives could be structured around key metrics such as customer satisfaction, policy retention rates and Shari'ah compliance scores, rather than focusing solely on sales volumes. The use of balanced scorecards that incorporate both financial and non-financial measures could provide a more holistic approach to agent performance evaluation and reward.¹¹⁹

Expand bancatakaful partnerships and leverage Islamic bank branch networks

To optimize bancatakaful partnerships, Takaful operators should focus on developing integrated customer relationship management (CRM) systems that seamlessly connect with Islamic banks' existing platforms. This integration can facilitate more effective cross-selling opportunities and improve customer service by providing a unified view of clients' financial and protection needs.¹²⁰ Implementing a shared customer data platform, including robust data protection measures, can enable personalized product recommendations and ensure more efficient underwriting processes.

So-called "phygital" distribution – blending physical branch presence with digital capabilities – can be particularly effective in markets where face-to-face interactions remain important for building trust.¹²¹ In relation to Takaful, phygital distribution could involve equipping Islamic bank branches with digital kiosks where Takaful product information can be obtained and simple policies can be issued, supported by video conferencing facilities for more complex inquiries. To address potential channel conflicts, clear guidelines on revenue sharing and customer ownership should be established, possibly adopting a model similar to the Islamic Financial Services Act 2013 in Malaysia, which provides a regulatory framework for bancatakaful arrangements.¹²²

Develop digital/insurtech distribution models for improved reach and efficiency

Digital and insurtech methods have great potential for improving Takaful distribution. Takaful robo-advisory platforms, for example, could provide automated Takaful recommendations based on an individual's risk profile and financial goals. These platforms could incorporate Islamic finance principles into their algorithms, ensuring that product recommendations align with Shari'ah guidelines.¹²³ Another promising avenue is the development of blockchain-based

smart contracts for Takaful policies, which can automate policy issuance, premium collection and claims processing, significantly reducing operational costs and improving transparency.¹²⁴

To reach underserved populations, particularly in rural areas, mobile-based micro-Takaful solutions could be highly effective. These could be integrated with existing mobile money platforms, which are popular in many Muslim-majority countries, allowing for easy premium payments and claims disbursements.¹²⁵ Finally, AI and machine learning for risk assessment and fraud detection could be used to make underwriting and claims processes in digital distribution models more efficient and accurate. However, these AI systems must be developed with Islamic values-based considerations in mind, avoiding biases and maintaining transparency in decision-making processes.¹²⁶

Strengthening data and technology capabilities

Better data and technology capabilities can ensure greater operational efficiency and competitiveness in the Takaful sector, modernizing operations and delivering better outcomes for operators and customers. This section focuses on improving data collection processes, facilitating data-sharing across the industry and driving digitization through technology and strategic partnerships.

Improve data collection processes from underwriting to claims management

One innovative approach in upgrading data collection could be the use of Internet of Things (IoT) devices and telematics in real-time risk assessment and claims verification. For example, in motor Takaful, usage-based insurance models leveraging telematics can provide more accurate risk profiles and encourage safer driving behaviours.¹²⁷ In health

Takaful, wearable devices can offer continuous health monitoring, enabling more personalized underwriting and proactive health management.¹²⁸ For property Takaful, smart home devices can help in risk mitigation and early detection of potential claims.¹²⁹ To ensure Shari'ah compliance, these data collection methods should be implemented with clear consent mechanisms and data privacy safeguards.¹³⁰

In claims processing, the use of natural language processing (NLP) and machine learning algorithms can significantly improve efficiency by automating document analysis and fraud detection.¹³¹ These technologies could be trained on Shari'ah-compliant data sets¹³² to ensure alignment with Islamic principles. Blockchain technology could be leveraged to create an immutable and transparent record of all data collected throughout the Takaful lifecycle, enhancing trust and facilitating audits.¹³³

Facilitate sharing of industry data for risk analysis and pricing

Better data-sharing could improve the overall stability and competitiveness of the Takaful sector. One way to ensure this could be establishing a centralized, Shari'ah-compliant data repository managed by a neutral third party, such as a regulatory body or industry association. This repository could aggregate anonymized data from multiple Takaful operators and could provide a comprehensive view of risk patterns and claim trends, similar to that provided by insurance data repositories.¹³⁴ To address any concerns about data confidentiality and competitive advantage, a federated learning approach could be adopted, through which Takaful operators could collaboratively train machine learning models without directly sharing raw data.¹³⁵ This technique could be particularly useful in developing more accurate pricing models for rare or emerging risks, such as those related to climate change or cyber threats. The creation of industry-wide data standards and protocols, similar to the ACORD (Association for Cooperative Operations Research and Development)

standards in conventional insurance, could facilitate seamless data exchange and interoperability between different Takaful systems.¹³⁶ To ensure Shari’ah compliance in data-sharing practices, clear guidelines should be developed on the types of data that can be shared and how they should be used, and Shari’ah advisory boards could potentially be involved in the governance of these data pools.

Drive digitization of core processes through technology solutions and partnerships

Digitizing core processes could modernize Takaful operations and significantly improve customer experience. One key step is the implementation of robotic process automation (RPA) for routine tasks such as policy issuance, premium processing and basic claims handling. RPA can significantly

reduce processing times and errors, freeing up human resources for more complex tasks that require judgment and customer interaction.¹³⁷ For more advanced automation, AI and machine learning could be used to support underwriting decisions, in claims triage and as customer service chatbots. These AI systems should be designed with Islamic principles in mind, ensuring transparency and fairness in decision-making processes.¹³⁸

Cloud computing solutions could provide the scalable infrastructure needed to support these digital initiatives, while offering the flexibility to comply with regulatory and Shari’ah requirements across different jurisdictions.¹³⁹ The guidelines issued by the European Insurance and Occupational Pensions Authority (EIOPA) on outsourcing to cloud service providers (CSPs) could act as a model for addressing cross-border operational issues in financial services to promote secure and efficient Takaful operations.¹⁴⁰



BLUEPRINT

Adapting EIOPA cloud outsourcing guidelines for Takaful

Adaptation for Takaful

1

Shari’ah compliance: A layer of Shari’ah compliance should be integrated into the risk assessment process. This would involve ensuring the CSP’s operations and data storage practices adhere to Islamic principles.

2

Focus on values-based investment: Similar to risk assessment, the CSP’s investment practices should be considered. This aligns with the core values of Takaful, which promotes responsible and socially conscious investments.

Application of guidelines

1

Risk assessment: Takaful operators should classify cloud-based activities as critical or important based on their impact on Shari'ah compliance, values-based investment practices, policyholder protection and operational resilience. In jurisdictions with strong Islamic finance regulations, such as Malaysia, factors like data location would be very important.

2

Standardized contracts: Takaful-specific contract templates should be developed that address Shari'ah compliance audits, data residency in Shari'ah-compliant jurisdictions and dispute resolution mechanisms aligned with Islamic legal principles.

3

CSP requirements: Similar to the European model, specific requirements should be defined for CSPs serving the Takaful sector. This could include adherence to Shari'ah-compliant data security standards and participation in information-sharing initiatives with Islamic financial regulatory authorities.

4

Monitoring and enforcement: Takaful operators should conduct ongoing monitoring of cloud outsourcing arrangements, focusing on Shari'ah compliance, data security and potential cross-border risks. Regulatory bodies should establish clear enforcement mechanisms for non-compliance.

Additional considerations

1

Regional variations: The guidelines should be adapted to take account of the specific regulatory frameworks and Shari'ah interpretations of each Islamic country.

2

Industry collaboration: Collaboration between Takaful operators and cloud service providers should be encouraged in developing best practices and Shari'ah-compliant cloud solutions for the Islamic finance sector.

Partnerships with insurtech firms and Islamic fintech companies can accelerate the digitization process by bringing in specialized expertise and generating innovative solutions. To ensure successful

implementation, Takaful operators should develop comprehensive digital transformation strategies that address not only technology adoption but also organizational culture change and talent development.

Building marketing and consumer education efforts

Effective marketing and consumer education efforts are needed to increase awareness and understanding of Takaful products. This section focuses on developing comprehensive financial literacy programmes and launching targeted and responsible marketing campaigns to address perceptions of Takaful and encourage uptake.

Develop financial literacy programmes with a focus on Takaful and climate-related risks

Financial literacy programmes focused on Takaful, at local or national level, could improve consumer understanding and adoption of Islamic insurance products. These programmes should address the unique aspects of Takaful, including its Shari'ah-compliant nature and risk-sharing principles, while also emphasizing the growing importance of protection against risks. One effective approach could be to integrate Takaful education into existing national financial literacy frameworks, such as the adult financial literacy frameworks recommended by the Organisation for Economic Co-operation and Development (OECD).¹⁴¹

Programmes should cover key concepts including the differences between Takaful and conventional insurance, the various Takaful models (e.g., Wakalah, Mudarabah) and Takaful's potential for mitigating climate and non-climate disaster risks. To increase engagement and accessibility, programmes could leverage digital platforms and gamification techniques. For instance, Takaful associations could develop a mobile app that simulates real-life financial scenarios, allowing users to make Takaful-related decisions and see their long-term impacts. Collaborations between Takaful operators, educational institutions and religious organizations could help create culturally sensitive

and contextually relevant educational content.¹⁴² Gender considerations should be integrated into the design and implementation of these programmes.

Launch media campaigns to raise Takaful awareness and address misperceptions

Media campaigns on Takaful require a strategic and culturally nuanced approach. To reach diverse audiences, campaigns should leverage a mix of traditional and digital media channels. Social media platforms, in particular, offer powerful tools for targeted messaging and community engagement. For example, short-form video content on digital and social media platforms can effectively explain complex Takaful concepts in an accessible and engaging way.¹⁴³ Interactive elements like online quizzes and virtual reality experiences could provide immersive learning opportunities about Takaful and climate risks.

To combat common misperceptions, such as the belief that Takaful is only for Muslims or that it is more expensive than conventional insurance, campaigns should focus on clear, fact-based messaging, supported by relatable case studies and testimonials. Influencer partnerships, particularly with respected financial experts and religious scholars, can lend credibility to these messages and help overcome trust barriers.¹⁴⁴ A comprehensive set of key performance indicators (KPIs) should be established to measure campaign effectiveness, including metrics for awareness, understanding and behavioural change.

Provide guidelines and training for operators on responsible marketing practices

Operators need guidelines and education on responsible sales and marketing practices in order to maintain the integrity of the Takaful industry and build long-term consumer trust. These guidelines

should align with Shari'ah principles and with best practices in financial services marketing, among them gender mainstreaming. Key areas to address include transparency in product disclosure, ethical use of customer data and avoidance of misleading claims or excessive promises.

The IFSB could develop a comprehensive set of marketing standards specific to Takaful, similar to its existing standards for conduct of business, risk management and corporate governance.¹⁴⁵ These standards should emphasize the importance of clear communication about risk-sharing in Takaful and the potential limitations of coverage, particularly for complex products like those related to climate risks. Training programmes for marketing professionals in Takaful companies should cover not only these guidelines, but also broader topics such as Islamic finance ethics and consumer psychology. Role-playing exercises and case studies can be particularly effective in helping marketers navigate challenging scenarios while adhering to responsible practices. Implementing internal review processes and external audits can help ensure compliance with these marketing guidelines.

As with conventional insurance, the development of supporting functions is crucial for the sustainable growth of the Takaful sector. Key recommendations for building support functions include enhancing reinsurance solutions with a focus on climate action, improving payment systems by integrating with Islamic finance institutions and leveraging data and technology to drive digitization. Other important steps include expanding distribution channels through agency training, bancatakaful partnerships and phygital models, along with improving client servicing and marketing efforts. These initiatives collectively aim to fortify the operational framework, ensuring that Takaful operators can deliver high-quality, accessible and effective insurance solutions. By addressing these areas, the Takaful industry will be better positioned to meet the diverse needs of its market, thereby fostering increased trust and participation in Takaful products.



3

Building the Takaful
enabling environment

3

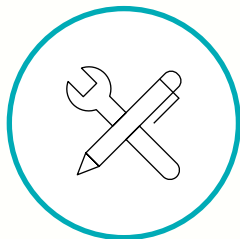
For the Takaful sector to continue to develop and succeed, it needs a supportive policy and regulatory framework. This section presents strategic actions that could help to create an enabling and rule-based regulatory environment, including through creating tailored mutual insurance regulations, integrating Takaful into national financial inclusion strategies, harmonizing Shari'ah standards and addressing sociocultural barriers. Implementing these recommendations can help the Takaful industry achieve greater regulatory clarity, foster innovation and ensure compliance with Shari'ah principles, ultimately driving the sector's growth and sustainability.

Establishing tailored mutual insurance/ Takaful regulations

Creating a robust, Shari'ah-compliant regulatory environment can enhance financial stability, encourage innovation and build consumer trust in the Takaful sector. This section focuses on developing a comprehensive regulatory framework that addresses the unique characteristics of Takaful and mutual insurance models. It emphasizes the need for specific guidelines on capital adequacy, corporate governance and consumer protection, and advocates for the use of regulatory sandboxes to foster innovation and test new Takaful products.

Develop a comprehensive regulatory framework specifically for Takaful/mutual insurance models

A robust, adaptable regulatory framework for Takaful should strike a delicate balance between Shari'ah compliance, financial stability and consumer protection.¹⁴⁷ It should acknowledge the unique risk-sharing nature of Takaful, as well as its operational differences from conventional insurance. A key recommendation is to establish a tiered regulatory structure that differentiates between family (life) and general Takaful, as well as between small-scale community-based Shari'ah-compliant mutual insurance, window Takaful operators and large commercial Takaful operators. This tiered approach, similar to the one adopted by the IFSB in its capital adequacy standard for Takaful undertakings (IFSB-28), allows for proportionate regulation that does not stifle innovation or market development.¹⁴⁸ The regulatory framework should also address the specific roles and responsibilities of key stakeholders in the Takaful model, including participants (policyholders), shareholders and the operator, and should offer clear guidelines on the segregation and management of participant and shareholder funds.¹⁴⁹ The framework should provide clarity on acceptable Takaful models (e.g., Wakalah, Mudarabah, hybrid) and define the associated governance requirements. To ensure international compatibility, regulators should consider aligning their frameworks with global standards such as the Insurance Core Principles (ICPs) developed by the International Association of Insurance Supervisors (IAIS), which could be adapted to Takaful-specific needs.¹⁵⁰



BLUEPRINT

Developing a robust Takaful regulatory framework – a phased approach

The global Takaful industry operates within a diverse regulatory landscape, reflecting the varying stages of Takaful market development across Muslim-majority countries.¹⁷⁸ This unevenness presents both challenges and opportunities. A phased approach for Takaful regulation could allow countries to progress at their own pace while ensuring a robust and Shari'ah-compliant environment.



This phased approach would allow countries interested in expanding their Takaful operations to tailor their regulatory framework to their specific development stage. It could foster a vibrant Takaful industry that adheres to Shari'ah principles, promotes financial stability and empowers citizens through risk-sharing and values-based financial products. Aligning regulations with international standards like the IFSB guidelines could encourage cross-border collaboration and strengthen the global Takaful market.

Define capital, solvency, corporate governance and consumer protection requirements

In defining requirements for Takaful operators, their unique risk profiles and operational models need to be carefully considered. For capital and solvency requirements, a risk-based capital (RBC) approach tailored to Takaful is recommended. This approach should account for the distinct risks associated with different Takaful models and the potential for conflicts between participant and shareholder interests. The Malaysian model of Takaful RBC, which separately assesses the capital adequacy of participant and shareholder funds, offers a useful reference point.¹⁵¹

Corporate governance requirements should emphasize the role of Shari'ah governance alongside traditional governance structures. This includes mandating the establishment of Shari'ah advisory boards and internal Shari'ah audit functions, as well as defining their roles and reporting lines. The IFSB's standard on governance for Takaful undertakings provides comprehensive guidance in this area.¹⁵² Consumer protection requirements should focus on transparency in product disclosure, fair treatment of participants and effective dispute resolution mechanisms. Special attention should be given to ensuring that surplus distribution mechanisms are clearly explained and fairly implemented. Regulators should consider establishing Takaful-specific policyholder protection schemes to enhance consumer confidence in the sector.

Establish regulatory sandboxes to test innovative Takaful products and business models, including on climate action

Regulatory sandboxes can help foster innovation while managing risks. Sandboxes for Takaful could provide a controlled environment in which Takaful operators could experiment with new products, distribution channels and technologies under regulatory supervision. For climate-related Takaful innovations, the sandbox could allow testing of, for example, parametric insurance products, blockchain-based smart contracts for claims processing and AI-driven risk assessment models.

Key recommendations for implementing Takaful-specific sandboxes include: (1) establishing clear eligibility criteria that prioritize genuinely innovative solutions with potential consumer benefits; (2) defining specific testing parameters and success metrics, particularly for assessing Shari'ah compliance and social impact; (3) implementing safeguards to protect consumers participating in sandbox tests, such as compensation mechanisms and enhanced disclosure requirements; (4) creating fast-track processes for successful sandbox graduates to obtain full regulatory approval; and (5) fostering collaboration between multiple regulators (e.g., financial, insurance and telecommunications) to address cross-sectoral innovations.

The regulatory sandbox created by the United Kingdom's Financial Conduct Authority (FCA) has successfully facilitated testing for several insurtech innovations and provides a useful model that could be adapted for Takaful.¹⁵³ The experience of the Central Bank of Bahrain in operating a regulatory sandbox for fintech and insurtech firms, including those offering Takaful solutions, also provides valuable insights into the practical implementation of sandbox initiatives in Islamic finance contexts.¹⁵⁴



BLUEPRINT

Launching a Takaful regulatory sandbox, inspired by the FCA insurance sandbox

Objectives

- 1 **Drive innovation:** Encourage development and testing of Takaful solutions.
- 2 **Protect consumers:** Ensure innovation prioritizes consumer needs and Shari'ah principles.
- 3 **Maintain stability:** Mitigate risks associated with novel Takaful models.
- 4 **Refine regulations:** Test and refine regulatory frameworks for Takaful innovation.

Key considerations

- 1 **Eligibility:** Define clear criteria for Takaful operators to participate (business model, target market, risk profile).
- 2 **Shari'ah review:** Establish a robust Shari'ah review process with recognized scholars.
- 3 **Regulatory relief:** Offer temporary relief from specific licensing/capital requirements, proportionate to potential risks.
- 4 **Supervision and reporting:** Implement a supervisory framework and require regular progress reports from participants.
- 5 **Sandbox duration:** Set a clear timeframe (e.g., 12 months with extension options).
- 6 **Exit strategy:** Outline the transition process for successful innovations from sandbox to full regulation.

Learning and sharing

- 1 Facilitate knowledge-sharing among participants and stakeholders.
- 2 Regularly publish reports summarizing sandbox activities and key findings to inform broader Takaful regulations.





- 1 **Shari'ah focus:** Prioritize testing of Takaful models and risk-sharing mechanisms.
- 2 **Shari'ah expertise:** Integrate Shari'ah scholars into governance and review processes.
- 3 **Risk-sharing structures:** Accommodate unique Takaful risk-sharing features (Mudarabah, Wakalah).

Integrating Takaful into national financial inclusion strategies

Integrating Takaful into national financial inclusion strategies can broaden access to Islamic insurance, promoting economic empowerment and enhancing financial resilience among underserved populations. This section outlines key approaches to make Takaful a core pillar of financial inclusion efforts, including incorporating Takaful into national road maps and providing targeted incentives such as tax breaks and subsidies.

Incorporate Takaful as a core pillar in national financial inclusion road maps

Making Takaful a core pillar of national financial inclusion strategies requires a multifaceted approach that recognizes the unique role Islamic insurance can play in promoting financial resilience and economic empowerment, particularly among underserved populations.¹⁵⁵ To effectively incorporate Takaful, policymakers should first conduct a comprehensive

assessment of the current state of financial inclusion, identifying specific gaps where Takaful could make an important contribution. This assessment should consider factors such as religious and cultural preferences, existing risk management practices and the prevalence of informal insurance mechanisms within target communities. Based on this analysis, national financial inclusion road maps should explicitly include Takaful-specific objectives and KPIs, such as Takaful penetration rates among low-income groups or the percentage of micro and small enterprises covered by Takaful products. The road map should also outline strategies for developing appropriate distribution channels to reach underserved segments, for example leveraging existing Islamic microfinance networks or mobile technology platforms. Regulators should consider establishing a dedicated Takaful inclusion unit within the national financial inclusion governance structure to ensure that Takaful-related initiatives receive focused attention and that implementation is effectively coordinated. The experience of countries like Malaysia, which has successfully integrated Islamic finance including Takaful into its national financial inclusion framework, provides valuable insights for this process.¹⁵⁶

CASE STUDY

Evolution and success of Malaysia's Takaful sector development and integration



INTRODUCTION

Malaysia's Takaful sector development exemplifies the successful integration of Islamic financial principles into a modern financial system, demonstrating the importance of a holistic approach that incorporates regulatory foresight, market liberalization and continuous innovation. This case study examines the key milestones, regulatory frameworks and innovative approaches that have positioned Malaysia as a global leader in the Takaful industry.

Key milestones and regulatory developments

Foundational phase (1980s–1990s):

- **1984:** Enactment of the Takaful Act 1984, providing the legal framework for Takaful operations.
- **1985:** Establishment of Syarikat Takaful Malaysia Berhad as the first Takaful operator.
- **1993:** Introduction of the Insurance Act 1996, which included provisions for Takaful regulation.

Expansion and diversification (2000s):

- **2001:** Implementation of the Financial Sector Master Plan (FSMP).¹⁵⁷
 - Key initiative: Liberalization of foreign equity participation in Takaful operations up to 49%.
 - Result: Entry of international players like HSBC Amanah Takaful and Great Eastern Takaful.
- **2004:** Introduction of the Risk-Based Capital Framework for conventional insurers, laying the groundwork for future Takaful regulations.
- **2005:** Establishment of the dual financial system.
 - Regulatory change: Conventional insurers allowed to offer Takaful products through window operations.
- **2006:** Launch of the Malaysia International Islamic Financial Centre (MIFC).
 - Incentive: Tax exemptions for Takaful operators on international currency business income.

Regulatory reforms and standardization (2010s):

- **2010:** Introduction of Takaful Operational Framework.
 - Key features: Defined models for Takaful operations (Wakalah, Mudarabah and hybrid models).
- **2013:** Enactment of the Islamic Financial Services Act (IFSA) 2013.
 - Major change: Separation of Family and General Takaful licences.
 - Impact: Enhanced focus on specialized Takaful products and services.
- **2014:** Implementation of Risk-Based Capital Framework for Takaful Operators (RBCT).
 - Technical detail: Required minimum capital adequacy ratio of 130% for Takaful operators.
- **2016:** Introduction of Life Insurance and Family Takaful Framework.
 - Key initiative: Phased liberalization of commission limits and operating costs.
 - Impact: Increased product innovation and improved distribution efficiency.

Digitalization and innovation (2020s and Beyond):

- **2019:** Introduction of Regulatory Sandbox Framework by Bank Negara Malaysia (BNM).
 - Purpose: Facilitate testing of innovative fintech solutions, including insurtech and Takatech.
- **2024:** Launch of Digital Insurers & Takaful Operators (DITOs) framework.¹⁵⁸ Key requirement:
 - 1) Minimum paid-up capital of 30 million Malaysian ringgit (RM) for digital Takaful operators instead of RM 100 million as required for Takaful operator licence.
 - 2) Timeframe of 3 to 7 years allowed for graduating from foundation phase to full-scale operations.
- **2021:** Implementation of Value-Based Intermediation for Takaful (VBIT) framework.
 - Focus areas: Customer empowerment, community empowerment, good self-governance and best conduct.

Market development and performance indicators

Market growth:

- Takaful market share increased from 13% in 2011 to 27% in 2023.¹⁵⁹
- CAGR of Family Takaful contributions was 8.5% from 2015 to 2020.

Product innovation:

- Introduction of micro-Takaful products (e.g., Perlindungan Tenang) in 2017.
- Launch of investment-linked Takaful products with ESG-focused underlying funds in 2019.

Distribution channels:

- Bancatakaful partnerships accounted for 40.2% of new business in 2020.
- Online Takaful sales grew by 28% in 2020 amid the COVID-19 pandemic.

Solvency and stability:

- Industry-wide capital adequacy ratio for Takaful operators was 226.5% in 2020, well above the regulatory minimum.

Key success factors and recommendations for other countries

Comprehensive regulatory framework:

- **Lesson:** Phased implementation of regulations allowed for industry adaptation.
- **Recommendation:** Develop a clear regulatory road map with industry consultation.

Government support and strategic vision:

- **Success factor:** Alignment of Takaful development with broader economic goals (e.g., MIFC initiative).
- **Recommendation:** Integrate Takaful development into national financial sector strategies.

Talent development:

- **Initiative:** Establishment of INCEIF (International Centre for Education in Islamic Finance) in 2005.
- **Recommendation:** Invest in specialized education and training programmes for Takaful professionals.

<p>Product innovation and standardization:</p>	<ul style="list-style-type: none"> • Success factor: BNM’s proactive approach in issuing guidelines for new product development. • Recommendation: Establish a regulatory sandbox for testing innovative Takaful products.
<p>International collaboration:</p>	<ul style="list-style-type: none"> • Initiative: Active participation in international standard-setting bodies (e.g., IFSB, AAOIFI). • Recommendation: Engage in cross-border collaborations to harmonize Takaful standards.

Provide incentives like tax breaks and subsidies to drive Takaful adoption among underserved segments

Incentives to increase Takaful uptake among underserved segments can help overcome barriers to access and accelerate financial inclusion. Tax breaks can make Takaful products more affordable and attractive to low-income individuals and small businesses. Governments could offer tax deductions or credits for Takaful contributions, similar to those often provided for conventional insurance premiums. To encourage Takaful adoption, tax incentives could potentially be offered on more favourable terms than those used for conventional insurance, particularly where insurance is not making progress for reasons other than financial protection. These tax incentives should be carefully structured to ensure they primarily benefit the target underserved segments, rather than being disproportionately captured by higher-income groups.

Subsidies represent another powerful instrument for promoting Takaful uptake, particularly for products addressing critical societal needs, such as health or agricultural coverage.¹⁶⁰ These subsidies could take various forms, including direct premium subsidies for low-income policyholders, government co-contributions to Takaful risk pools or subsidized reinsurance arrangements for Takaful operators

serving high-risk or low-income markets. The design of subsidy programmes should incorporate clear targeting mechanisms, gradual phase-out plans and robust monitoring and evaluation frameworks to ensure their effectiveness and sustainability.¹⁶¹

Policymakers should also consider non-financial incentives, such as linking Takaful coverage to access to other government services or financial products, to create a more comprehensive value proposition for potential participants. For example, agricultural loan programmes could require or incentivize participation in crop Takaful schemes.

Harmonizing Shari’ah standards and governance

Standardizing Shari’ah interpretations and improving governance practices can help strengthen the Takaful sector, supporting it in adhering to Islamic principles while also meeting the demands of modern financial markets. This section focuses on key strategies to align and coordinate Shari’ah standards and governance, including the establishment of national or regional Shari’ah advisory boards, the development of comprehensive Shari’ah governance frameworks and the enhancement of Shari’ah scholars’ expertise through certification programmes.

Establish national/regional Shari'ah advisory boards for standardized guidance

National or regional Shari'ah advisory boards should be established to serve as the highest authority on Shari'ah matters related to Takaful, providing consistent interpretations and rulings that can be applied across the sector. The structure and operation of these boards can be modelled after successful examples such as the Shariah Advisory Council of Bank Negara Malaysia or the Centralized Shari'ah Supervisory Board in Bahrain.

Key recommendations for establishing these boards include: (1) ensuring diverse representation of Shari'ah scholars from various schools of Islamic jurisprudence to promote broader acceptance of rulings; (2) implementing a transparent selection process for board members, emphasizing both religious expertise and understanding of modern financial practices;¹⁶² (3) defining clear mechanisms for issuing fatwas (religious rulings) and resolving conflicts between different interpretations; (4) establishing formal channels for communication and coordination with individual Takaful operators' Shari'ah boards;¹⁶³ and (5) developing a systematic approach for reviewing and updating Shari'ah standards in light of evolving market practices and technological innovations. These boards should collaborate with international Islamic finance standard-setting bodies such as AAOIFI and the IFSB to ensure they remain aligned with global best practices, while also addressing local market needs.¹⁶⁴

Develop comprehensive Shari'ah governance frameworks covering product approval to investments

Comprehensive Shari'ah governance frameworks (SGFs) should cover the entire spectrum of Takaful activity, from product approval to investments. These frameworks should provide a structured approach for ensuring Shari'ah compliance at every stage of the Takaful business cycle. Bank Negara Malaysia's

SGF could provide a useful reference for countries seeking to create these frameworks.¹⁶⁵

Key components of SGFs should include: (1) a clear delineation of roles and responsibilities for various stakeholders, including the board of directors, management, Shari'ah board and internal Shari'ah audit function; (2) detailed processes for product development and approval, ensuring Shari'ah compliance from conception to implementation; (3) guidelines for investment activities, specifying permissible asset classes, screening methodologies for equity, fixed income (Sukuk), real estate, commodities and other investments and principles for profit distribution; (4) protocols for ongoing Shari'ah monitoring and audit, including both internal and external review mechanisms; (5) procedures for addressing Shari'ah non-compliance incidents and implementing corrective actions; and (6) requirements for Shari'ah-related disclosures to enhance transparency and stakeholder confidence.¹⁶⁶ To operationalize these frameworks effectively, Takaful operators should invest in robust information systems that can track and report on Shari'ah compliance indicators in real time. Regulators should consider mandating regular external Shari'ah audits by qualified independent parties to provide an additional layer of assurance.

Build capacity of Shari'ah scholars and institutionalize certification programmes

Initiatives to increase capacity and formalize training need to take into account the depth of knowledge and breadth of expertise required in the rapidly evolving landscape of Islamic finance and insurance. A comprehensive and structured educational framework should be developed to enhance capacity among Shari'ah scholars. This framework should cover not only traditional Islamic jurisprudence but also modern financial concepts, risk management principles and the technicalities of insurance operations. AAOIFI has taken steps in this direction by offering professional certifications such as the Certified Shari'ah Adviser and Auditor

(CSAA) programme.¹⁶⁷ However, more specialized programmes focusing on Takaful are needed. These programmes should include modules on actuarial science, underwriting principles and emerging technologies in insurance, all contextualized within the framework of Islamic finance.

Continuous professional development (CPD) programmes should be mandated for certified Shari'ah scholars to ensure they stay updated on the latest developments in both Islamic jurisprudence and insurance practices. These programmes could include workshops on new Takaful products, case studies on complex Shari'ah issues and forums for discussing emerging challenges in the industry. To improve the practical relevance of Shari'ah scholarship, industry attachments or rotational programmes could be established, allowing scholars to gain hands-on experience in different aspects of Takaful operations.

Lastly, to address potential conflicts of interest and promote transparency, a centralized registry of certified Shari'ah scholars should be established, including their qualifications, areas of expertise and current appointments. This registry could be maintained by a recognized international body such as the IFSB or AAOIFI.

Addressing sociocultural barriers and building awareness

This section explores strategies to overcome misconceptions and cultural resistance that often work against the adoption of Takaful. By engaging communities, enhancing financial literacy and tailoring communication strategies to resonate with diverse audiences, the Takaful sector can foster a deeper understanding and appreciation of Shari'ah-compliant insurance, facilitating broader acceptance and uptake of Takaful services.

Understanding community perceptions and beliefs

Tailoring approaches to local contexts can help Takaful operators to better align their offerings with community values and increase acceptance across diverse populations. This section explores strategies for identifying cultural sensitivities, analysing religious viewpoints and improving gender inclusivity.

Conduct research to identify cultural sensitivities and barriers to Takaful

Overcoming sociocultural barriers to Takaful adoption requires a nuanced understanding of community perceptions and beliefs, which can vary significantly across different cultural contexts. In-depth qualitative studies have highlighted cultural sensitivities and barriers to Takaful acceptance. Religious compatibility has been shown to act as a strong motivator, while misconceptions about similarities to conventional insurance and lack of trust in financial institutions remain significant hurdles.¹⁶⁸ Similarly, cultural norms around financial decision-making within families have played a crucial role in Takaful uptake.¹⁶⁹ To effectively address these barriers, Takaful operators and regulators must invest in comprehensive market research that employs mixed-method approaches, including focus groups, surveys and ethnographic studies. This research should aim to uncover not only overt objections to Takaful but also subtle cultural nuances that may influence perception and adoption rates.

Analyse religious viewpoints and gaps in understanding Takaful concepts like risk-sharing

To develop effective awareness-building strategies, it is important to analyse different religious viewpoints and identify gaps in communities' understanding of Takaful concepts, particularly in relation to the

principle of risk-sharing. A systematic review of religious scholars' opinions on Takaful across different Islamic schools of thought revealed a general consensus that risk-sharing is permissible, but different views exist on specific operational aspects.¹⁷⁰ This highlights the need for Takaful operators to engage with local religious authorities to clarify and contextualize Takaful principles within specific cultural frameworks. Moreover, significant knowledge gaps exist on the fundamental differences between Takaful and conventional insurance, particularly in terms of risk-sharing mechanisms and profit distribution.¹⁷¹ To address these gaps, targeted educational campaigns should be developed that not only explain Takaful concepts in accessible language but also demonstrate their alignment with Islamic principles and local cultural values. These campaigns should leverage multiple channels, including social media, community workshops and partnerships with religious institutions, to ensure widespread reach and credibility.

Enhancing gender inclusivity

To broaden Takaful's inclusivity, it is crucial to confront gender-related barriers that limit women's access to financial services, particularly in conservative societies. Women often face challenges such as restrictive sociocultural norms and lack of financial literacy. Takaful operators should develop specific products tailored to the needs of women, offer micro-Takaful solutions for rural areas and implement targeted outreach programmes. Involving women in distribution and marketing through female-led networks can build trust and encourage adoption among female customers, thereby expanding the sector's reach and ensuring it meets the needs of all community members.

Building trust through community engagement

Cultivating strong community connections and providing accessible education can help Takaful operators to build lasting trust and encourage broader participation in Islamic insurance. This section highlights the importance of collaborating with local religious leaders, non-governmental organizations (NGOs) and community groups to enhance the credibility and acceptance of Takaful. It also emphasizes the need to develop multimedia content in local languages to effectively communicate core Takaful concepts.

Collaborate with local religious leaders, NGOs and community groups

Building trust through community engagement can help overcome sociocultural barriers to Takaful adoption. Working with local religious leaders, NGOs and community groups on outreach can significantly enhance the credibility and acceptance of Takaful products. Endorsements from respected religious figures positively influenced Takaful adoption intentions among Indonesian consumers, for example.¹⁷² Another key success factor in Indonesia has been forging partnerships with local NGOs. These collaborations, by leveraging established community networks, have demonstrably boosted Takaful penetration rates in rural areas.¹⁷³

To maximize the impact of these collaborations, Takaful operators should adopt a structured approach to stakeholder engagement, as proposed in Freeman's stakeholder theory.¹⁷⁴ To do so, they should map key influencers within the community, develop tailored engagement strategies and establish long-term partnerships that go beyond mere product promotion. For instance, co-creating financial literacy programmes with local NGOs or sponsoring community development initiatives can help build goodwill and trust.

Develop multimedia content in local languages explaining core Takaful concepts

Language barriers and complex financial terminology have been shown to be significant obstacles to Takaful understanding, for example among non-urban populations in Malaysia.¹⁷⁵ To address this issue, Takaful operators should invest in creating diverse, culturally sensitive content that caters to different learning styles and literacy levels. This could include animated videos explaining risk-sharing principles, infographics comparing Takaful with conventional insurance and interactive mobile apps that simulate Takaful scenarios. Research has demonstrated the effectiveness of multimedia approaches in financial education, with studies showing that visual and interactive content significantly improves financial literacy scores across diverse demographic groups.¹⁷⁶ When developing this content, principles of instructional design and cognitive load theory should be applied to ensure optimal learning outcomes.¹⁷⁷ Leveraging social media platforms and local influencers can amplify the reach and impact of these educational initiatives.

Regulatory reforms can help create a supportive environment for the Takaful sector. Key recommendations are developing comprehensive Takaful/Shari'ah-compliant mutual insurance regulations, integrating Takaful into national financial inclusion strategies and establishing a framework for harmonizing Shari'ah standards. Developing regulatory sandboxes to test innovative Takaful products and ensuring that regulations are adaptable to the evolving market needs will further bolster the sector's growth. Sociocultural barriers need to be addressed and public awareness must be increased to generate acceptance and improve the accessibility of Takaful products; given low insurance penetration rates in many Muslim-majority countries, Takaful's compliance with Shari'ah should provide a competitive advantage, which could be unlocked through better communication and collaboration with local actors. By embracing these regulatory and educational initiatives, the Takaful industry can ensure adherence to Shari'ah principles while encouraging innovation and growth, enhancing its appeal and utility for a wider audience.



4

Innovating for climate resilience

4

Takaful has significant potential to enhance climate adaptation and financial resilience for vulnerable communities facing escalating climate impacts. Global climate-related disasters caused over \$275 billion in economic losses in 2021, with events expected to displace 200 million people by 2050 if adaptation measures are not implemented. In Pakistan, for example, 2022 floods led to \$30 billion in damages, and with an insurance penetration of just 0.9 percent, most people were left unprotected.

For low-income populations globally, insurance penetration averages around 3 percent, and is even lower in Muslim-majority regions, where Takaful could align with cultural preferences. In Indonesia, for instance, insurance penetration is 1.8 percent, and in many sub-Saharan areas the rate is below even that low rate. Expanding Takaful coverage could fill this gap, protecting smallholder farmers, fishers, MSMEs and low-income households. By bridging this gap, Takaful operators can not only foster financial security but also support climate resilience, addressing critical needs in underserved regions and driving sustainable recovery.

This section focuses on practical steps that operators can take to develop innovative Takaful products that address the increasing risks associated with climate change. It explores how Takaful operators can design and implement Takaful solutions that not only comply with Shari'ah principles but also provide substantial support for communities vulnerable to climate-related shock events. Emphasizing a client-centric approach, this section discusses the development of parametric and other tailored products through collaborative, human-centred design processes.

These innovations can enhance climate resilience, offering crucial protection to those most impacted by climate-related shocks and environmental changes.

Conducting a client-centric needs assessment

Carrying out a client-centric needs assessment is the first step in developing effective Takaful products that address climate resilience, including parametric products, in which payouts are made based on predetermined weather or climate indicators rather than actual losses sustained.

Use bottom-up exercises to segment clients by climate risk exposures

Bottom-up exercises include community-level assessments using participatory and climate-risk vulnerability mapping, seasonal calendars and historical event timelines. They can enable operators to identify specific climate risks faced by different groups (e.g., drought for farmers, floods for urban dwellers). Geographic Information Systems (GIS) data and historical climate analysis can then be integrated to create risk maps and assess future trends. Combining scientific data with local knowledge allows Takaful operators to gain a comprehensive risk profile for client segments, which can then be used to develop relevant and effective climate resilience products.

Use focus groups to generate an understanding of risk perceptions, coping strategies and willingness-to-pay

Focus groups facilitate the design of Takaful products that resonate with target communities and align with their existing risk management practices. Structured discussions in focus groups, using scenarios and visuals, can stimulate dialogue about climate risks, past experiences and existing risk management practices, surfacing valuable information on informal risk-sharing and traditional coping strategies. Willingness-to-pay can apply not just to premiums but to preferred payment frequencies and methods. Focus groups can also help to identify potential barriers such as mistrust in financial institutions or misunderstandings about Shari'ah compliance. These insights can provide the basis for developing relevant and accessible Takaful products aligned with clients' needs and financial capabilities.

Using human-centred design

Human-centred design (HCD) is an approach to product development that puts end users first, making it especially useful for addressing the complex needs of vulnerable populations in developing innovative Takaful products for climate resilience.

Co-create parametric product concepts through inclusive design workshops

Inclusive design workshops, organized by Takaful regulators, can bring together diverse stakeholders groupings (policyholders, Takaful experts, risk specialists, value chain players and regulators) in a two-phase process. Takaful regulators are essential for organizing the co-creation of parametric Takaful product workshops, as these align with government development priorities. Their leadership ensures compliance with national strategies, fosters innovation and builds trust by bringing together key stakeholders,

bridging market needs with policy objectives and addressing systemic risks like climate change.

Phase 1 focuses on education, ensuring all participants understand parametric insurance and local climate risks. In phase 2, brainstorming and design thinking are used to generate parametric Takaful product ideas. The workshops can also address implementation challenges. This inclusive approach helps Takaful operators create parametric products that are not only technically sound but also culturally relevant and appealing to the target market.

Ensure empathic product design with personas and journey maps

Personas, built from client segmentation and focus group data, represent archetypal clients with demographics, financial situations, risk exposures and attitudes towards insurance and Islamic finance. Journey maps, created for each persona, detail the individual's experiences before, during and after climate events. These maps highlight touchpoints with financial services, decision-making processes, pain points and emotions. Understanding these elements of the customer journey can help Takaful operators to identify opportunities for product intervention and service improvement.

Prototype simple, easy-to-grasp covers with complementary services

Prototyping is the final step in the HCD approach for Takaful product innovation. Prototypes should focus on clear policy terms and triggers, explained in plain language with visuals. Parametric triggers based on verifiable data (e.g., rainfall) simplify claim processes. Adding value beyond financial protection is crucial, so operators should consider including complementary services like weather alerts and early warning systems, agricultural advice or access to climate-resilient inputs (e.g. seeds). Digital tools (such as mobile apps, SMS) can improve accessibility and support knowledge-sharing.

Implementing iterative prototyping and closing feedback loops

An iterative prototyping process, incorporating feedback from potential clients and stakeholders, can enable designs to be refined before full-scale implementation, ensuring that products are fully Shari'ah-compliant and effectively meet client needs.

Understand customer needs through iterative prototyping

This step involves close collaboration with target customers such as smallholder farmers, fishers and vulnerable households to understand their specific needs. Operators in this phase also engage with Re-Takaful companies to ensure products align with their capacities and risk appetite, as well as with intermediaries to ensure effective distribution outreach, and with technology solution providers to ensure timely and seamless support.

Prototypes showcase key features such as parametric triggers, payouts and complementary services. Feedback is gathered from vulnerable communities through various methods, including surveys, focus groups and interviews, with a focus on value proposition, affordability and distribution preferences. This user-centred approach allows for rapid product refinement based on real-world input, so that Takaful offerings effectively address climate risks and comply with Shari'ah principles.

Refine products based on client inputs before pilot testing

Taking the time to make changes based on feedback before the commencement of pilot projects can substantially increase the likelihood of success when the product is launched in the market. This process involves analysing the feedback received, identifying common themes or issues and making the necessary adjustments to the product design, pricing structure

or distribution strategy. For instance, client feedback might show that certain elements of the Takaful product are difficult to understand, and as a result, operators could redesign communication materials or simplify policy terms. Pricing feedback could inform the development of more flexible premium payment options, or could lead to bundling the Takaful product with other financial services. Distribution preferences can guide decisions on whether to prioritize digital channels, leverage existing community structures or partner with local organizations for product delivery. Real-world experience shows that iteratively refining Takaful products based on user feedback leads to higher adoption rates and products that better address local risk management needs.¹⁷⁹ So, thoroughly refining products based on client inputs before moving to pilot testing can enable Takaful providers to minimize the risk of launching products that fail to meet market needs and maximize the potential for successful scaling.

Learning from successful initiatives and cases

Learning from successful initiatives in Takaful product innovation for climate resilience can supply valuable insights into the design features, impact outcomes and marketing strategies that are likely to be most effective.

Adopt proven design features

Parametric insurance has been shown to be a particularly promising approach for climate-related Takaful products. For instance, the R4 Rural Resilience Initiative, implemented across several African countries, uses a combination of satellite data and ground measurements to trigger payouts for drought-affected farmers.¹⁸⁰

Risk pooling mechanisms, such as those used by the African Risk Capacity (ARC), have demonstrated

how countries can collectively manage climate risks more effectively than they could individually.¹⁸¹ Product bundling, where Takaful is combined with other financial services or risk reduction measures, has also shown promise. For example, the Agriculture and Climate Risk Enterprise (ACRE) in East Africa bundles parametric insurance with agricultural inputs, increasing uptake and improving agricultural productivity.¹⁸²

Study impact stories from successful Takaful and Islamic microinsurance initiatives

Success stories provide evidence of better risk protection and improved resilience outcomes for vulnerable communities. A study on parametric livestock insurance in Kenya, for example, found that compared to uninsured households, insured households were better able to smooth consumption and protect their assets during drought periods.¹⁸³ In Bangladesh, a parametric insurance programme implemented by Oxfam and supported by Swiss Re demonstrated how timely payouts could help communities recover more quickly from flood events, with insured households reporting lower levels of post-disaster debt and faster resumption of economic activities.¹⁸⁴ The IBLI (Index-Based Livestock Insurance) project in Ethiopia and Kenya has shown how Takaful-compatible parametric insurance can not only protect pastoralists against drought-related livestock losses but also contribute to broader economic resilience by enabling continued investment in productive activities even in the face of climate uncertainty.¹⁸⁵

Choose marketing strategies that generate awareness and build trust

Given the low levels of insurance literacy in many target markets, effective marketing strategies are essential to success for climate resilience Takaful products. Financial education and clear communication can drive insurance uptake among low-income populations.¹⁸⁶ In conventional insurance, successful

approaches have often involved partnerships with trusted local institutions and community leaders. For instance, the Kilimo Salama (Safe Agriculture) programme in Kenya and Rwanda partnered with agro-dealers and used mobile technology to deliver insurance, which significantly increased trust and adoption rates.¹⁸⁷ The use of innovative communication channels, such as radio shows, mobile apps and community theatre, has proven effective in raising awareness and building trust: for example, educational radio programming was shown to significantly increase farmers' understanding and uptake of parametric insurance products in Senegal.¹⁸⁸ These approaches could also be applied to Takaful products. Transparency in product design and claims processes, coupled with rapid and reliable payouts, has also been identified as critical for building and maintaining trust in insurance/Takaful products for climate resilience.¹⁸⁹

Devising an implementation road map

A road map to implement climate-related Takaful products should consider hypothetical product scenarios, operational requirements and stakeholder cooperation across various phases of development.

Develop hypothetical product scenarios

Hypothetical scenarios can be developed for climate-related risks such as droughts, floods and sea-level rise, taking into account the specific vulnerabilities of target populations and the unique characteristics of each risk type. These hypothetical scenarios should be developed in close consultation with climate risk experts, local communities and Takaful experts to ensure they accurately reflect local risk profiles and adhere to Shari'ah principles.

For drought scenarios, parametric Takaful products that trigger payouts based on rainfall deficits or

vegetation indices have shown promise.¹⁹⁰ Flood scenarios might use a combination of satellite imagery and river gauge data to determine payout thresholds, as demonstrated by the successful meso-level flood parametric insurance programme in Bangladesh.¹⁹¹ For slow-onset events like sea-level rise, parametric products could be designed with long-term triggers based on tidal gauge measurements or satellite altimetry data, potentially combined with relocation assistance or adaptation measures.¹⁹²

majority countries and are tailored to address specific climate threats in diverse contexts. One hypothetical scenario, for example, might be a drought-resistant crop Takaful programme in Kenya, which could safeguard smallholder maize farmers against unpredictable rainfall patterns. Similarly, a hypothetical urban flood Takaful initiative in Pakistan could offer crucial financial support to flood-prone villages, mitigating the impact of monsoon-induced flooding on households. Long-term sea-level rise Takaful products could be developed for coastal communities, building resilience among fishing families facing gradual environmental changes.

Creating hypothetical scenarios can help operators to conceive of Takaful products that protect vulnerable communities across developing Muslim-

Hypothetical scenarios for climate change-related Takaful products



- | | |
|---|---|
| 1 | <p>Drought scenario:</p> <ul style="list-style-type: none"> • Community: 1,000 pastoralists in Wajir region of Kenya’s Northern Province • Risk: Recurring droughts leading to livestock mortality and decreased productivity • Product: Livestock Takaful for Drought Protection |
| 2 | <p>Drought scenario:</p> <ul style="list-style-type: none"> • Community: 5,000 smallholder maize farmers in a village in Kenya’s Eastern Province • Risk: Crop losses due to lower-than-expected rainfall • Product: Maize Crop Takaful for Drought Protection |
| 3 | <p>Flood scenario:</p> <ul style="list-style-type: none"> • Community: 5,000 households in a flood-prone village near D.G. Khan Punjab Province in Pakistan • Risk: Monsoon-induced flooding from River Indus • Product: Urban Flood Takaful for Homeowners |
| 4 | <p>Sea-level rise scenario:</p> <ul style="list-style-type: none"> • Community: 5,000 fishers and their families in a coastal village in Cox’s Bazar in Bangladesh • Risk: Gradual sea-level rise, increased storm surge, saltwater intrusion • Product: Coastal Community Resilience Takaful |

Key stakeholders and their role in Takaful climate risk product development:

Design:	<ul style="list-style-type: none"> • Takaful operators and Shari'ah scholars: Develop product structures and risk triggers. • Climate risk experts and local community leaders: Identify specific climate risks and community needs.
Pilot:	<ul style="list-style-type: none"> • Regulators and local government: Approve pilot programme, facilitate stakeholder engagement. • Re-Takaful providers: Provide risk transfer capacity and expertise. • Tech partners: Develop digital solutions for data collection, payouts and communication.
Scale-up:	<ul style="list-style-type: none"> • National government agencies: Integrate Takaful programme into broader climate resilience strategies. • International development organizations: Provide funding, technical assistance and knowledge-sharing. • Media outlets: Raise public awareness and encourage participation in Takaful programmes.

1

Drought scenario (Livestock): Kenya

Product: Livestock Takaful for Drought Protection

Context:	<ul style="list-style-type: none"> • 1,000 pastoralists in Wajir region of Kenya's Northern Province • Average herd size: 50 animals (mixture of cattle, goats and sheep) • Main risk: Recurring droughts leading to livestock mortality and decreased productivity
Product features:	<ul style="list-style-type: none"> • Parametric trigger: Average livestock weight below a pre-determined threshold (e.g., 50% of normal weight) during a specific drought period (e.g., June–August) • Payout structure: <ul style="list-style-type: none"> – 50% payout if average weight is 75–90% of normal weight – 100% payout if average weight is below 75% of normal weight • Coverage: Up to 80% of estimated livestock value • Contribution: 3% of sum insured, with government subsidy of 50% • Bundled services: Drought-resistant livestock breeds, access to veterinary care and early warning systems
Operational requirements:	<ul style="list-style-type: none"> • Data: Satellite-based vegetation monitoring data, historical livestock weight data and livestock census data • Tech: Mobile app for registration, claims and data collection, GPS tracking devices for livestock (if available) • Distribution: Partnership with local pastoralist associations and community leaders and NGOs • Regulation: Approval from Insurance Regulatory Authority and Takaful Advisory Council

2

Drought scenario (Crop): Kenya

Product: Maize Crop Takaful for Drought Protection

- Context:**
- **5,000 smallholder maize farmers** in a village in Kenya's Eastern Province
 - **Average farm size:** 2 acres
 - **Main risk:** Recurring droughts affecting crop yield

- Product features:**
- **Parametric:** Cumulative rainfall below 250mm during the critical growing period (March–May)
 - **Payout structure:**
 - 70% payout if rainfall is 150–250mm
 - 100% payout if rainfall is below 150mm
 - **Coverage:** Up to 80% of expected crop value
 - **Contribution:** 5% of sum insured, with government subsidy of 50%
 - **Bundled services:** Drought-resistant seed varieties, SMS-based weather forecasts

- Operational requirements:**
- **Data:** Satellite-based rainfall data, historical yield data
 - **Tech:** Mobile app for registration and claims, automated weather stations
 - **Distribution:** Partnership with local agricultural cooperatives
 - **Regulation:** Approval from Insurance Regulatory Authority and Takaful Advisory Council

3

Flood scenario: Pakistan

Product: Urban Flood Takaful for Homeowners

- Context:**
- **5,000 households** in a flood-prone village near D.G. Khan
 - **Average home value:** 2 million Pakistan rupee (PKR, approx. \$7,000)
 - **Main risk:** Monsoon-induced flooding from River Indus

- Product features:**
- **Trigger:** River water level exceeding 5 metres at local gauge station
 - **Payout structure:**
 - 50% payout at 5–6 metres
 - 75% payout at 6–7 metres
 - 100% payout above 7 metres
 - **Coverage:** Up to 60% of home value for structural damage, plus PKR 100,000 for contents
 - **Contribution:** 3% of sum insured annually
 - **Included services:** Emergency evacuation assistance, temporary housing support

- Operational requirements:**
- **Data:** Real-time river level data, flood risk maps
 - **Tech:** IoT sensors for water level monitoring, blockchain for transparent claims processing
 - **Distribution:** Through local Islamic banks and mosque committees
 - **Regulation:** Approval from Securities and Exchange Commission of Pakistan, alignment with National Disaster Management Authority guidelines

4

Sea-level rise scenario: Bangladesh

Product: Coastal Community Resilience Takaful

Context:	<ul style="list-style-type: none"> • 5,000 fishers and their families in a coastal village in Cox’s Bazar • Average annual income: 150,000 Bangladeshi taki (BDT, approx. \$1,400) • Main risks: Gradual sea-level rise, increased storm surge, saltwater intrusion
Product features:	<ul style="list-style-type: none"> • Trigger: Combination of sea-level rise measurements and impact indicators (e.g., salinity levels in soil, frequency of tidal flooding) • Payout structure: <ul style="list-style-type: none"> – Annual resilience dividend: 5% of sum insured for adaptation measures – Relocation payout: 100% of sum insured if village becomes uninhabitable • Coverage: Up to 5 years of average income (BDT 750,000) • Contribution: 4% of sum insured annually, with 60% government subsidy • Included services: Livelihood diversification training, mangrove restoration projects
Operational requirements:	<ul style="list-style-type: none"> • Data: Long-term sea-level projections, socioeconomic vulnerability assessments • Tech: GIS mapping for risk assessment, mobile-based financial literacy tools • Distribution: Partnership with local NGOs and fishers’ associations • Regulation: Approval from Insurance Development and Regulatory Authority Bangladesh, coordination with Ministry of Environment, Forest and Climate Change

These are hypothetical scenarios, but they demonstrate the adaptability of Takaful in meeting climate challenges. This innovative approach has the potential to offer a vital lifeline to communities on the front lines of climate change.

Consider operational requirements for implementing climate resilience Takaful products

Operational requirements include data, technology, distribution and regulatory requirements. For parametric products, access to high-quality, long-term climate data is essential, along with the ability to process these data in near real-time.¹⁹³ This may necessitate partnerships with national meteorological agencies, satellite data providers

or specialized climate data firms. Technological infrastructure is needed to support product design, risk modelling, policy issuance and claims processing. This could include the use of blockchain technology for transparent and efficient claims settlement, as explored by Allianz in their blockchain-based catastrophe bond products.¹⁹⁴ Distribution channels must be tailored to the target market, which could involve leveraging mobile technology, microfinance institutions or agricultural cooperatives to reach rural and low-income populations.¹⁹⁵ Regulatory requirements vary by jurisdiction but generally involve issues of consumer protection, capital adequacy and Shari’ah compliance. The development of specific Takaful regulations, as seen in countries like Bahrain and Malaysia, can provide a supportive framework for product innovation.

Facilitate stakeholder cooperation across the design, pilot and scale-up phases

In the design phase, collaboration between Takaful operators, climate risk experts and community representatives can help develop products that are both technically sound and culturally appropriate.¹⁹⁶ Reinsurance or Re-Takaful partners provide risk capacity and technical expertise. During the pilot phase, local distribution partners such as microfinance institutions or agricultural extension services can help reach target populations and provide education on the new products.¹⁹⁷ Regulatory bodies should be engaged early to ensure compliance and potentially develop supportive policy frameworks. In the scale-up phase, technology partners become increasingly important for efficiently managing larger portfolios and processing claims. International organizations and development agencies may provide initial risk capital, facilitate knowledge-sharing and support impact assessment.¹⁹⁸ Throughout all phases, continuous engagement with the target community is crucial for building trust, gathering feedback and refining the product offering.



5

Conclusion and recommendations

5

The Takaful sector is at a critical juncture, with significant growth opportunities in Central Asia, the Middle East, North Africa, South-East Asia and West Africa. Its expansion is driven by growing populations, rising incomes in Muslim-majority countries and an increasing awareness of climate-related risks. The sector's ability to provide Shari'ah-compliant financial protection presents a unique opportunity to enhance financial inclusion and resilience in emerging markets, and to protect vulnerable groups from the worsening impacts of climate change.

To fully develop the sector and its capacity to contribute to sustainable development, the Takaful industry requires strategic support to address key challenges. Critical priorities must be improving market penetration, modernizing operational and technological infrastructure, building technical in-country capacity on design and delivery of Shari'ah-compliant parametric solutions and developing the capacity to underwrite large-scale risks, particularly those related to climate change. Expanding Re-Takaful capacity, increasing consumer awareness and navigating complex regulatory environments are essential for further growth. Developing new and innovative climate resilience products integrated into the business model of agricultural value chain players can help bolster financial protection among vulnerable groups as well as contributing to growth for Takaful operators.

The sustainability and expansion of the Takaful industry also depends on the development of supporting functions. Enhanced reinsurance solutions, integrated payment systems and advanced data and technology infrastructure are vital for

improving operational efficiencies and customer satisfaction. Expanding distribution channels and enhancing client servicing and marketing strategies will help reach untapped markets and meet the diverse needs of existing customers.

Regulatory reforms, as outlined in this report, provide a road map for creating an enabling environment for Takaful expansion. Clear, tailored regulations under regulatory sandbox modalities must be developed to support product innovation while ensuring compliance with Shari'ah principles. Integrating Takaful into national financial inclusion strategies and harmonizing Shari'ah standards across jurisdictions will further solidify the sector's foundation and encourage wider adoption.

By focusing on risk management, digital innovation and regulatory harmonization, the full potential of Takaful can be unlocked. This approach will not only strengthen the financial sector but also significantly contribute to broader development goals such as poverty reduction, disaster and climate resilience and sustainable economic growth in key regions around the world.

Recommendations for stakeholders

The collaboration of all stakeholders in this effort is essential. Government entities, industry associations, Takaful operators, community organizations and technical assistance partners must work together to promote Takaful. Effective policy support, enhanced governance and active community engagement are

needed to expand the reach of Takaful services and educate potential customers about their benefits.

Governments and regulatory bodies need to provide policy support and foster public-private coordination to foster the growth of the Takaful industry. Governments should develop comprehensive national strategies that recognize Takaful as an integral part of the financial ecosystem, aligning it with broader economic and social development goals. This could include implementing favourable tax policies, such as tax incentives for Takaful operators and tax deductions for policyholders, to stimulate market growth. Meanwhile, integrating Takaful into national financial literacy programmes and social protection schemes can boost awareness and adoption. Regulatory bodies should establish clear, tailored frameworks for Takaful operations, addressing issues such as risk-sharing models and Shari'ah compliance.

Public-private partnerships can be leveraged to develop innovative Takaful products, particularly in underserved sectors or for addressing national priorities like disaster risk management. Governments can also facilitate the creation of centralized climate data platforms, enabling better risk assessment and product pricing across the industry. Regular dialogue forums between government entities, Takaful operators and other stakeholders should be established to ensure responsive policymaking.

Industry associations and self-regulatory bodies should focus on developing and promoting industry standards, best practices and ethical guidelines to enhance operational efficiency and market credibility. They can serve as knowledge hubs, conducting and disseminating research on market trends, consumer behaviour and emerging risks specific to Takaful. They can facilitate collaboration among members on shared challenges, such as developing common technological platforms or conducting joint awareness campaigns. Associations should establish professional certification programmes and continuous education initiatives to upgrade the skills and expertise of Takaful professionals.

Associations and self-regulatory bodies can also act as intermediaries between the industry and regulators, providing valuable input on policy formulations and representing the sector's interests in regulatory discussions. Self-regulatory mechanisms, such as voluntary codes of conduct and peer review processes, can complement formal regulations and foster a culture of accountability.

These organizations can help to leverage Takaful to protect against the impacts of climate change by developing frameworks for climate-based parametric Takaful and promoting sustainable investment practices. On the international front, they can forge partnerships with similar organizations globally to exchange knowledge and promote the Takaful concept.

Takaful operators in partnership with NGOs and community organizations can extend the reach and impact of Takaful initiatives, particularly in underserved areas and among marginalized populations. These organizations often have deep-rooted connections and trust within communities, making them ideal partners for raising awareness about Takaful concepts and benefits. NGOs and Takaful operators should work together to develop and deliver tailored financial literacy programmes that incorporate Takaful principles, ensuring the content is culturally sensitive and easily understood.

Community organizations can serve as effective distribution channels for micro-Takaful products, helping to increase penetration rates among low-income groups. They can also gather grassroots feedback on product design and customer needs, enabling Takaful operators to refine their offerings. Partnerships with NGOs can facilitate the development of innovative Takaful solutions addressing specific community challenges, such as agricultural risks or health coverage, through participation in human-centred design initiatives. NGOs and community organizations can also assist in claims processes, particularly in remote areas, by acting as intermediaries between policyholders and Takaful operators.

Technical assistance partners, including multilateral development banks, development agencies and representatives of academia, can advance the Takaful industry by providing specialized expertise and resources. They should focus on addressing key capacity gaps within the sector, first helping to create the enabling environment and then supporting Takaful operators to scale up by jointly developing and implementing advanced technological solutions, including AI-driven underwriting systems and blockchain-based claims processing platforms. To do this, they could offer tailored training programmes to improve the skills of Takaful professionals in areas such as actuarial science and risk management. They could contribute to the creation of standardized operational frameworks and best practice guidelines, helping to professionalize the industry. They could facilitate knowledge transfer by organizing study tours, workshops and mentorship programmes, connecting Takaful operators with international experts and successful models from other markets.

Technical assistance partners should also support evidence-based research initiatives to drive innovation in product development and market expansion strategies. In collaboration with local stakeholders, they can support the design and

implementation of pilot projects for new Takaful models or products, particularly those aimed at addressing socioeconomic challenges.

Takaful partners with climate adaptation initiatives can explore integrating Shari’ah-compliant parametric insurance into climate adaptation services through a bundling approach to enhance resilience while aligning with Islamic values. These modalities could include bundling parametric insurance with other climate adaptation tools such as drought-resistant seeds, water-saving irrigation solutions and early warning systems to offer comprehensive protection for smallholder farmers and vulnerable communities. Parametric insurance should be structured to provide rapid payouts based on predefined triggers, enabling quick recovery from climate shocks, while bundled resources support longer-term adaptation. This holistic package can be delivered in collaboration with agricultural food system partners.

The way forward

Looking ahead, the Takaful industry, along with key stakeholders, may focus on several strategic initiatives:

INITIATIVES	STAKEHOLDER’S ROLE
<p>Innovation in product design: Develop and introduce innovative Takaful products that address emerging risks, particularly those related to climate change. This includes designing parametric insurance products that are simple, transparent and tailored to the needs of vulnerable populations.</p>	<p>Takaful operators: Develop and introduce innovative products, partnering with climate risk modelling experts and technology providers.</p>
	<p>Regulators: Create an enabling regulatory environment that supports product innovation and experimentation.</p>
	<p>Shari’ah scholars: Provide guidance on the Shari’ah compliance of innovative product designs.</p>
	<p>Climate risk experts: Collaborate to develop products tailored to specific climate risks.</p>

INITIATIVES	STAKEHOLDER'S ROLE
<p>Digital transformation: Accelerate the adoption of digital technologies to streamline operations and improve customer interactions. This involves embracing digital distribution channels and leveraging technologies such as AI and blockchain for better risk management and service delivery.</p>	<p>Takaful operators: Invest in technology infrastructure, develop digital platforms and train staff on digital tools.</p>
	<p>Technology providers: Offer specialized solutions for Takaful operations, such as AI-powered underwriting and claims processing.</p>
	<p>Regulators: Facilitate digital transformation by providing clear guidelines and supporting regulatory sandboxes for testing innovative technologies.</p>
<p>Enhancing financial literacy and consumer awareness: Implement comprehensive educational programmes that improve understanding of Takaful principles and products. This will help dispel misconceptions and foster trust among potential customers.</p>	<p>Takaful operators: Develop educational materials, conduct awareness campaigns and provide training for agents.</p>
	<p>Industry associations: Collaborate with Takaful operators to promote financial literacy initiatives.</p>
	<p>Governments: Support financial literacy programmes through public awareness campaigns and educational institutions.</p>
<p>Strengthening regulatory frameworks: Continue to refine regulatory frameworks to ensure they are supportive of Takaful's unique business model while encouraging innovation and protecting consumers.</p>	<p>Regulators: Review and update regulations to support Takaful innovation and consumer protection.</p>
	<p>Industry associations: Engage with regulators to provide feedback and advocate for supportive policies.</p>
	<p>Shari'ah scholars: Advise on regulatory frameworks to ensure Shari'ah compliance.</p>
	<p>International standard-setting bodies: Develop global standards, provide technical assistance, advocate for supportive policies and promote harmonization in Takaful regulation.</p>

INITIATIVES	STAKEHOLDER'S ROLE
<p>Fostering international collaboration: Encourage international cooperation among Takaful operators and regulatory bodies to share best practices, develop standardized approaches and promote global growth of the sector.</p>	<p>Takaful operators: Participate in international forums and networks to share best practices and explore cross-border collaborations.</p>
	<p>Industry associations: Facilitate international cooperation and knowledge exchange among Takaful operators.</p>
	<p>Governments: Support international initiatives and agreements related to Takaful development.</p>
	<p>International organizations: Provide technical assistance, coordination, funding and research to support Takaful development globally.</p>
<p>Piloting innovative products: Encourage the piloting of new Takaful models and products, particularly in underserved markets or for emerging risks like climate change. This approach allows for testing and fine-tuning before broader implementation, helping to minimize risks and ensure that new offerings are well-suited to market needs.</p>	<p>Takaful operators: Identify underserved markets and develop pilot programmes for new Takaful products.</p>
	<p>Development agencies: Provide technical assistance, facilitate partnerships, promote awareness, advocate for policies and fund pilot programmes to support Takaful innovation and growth.</p>
	<p>Regulators: Create regulatory sandboxes or pilot programmes to test innovative products in a controlled environment.</p>
	<p>Shari'ah scholars: Provide guidance on the Shari'ah compliance of pilot products.</p>
	<p>Technology providers: Collaborate to develop and test innovative product features.</p>
<p>Climate risk experts: Provide insights and data to inform product design and risk assessment.</p>	

Targeted technical assistance and knowledge transfer are needed to achieve these goals. To facilitate this, stakeholders could consider:

Establishing knowledge-sharing platforms and communities of practice, to help ensure innovation and continuous improvement in the Takaful industry.

These platforms should be designed to facilitate the exchange of ideas, best practices and lessons learned among industry professionals, regulators and academics. A centralized online portal could serve as a repository for research papers, case studies and industry reports, making valuable information easily accessible to stakeholders. Regular

webinars, virtual conferences and discussion forums could enable real-time knowledge-sharing and problem-solving across geographical boundaries. Communities of practice focused on specific areas such as product development, risk management or Shari'ah compliance could drive deeper, specialized discussions and collaborations. Platforms and communities of practice could incorporate mentorship programmes, pairing experienced professionals with newcomers to facilitate knowledge transfer.

Facilitating cross-learning and replication of successful models, to drive growth and maturity in the Takaful industry across different regions and markets. Stakeholders could establish structured programmes for knowledge exchange between mature and emerging Takaful markets. This could include organizing study tours, secondment programmes and twinning arrangements between Takaful operators in different countries. Industry associations and regulators could collaborate to create a global database of case studies highlighting successful Takaful models, innovative products and effective regulatory frameworks. Regular international conferences and workshops sharing best practices and discussing adaptation strategies for different market contexts can support a culture of continuous improvement. Developing a standardized framework for assessing and documenting successful Takaful models could facilitate easier replication and adaptation across markets, while encouraging joint research projects between academic institutions and Takaful operators from different regions could

lead to more robust and globally applicable insights. Establishing a mentorship programme that pairs experienced Takaful professionals with those in developing markets could provide personalized guidance for implementing successful strategies.

Establishing a global Takaful Alliance that could effectively drive these initiatives forward and ensure the sector's cohesive development. The primary objective of this Alliance would be to harness public-private collaboration to scale Takaful solutions that responds to Muslim communities and countries' needs, enhancing their long-term financial resilience to rising risks. The Alliance would serve as a central hub for coordination, product development, research, global advocacy and support across all facets of the Takaful industry. The Alliance could act as a nexus for stakeholders, facilitating collaboration between government entities, Takaful operators, industry associations, Takaful supervisors, research institutes and community organizations, in addition to donors, foundations and philanthropies. It would spearhead research initiatives, develop best practices and provide a global platform for knowledge-sharing and capacity-building.

Working together, stakeholders can ensure that the full potential of Takaful is realized, enabling the sector to remain relevant, competitive and aligned with the needs of its consumers, while contributing to global economic growth and resilience in the face of the challenges to come.

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