Africa Insurance Pulse 2024

Disaster Resilience

Published by

African Insurance Organisation

Published by

African Insurance Organisation

Prepared by

faber

SUBSTANCE IS
OUR STRENGTH

For more information about Faber Consulting AG,
please visit: www.faberconsulting.ch

Cover illustration: Photo by Peeterv on istockphoto

Africa Insurance Pulse 2024, published June 2024

African Insurance Organisation
30, Avenue de Gaulle
P. O. Box 5860
Douala, Cameroon
Telephone: (237) 233 42 01 63
E-mail: aio@africaninsurance.net
Website: www.african-insurance.org

To download a soft copy of the report, please visit:
www.african-insurance.org

Content

Foreword African Insurance Organisation

Dear Members,

It is with great pleasure that I present to you the 2024 edition of the «Africa Insurance Pulse». This year, our focus is on disaster resilience, a theme of paramount importance. The urgency and relevance of this topic are evident given the climatic challenges and other major disasters that our continent has recently confronted.

Africa remains the most susceptible continent to climate change globally. As we write this edition, the Horn of Africa and Southern Africa are experiencing their most severe drought in four decades, droughts that are devastating agricultural outputs and livelihoods. Concurrently, East Africa is grappling with extreme floods triggered by persistent heavy rainfall. These events, exacerbated by the El Niño phenomenon, highlight the transnational nature of climate risks and underscore the necessity for collaborative regional and international risk mitigation strategies.

The African Insurance Organisation (AIO) was established with the recognition that risks know no borders and that unity strengthens our capacity to manage these risks. By pooling our knowledge and promoting integrated, sustainable risk management solutions, we aim to forge a more resilient future for Africa.

Insurance and reinsurance professionals, as experts in risk management, play an indispensable role in enhancing Africa's disaster resilience. While we have made significant strides in this area, there remains a substantial gap between our current capabilities and the full potential of our sector. The aim of this edition of the «Africa Insurance Pulse» is to stimulate meaningful discussions that could lead to effective solutions to address the protection gaps on the African continent.

I extend my heartfelt appreciation to all the re/insurance professionals who dedicated their time and expertise to contribute to this publication. Their valuable insights and robust recommendations are instrumental in advancing our collective goal of bolstering disaster resilience across the continent. As we move forward, let us commit to leveraging the knowledge shared in these pages to better protect the people and economies of Africa against the increasing frequency and severity of disaster risks.

Thank you for your continued support and engagement. I trust you will find this edition both informative and inspiring.

Yours,
Benhabiles Chérif
President of the African Insurance Organisation

«Insurance is poised to redefine disaster risk management in Africa. With advanced risk knowledge and robust financial protection mechanisms, the sector goes beyond a mere safety net and actively builds resilience across the continent. In the face of increasing threats from climate change, natural disasters and other catastrophic events, insurance can play a vital role in filling significant gaps in risk protection, thereby reducing the burden on African governments. These risk transfer solutions not only support recovery, but also promote proactive preparedness, minimising economic disruption and enhancing community stability.»

«By placing insurance at the heart of disaster preparedness strategies, and with appropriate regulatory support, the insurance industry can help to ensure that Africa's vibrant communities and economies thrive. Using insurance to build disaster resilience is essential and a critical step in our collective efforts to build a safer and more resilient Africa.»

Jean Baptiste Ntukamazina
Secretary General of the African Insurance Organisation

Methodology

Faber Consulting AG, a research, communications and business development consultancy based in Zurich, Switzerland, extends its sincere appreciation to the AIO and the African re/insurance industry for their unwavering support over the past eight years. This collaboration has been crucial in establishing the «Africa Insurance Pulse» as a reputable source of information on risk and insurance market trends across the continent.

The insights in this report are derived from thorough desk-top research and in-depth interviews with re/insurance professionals. For this edition, Faber Consulting conducted interviews with 22 senior executives from 19 leading insurers, reinsurers and brokers operating in Africa. These interviews, carried out between March and April 2024, focused on evaluating disaster resilience and the insurance industry's role in enhancing this resilience across the continent.

We are extremely grateful to the following companies who kindly participated in this research:

- Africa Re
- Africa Specialty Risks
- Allianz Re
- CAT Assurance et Réassurance
- Compagnie Centrale de Réassurance
- Continental Re
- Custodian Investment
- EllGeo Re
- Ethiopian Re
- Gallagher Re
- NamibRe
- Munich Re
- PartnerRe
- Santam Re & International
- Société Nationale d'Assurance
- Swiss Re
- Trust Re
- Tunis Re
- ZEP-RE

Executive summary

Africa's urgent need for disaster resilience

Africa, the world's second-fastest growing economic region, faces serious risks from geopolitical tensions, regional conflicts and extreme weather and climate hazards. The continent's high vulnerability to disasters, as detailed by the IPCC, World Risk Report 2023 and other studies, underscores the need for improved infrastructure resilience and support for vulnerable populations to mitigate the negative impact of disasters on Africa's economic and social progress.

Severe weather damage costs far exceed the cost of mitigating climate risks

The average rate of warming in Africa has accelerated in recent decades and is now higher than the global average. According to a study published in the journal Nature, average global incomes are expected to fall by almost a fifth by 2050 as a result of climate change. The study predicts that rising temperatures, increased rainfall and more frequent and severe weather events will cause USD 38 trillion in annual damages worldwide by mid-century, compared to the USD 6 trillion cost of limiting global warming to 2°C.

Specifically for Africa, the study predicts a 22% drop in average incomes by 2050 – higher than the global average of 19% and 11% for the US and Europe. This greater impact on Africa is attributed to the continent's heightened vulnerability to climate-related disruptions in agriculture and labour productivity. African countries, which have historically contributed minimally to global emissions, are expected to suffer disproportionate economic damage, exacerbating existing inequalities. The study highlights the urgent need for robust global climate action to mitigate these impacts.

Africa's disaster resilience is hampered by significant financial and data challenges

Funding for disaster risk management is critically low, with African governments relying heavily on inconsistent and unsustainable external funding, further strained by global crises such as the COVID-19 pandemic. This lack of funding affects the development and maintenance of resilient infrastructure and emergency systems, often delaying responses until disasters have escalated. In addition, a lack of comprehensive risk data hampers informed decision-making and effective disaster mitigation strategies.

The insurance industry is crucial for enhancing disaster resilience in Africa

The re/insurance industry is an integral part of building disaster resilience in Africa, serving as a cornerstone of disaster risk management.

By providing risk transfer solutions, the sector enables governments, businesses and individuals to manage the financial losses from disasters more effectively. These insurance solutions not only provide coverage for losses – thereby protecting assets, livelihoods and enabling investment, including in critical infrastructure – but also encourage risk-reducing behaviours among policyholders by offering premium discounts for adopting sound risk management practices, such as safer construction methods or advanced agricultural techniques.

In addition, the insurance industry is collaborating with various stakeholders, including governments and academic institutions, to share expertise and promote innovative disaster management solutions. Through such collaborations and with its robust risk modelling capabilities, the industry plays a key role in identifying, mitigating and preparing for risks, thereby contributing significantly to financial protection and resilient post-disaster recovery. This comprehensive approach helps to strengthen the resilience of African communities and economies to the financial impact of disasters, and is closely aligned with the objectives of the Sendai Framework for Disaster Risk Management.

Market survey insights underscore the key role of insurance for disaster resilience and how to better leverage the capabilities of the sector

The re/insurance professionals who kindly shared their insights for the 2024 «Africa Insurance Pulse» highlighted the critical challenges posed by climate change, natural disasters and socio-economic vulnerabilities such as poverty and infrastructure deficiencies, which exacerbate the continent's risk exposure. Conflict, political instability and environmental degradation were also identified as significant factors affecting disaster resilience. The executives emphasised the need for a multifaceted approach that includes risk identification, mitigation and financial protection through innovative insurance solutions, which are crucial for sustainable development. The role of public-private partnerships (PPPs) was seen as essential, with government agencies, international organisations and the insurance industry working closely together to implement effective disaster resilience strategies. This collaboration aims to address the overarching threats, while promoting substantial infrastructure investment and strengthening local capacity to effectively manage and mitigate disaster risks. The findings also call for improved regulatory frameworks and increased disaster risk awareness and education to enhance and better leverage the capabilities of the insurance industry and promote a resilient African society.

Introduction to disaster resilience

WHAT IS A DISASTER AND DISASTER RESILIENCE?

The United Nations Office for Disaster Risk Reduction (UNDRR) defines a disaster as «a serious disruption of the functioning of a community or a society at any scale due to hazardous events interacting with conditions of exposure, vulnerability and capacity, leading to one or more of the following: human, material, economic and environmental losses and impacts».[1] Furthermore, the UNDRR underscores that disasters can manifest abruptly, often referred to as «shocks», or evolve gradually, or result from the cumulative impact of frequent disasters.

Importantly, the genesis of disasters is not solely linked to natural hazards, but also to a wide range of man-made hazards and also socio-natural hazards where natural and man-made factors intersect. Africa, with its 54 countries and vast, diverse geography, faces a wide range of hazards that can lead to disasters, affecting countries and regions in different ways.

- **Natural hazards** include severe droughts, for instance in countries such as Ethiopia, Somalia and Kenya, leading to famine and water shortages; devastating floods in Mozambique, Nigeria and South Africa; recent major earthquakes in Algeria and Morocco; and locust swarms in East Africa that destroy crops.
- **Man-made hazards** include geopolitical tensions and conflicts in regions such as the Sahel, Somalia and Libya that lead to humanitarian crises; oil spills that affect marine life and local livelihoods; widespread deforestation in areas such as the Congo Basin; and cyber risks that threaten economic security and digital trust.
- **Socio-natural hazards** such as climate change exacerbate other risks, contributing to phenomena such as extreme heatwaves and droughts in the Sahel and Horn of Africa, desertification in the Sahel, and water scarcity across North Africa. In addition, pandemics such as Ebola and COVID-19, influenced by both natural and societal factors, pose significant public health and economic challenges across the continent.

However, disaster risk is not only shaped by the presence of a hazard/s, but also by the exposure and vulnerability of affected populations and assets. Exposure encompasses the presence of people, buildings, infrastructure and crops at risk. Vulnerability involves traits that heighten the susceptibility to damage, like substandard construction. Additionally, factors such as poor planning, insufficient regulation, insufficient enforcement of regulation, poverty, environmental degradation and climate change intensify both vulnerability and exposure, amplifying disaster risks. The risk is further influenced by the availability of healthcare, effective communication systems, and the resilience of buildings to specific hazards like earthquakes (figure 1).

1 www.undrr.org/terminology/disaster

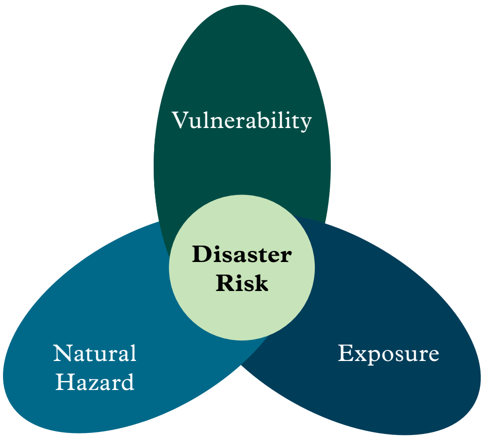
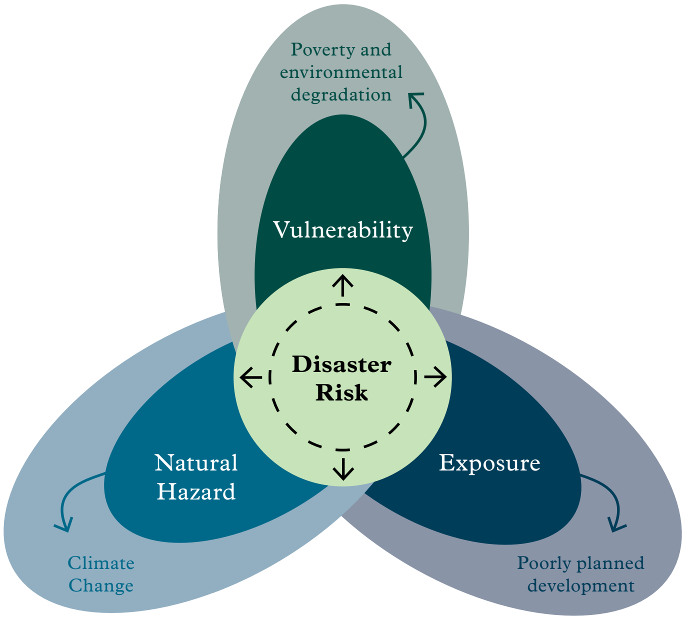


Figure 1: The role of hazard, exposure and vulnerability in disaster risk (example, natural hazard). Source: International Bank for Reconstruction and Development/World Bank.[2]



Disaster resilience, as defined by the UNDRR, refers to «the ability of a system, community or society exposed to hazards to resist, absorb, accommodate, adapt to, transform and recover from the effects of hazards in a timely and efficient manner». This includes the preservation and restoration of essential basic structures and functions through risk management practices.

In other words, disaster resilience enables communities to minimise disruption from disasters and promote growth and prosperity through proactive measures to prevent, reduce and recover from the effects of disasters. This approach can therefore reduce the hazard, exposure and vulnerability aspects of disaster risk.

The UNDP refers to resilience as investing to make development shockproof, so that it can be sustained over time.[3]

2 Building Resilience: integrating climate and disaster risk into development – the World Bank Group experience, World Bank Group, Washington DC, 2023
3 www.undp.org/africa/undp-resilience-hub-africa

KEY FACTORS FOR BUILDING DISASTER RESILIENCE

Depending on the specific disaster hazards, exposures and vulnerabilities of any one region, country or location, the following factors - themselves complex and interconnected, can all help to build resilience against disasters. Given the goal of disaster resilience, many of these factors overlap with the UN's Sustainable Development Goals (SDGs).

- **Diverse ecosystems** provide a range of resources and options for adaptation to climate change.
- **Biodiversity** supports ecosystem services, such as water purification, pollination and soil fertility, and provides a buffer against the impacts of pest and disease.
- **Natural hazard risk mitigation and adaptation measures** including for extreme weather and climate change – e.g. early warning systems, flood defense initiatives, building codes and sustainable urban design.
- **Equitable access to education, healthcare and technology** can enhance a community's adaptive capacity.
- **Equitable access to resources** including land, water and energy, as disparities in resource distribution can lead to vulnerabilities and social unrest.
- **Cultural diversity and social cohesion** improve the way in which communities respond to and recover from disasters.
- **Economic diversification** helps to absorb shocks, such as fluctuations in commodity prices, and fosters sustainable development.
- **Effective governance** facilitates effective responses to disasters, reduces vulnerabilities and promotes sustainable development.
- **Political stability** is essential as political instability can hinder a country's ability to respond to and recover from disasters.
- **Adequate, well-maintained infrastructure** including for transportation, communications and energy provision, facilitates efficient responses to disasters and promotes economic development.
- **Robust, innovative risk transfer solutions** are essential to enable and hasten disaster recovery through the provision of much-needed financial support. In addition to cushioning the impacts of disasters on communities and economies, risk transfer partners also help to enable investment in infrastructure, share valuable risk expertise, and promote risk prevention and mitigation measures.

UNEP-commissioned research has estimated that the cost of adapting to climate change across Africa could reach USD 50 billion a year by 2050, assuming that the global temperature increase is kept within 2° C above preindustrial levels.[4]

4 www.afdb.org/en/cop25/climate-change-africa

AN INTEGRATED APPROACH TO DISASTER RISK MANAGEMENT

We have seen how disaster risk is complex and interconnected, and how building disaster resilience involves a spectrum of complex, interconnected factors. The practice of building disaster resilience – termed disaster risk management (DRM) – therefore requires a structured, integrated approach.

The Sendai Report outlines a comprehensive framework for disaster risk management (DRM) involving strategic steps and measures that governments and communities, together with other partners, can adopt to safeguard people and assets.[5] The report emphasises that DRM requires an integrated approach encompassing multiple pillars.

Figure 2: Disaster Risk Management Framework. Source: The Sendai Report, World Bank Group and Faber Consulting.

Institutional, Political, Normative, Financial Context

Pillar 1 **Risk identification**	Understanding hazards, exposure and vulnerability is critical. Modern and traditional methods enable communities, governments and businesses to assess risks, quantify potential impacts and make informed decisions. This pillar is the foundation of all the other pillars.
Pillar 2 **Risk reduction**	Utilising disaster risk information to inform development strategies, plans and projects. Includes both anticipatory actions to prevent new risks and investments to address existing risks, such as improving building practices or retrofitting infrastructure.
Pillar 3 **Preparedness**	Since risks cannot be completely eliminated, preparedness is essential. Effective early warning systems, support of emergency measures and contingency planning enhance local response capabilities.
Pillar 4 **Financial protection**	Financial strategies protect against the economic impacts of disasters, supporting the resilience of governments, businesses and households. These strategies range from improving financial responses to disasters to social protection and enabling insurance markets.
Pillar 5 **Resilient reconstruction**	Post-disaster reconstruction provides an opportunity to enhance resilience. The heightened awareness of disaster risk during these times facilitates the integration of DRM into recovery and reconstruction plans.

5 The Sendai Report: Managing Disaster Risks for a Resilient Future, World Bank Group, 2012

Why is disaster resilience such an important issue for Africa now?

AFRICA HAS AN EXCELLENT DEVELOPMENT POTENTIAL ON THE GLOBAL STAGE

Africa is expected to maintain its position as the world's second-fastest-growing economic region after Asia. It is home to 11 of the world's 20 fastest-growing economies worldwide. Forecasts from the African Development Bank (AfDB) suggest an impressive average real gross domestic product (GDP) growth of 3.8 % and 4.2 % respectively in 2024 and 2025, notably above the projected global averages of 2.9 % and 3.2 %. This reflects factors including population growth leading to more private consumption, economic diversification, increased investment in key growth sectors and rising public spending. Africa's average fiscal deficit has also improved, stabilising at 4.9 % in 2023, down from 6.9 % in 2020.[6]

With a young, booming population and being the fastest-urbanising continent in the world according to the AfDB, Africa has the potential to become a global economic powerhouse. The median age of Africa's population is just 19 years[7], making Africa the world's youngest region. The population is also fast-growing – whilst population growth in other regions has slowed, Africa's has increased by 2.4 % per year for the past 30 years and is forecast to reach 2.4 billion by 2050 according to the AfDB.

BUT AFRICA'S DEVELOPMENT IS THREATENED BY DISASTER RISK AND OTHER CHALLENGES

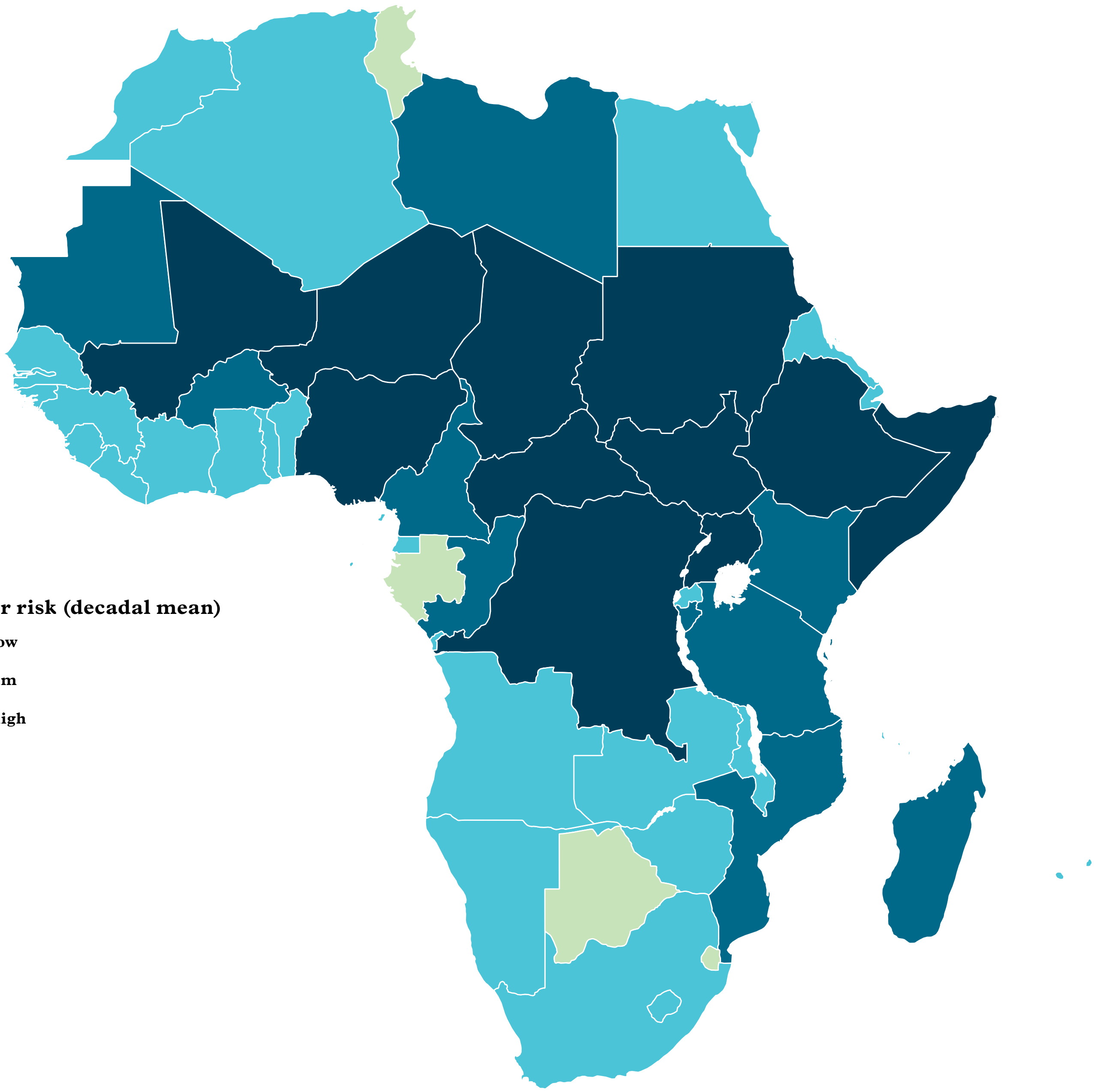
Africa is exposed to disasters linked to global uncertainty from rising geopolitical tensions – impacting supply chains, exports and debt servicing costs – as well as to disasters associated with regional conflict and political instability. The continent – with an important agricultural sector that accounted for 35 % of GDP in 2023[8] – is also highly (and disproportionately in terms of its contribution to greenhouse gas emissions)[9] exposed to disasters linked to extreme weather and climate hazards. Africa is reported to be the most vulnerable continent to climate change impacts under all climate scenarios above 1.5° C above pre-industrial levels, according to the AfDB.

Reinforcing this message, the World Risk Report 2023 found that Africa has the highest level of vulnerability to natural disaster risk of all continents. The effect of this on GDP was noted in a 2022 study which found that, on average over the period 1990–2019, drought and flood respectively reduced Africa's GDP per capita by 0.7 % and 0.4 %.[10]

Africa has the highest level of vulnerability to natural disaster risk of all continents.

6 Africa dominates list of the world's 20 fastest-growing economies in 2024—African Development Bank says in macroeconomic report, African Development Bank Group, 2024
7 Africa's Development Dynamics 2023: Investing in Sustainable Development, Africa Union, 2023
8 How Africa's new free trade area will turbocharge the continents' agriculture industry, World Economic Forum, 2023
9 Africa suffers disproportionately from climate change, World Meteorological Organization, 2023
10 Adapting to Natural Disasters in Africa, Bari & Dessus, International Finance Corporation World Bank Group, 2022

Figure 3: Disaster risk level categories in Africa, covering natural and/or man-made disaster hazards, based on the INFORM Risk index.
Source: Eze and Siegmund, 2024.[11]

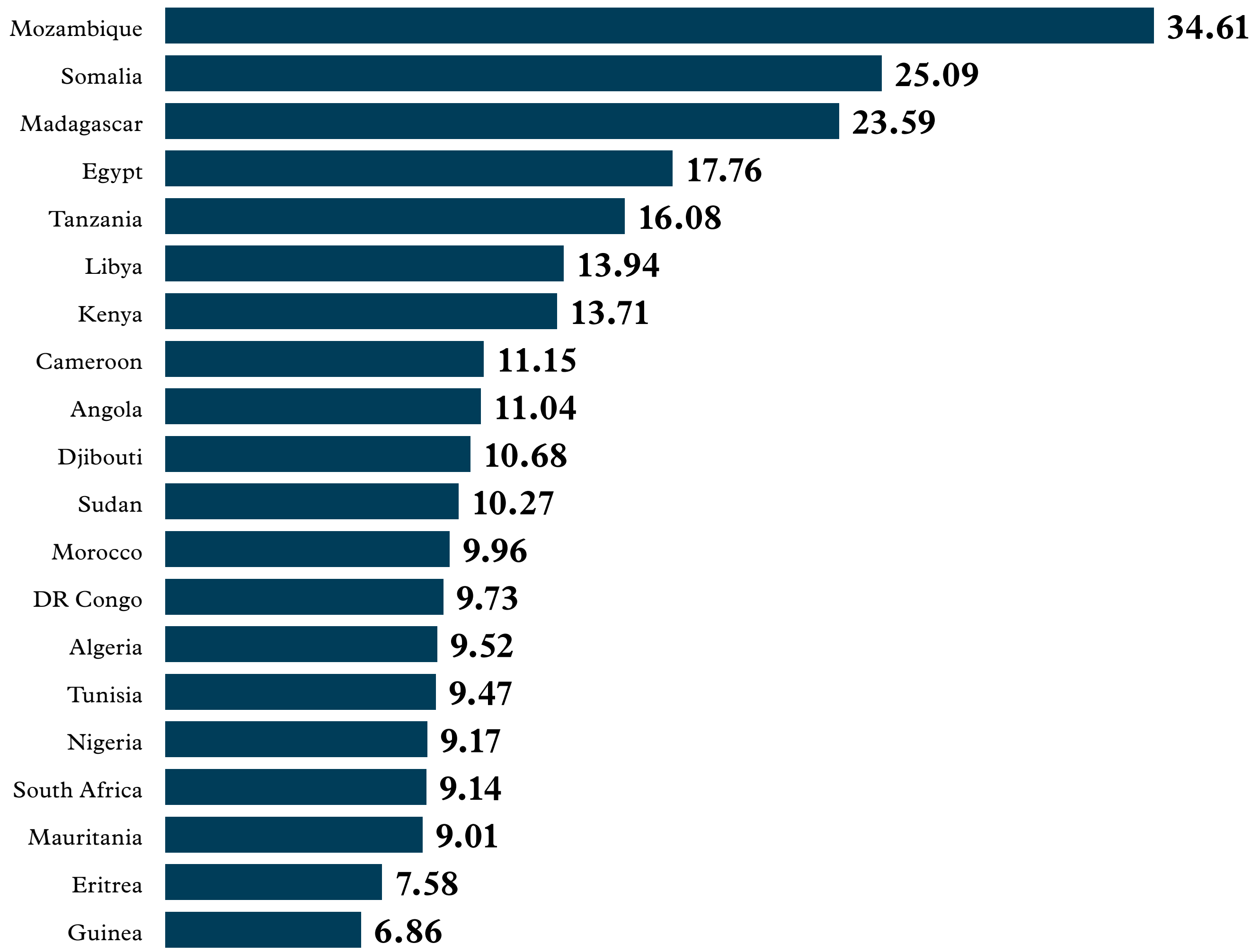


Disaster risk (decadal mean)

- Very low
- Low
- Medium
- High
- Very high

11 Identifying disaster risk factors and hotspots in Africa from spatiotemporal decadal analyses using INFORM data for risk reduction and sustainable development, E. Eze and A. Siegmund, 2024

Figure 4: Top 20 African countries by World Risk Index (WRI) score – this index is an assessment of disaster risk from extreme natural hazard events and negative climate change impacts. For comparison, for 2023, the median WRI for the African continent is 4.39 and the world median WRI is 4.13.
Source: World Risk Report 2023.



This high vulnerability reflects complex and interconnected factors, which also vary by region. As reported by the IPCC in its Sixth Assessment Report, Africa's exposure and vulnerability to climate change depends (with very high confidence) on intersecting socioeconomic, political and environmental factors.[12] The IPCC reports, for example, that Africans are disproportionately employed in climate-exposed sectors, with 55–62 % of the sub-Saharan workforce working in agriculture and 95 % of cropland being reliant on rainfall. It also reports that in urban locations, growing informal settlements lacking basic services increase the vulnerability of large populations to climate hazards.

Vulnerable groups, human hazard and lack of infrastructural coping capacity are highly relevant factors, respectively explaining 75 %, 70 % and 42 % of disaster risk in Africa.

Similarly, a 2022 study (based on the INFORM Risk index) found that vulnerable groups, human hazard and lack of infrastructural coping capacity are highly relevant factors, respectively explaining 75 %, 70 % and 42 % of disaster risk in Africa, with notable variation by region.[13] The impact of inequality/diversity issues on disaster risk was also highlighted in the World Risk Report 2023. Other resilience-relevant areas include access to healthcare and education. Progress is being made, for example in terms of life expectancy, but a lot more needs to be done in these and other resilience-relevant areas.

12 IPCC Sixth Assessment Report, Chapter 9
13 Identifying disaster risk factors and hotspots in Africa from spatiotemporal decadal analyses using INFORM data for risk reduction and sustainable development, E. Eze and A. Siegmund, 2024

Severe impact of climate change on Africa

The average rate of warming in Africa has accelerated in recent decades and is above the global average. Africa experienced an average warming trend of around +0.3° C per decade between 1991 and 2022 (the highest increase was in North Africa at +0.4° C per decade, the slowest in Southern Africa at +0.2° C per decade), which is above the global average of approximately +0.2° C per decade for the same period, and above Africa's average trend of +0.2° C per decade for the preceding period of 1961 to 1990.[14]

Weather- and climate-related hazards in Africa are becoming more severe, threatening food security, ecosystems and economies, and increasing displacement, migration and the threat of conflict over dwindling resources. According to the IPCC Sixth Assessment Report, for example, climate change has cut Africa's agricultural productivity by 34 % since 1961, led to biodiversity loss and water shortages, reduced economic growth across the continent and increased income inequality between African countries and countries in temperate northern hemisphere climates.[15] The IPCC also reports that over 2.6 million and 3.4 million new weather-related human displacements occurred in sub-Saharan Africa in 2018 and 2019.[16] For warming scenarios of between 1.5° C and 2° C, the negative impacts of climate change on food production, economic growth, inequality, poverty, biodiversity loss and human morbidity and mortality are projected by the IPCC (with high confidence) to become widespread and severe.[17]

The World Meteorological Organization reported that in 2022[18], 80 weather, climate and water-related hazards led to an economic loss of over USD 8.5 billion in Africa (dominated by flood at 92 %), directly impacted over 110 million people (91 % by drought) and tragically led to the loss of over 5,000 lives. In North Africa, Morocco recorded its driest agricultural year (September 2021 to August 2022) in the past 40 years, while the Horn of Africa continues to experience its worst drought in over 40 years following (now five) consecutive failed rainy seasons, severely impacting agriculture and food security. In Central Africa, Chad recorded its heaviest rainfall in 30 years, while Sudan was also severely impacted by heavy rainfall and flash flooding during the 2022 June–September rainy period; destroying and damaging over 70,000 homes.

14 State of the Climate in Africa 2022, World Meteorological Organization, 2023
15 Fact Sheet – Africa, IPCC Sixth Assessment Report, IPCC, 2022
16 Fact Sheet – Africa, IPCC Sixth Assessment Report, IPCC, 2022
17 IPCC Sixth Assessment Report, Chapter 9
18 State of the Climate in Africa 2022, World Meteorological Organization, 2023

AFRICA'S DISASTER RESILIENCE FACES SIGNIFICANT FINANCING AND DATA CHALLENGES

Funding disaster risk management is a major challenge for African governments

As the World Bank notes, while there is recognition in Africa of the need for substantial investment in disaster risk management to safeguard development gains, the availability of funds and resources to implement the necessary measures remains inadequate. This financial gap affects the ability to build and maintain resilient infrastructure and emergency preparedness systems, and the ability to invest in long-term resilience projects. As a result, despite the recognition of risk and the best intentions of policy frameworks, practical implementation often falls short due to limited financial resources.[19]

Many African countries are predominantly dependent on external funding, which is often neither reliable nor sustainable. Dependence on international agencies has increased as governments struggle to recover from the impact of global events such as the COVID-19 pandemic, followed by inflation, recession and supply chain disruptions.

When disasters strike Africa, the focus is on immediate relief rather than preventive measures that could more effectively mitigate disasters before they wreak havoc.[20] The disaster is then often exacerbated by the slow and often reactive nature of disaster response. Governments and NGOs typically mobilise funds too slowly, which means that by the time resources are available, the situation has worsened and more assistance is needed.

Lack of risk data for informed decision-making

Another problem is that the lack of data limits the ability to accurately assess the risks of disasters and to implement successful strategies to mitigate those risks.[21] In response, the African Union (AU), in collaboration with its member states and partners such as the UNDP, is prioritising evidence-based disaster management strategies. This includes the collection of comprehensive data to better inform disaster risk reduction efforts. Such initiatives are key to building a disaster resilient continent through informed policy-making and improved cooperation between member states. However, challenges remain, as evidenced by the reduced participation of AU member states in the preparation of the Second African Biennial Report on Disaster Risk Reduction compared to the first.

Given the many and significant challenges, the success of DRM strategies in Africa relies on a coordinated effort between governments, communities, researchers and businesses, including the insurance industry, to apply risk information effectively.

The insurance industry brings extensive risk expertise. Such collaborations enhance disaster resilience and help to mainstream disaster risk considerations into broader policy and decision-making processes.

19 Building Resilience in Africa, World Bank Group, 2019.
20 The Adaptation Principles: 6 Ways to Build Resilience to Climate Change, the World Bank, 2020.
21 Data-Driven Disaster Risk Reduction in Africa: Shaping a Resilient Future, 16 June 2023

The insurance industry – a vital partner for building Africa's disaster resilience

The insurance industry has a vital role to play in disaster risk management (DRM). It does this primarily, but not exclusively, by providing financial protection solutions that mitigate the financial impact of disasters. By providing such risk transfer solutions, the sector helps governments, businesses and households to manage the financial impacts of disasters. These solutions not only cover losses, but also encourage policyholders to adopt risk-reducing behaviours and measures through premium discounts for adopting sound risk management practices, such as building safer structures or using improved agricultural techniques. Insurers also collaborate with governments, researchers and other institutions to share risk management expertise and promote innovative solutions. The sector is therefore a key player and effective way to spread the financial risk of disasters and motivate a shift towards more disaster resilient practices.

Below we examine how the insurance industry in Africa can, and indeed already does, actively contribute to the five pillars of the Sendai Framework for Disaster Risk Management (see page 12).

- **Risk identification.** The insurance industry contributes to resilience by promoting the development of comprehensive risk assessments and data collection. It specialises in understanding, assessing and quantifying risk. Using sophisticated actuarial and risk modelling techniques, insurers assess the potential impact of disasters at various scales. They collect vast amounts of data on hazards, exposures and vulnerabilities that are critical to risk identification. This data is not only used to accurately price insurance products, but is also shared with customers and governments and communities to improve the understanding of exposures and management of risk. In addition, the sector often works with meteorological agencies, engineering firms and academic institutions to refine risk assessments and methodologies, strengthening this fundamental pillar of disaster risk management.

Managing disaster risks in Africa is vital if the continent is to continue on its path of development. By combining risk prevention, risk mitigation and risk transfer measures as part of a comprehensive disaster resilience strategy, the insurance industry can help to strengthen that resilience muscle. Take the insurance industry's risk modeling capabilities for example. These models are essential to identify risk and to quantify exposure, providing a basis for strategic decision-making. They guide stakeholders, from businesses to governments, through the intricacies of risk management and form the basis for developing strategies to prevent, mitigate and retain risk. The insurance industry can then take on the residual risk through risk transfer, which provides a tool to convert uncertainty into proactive disaster risk financing. Beyond simply responding to catastrophes, the insurance sector offers knowledge and tools for informed resilience and supports African communities and economies in protecting themselves against the financial consequences of disaster events

Mario Wilhelm, Head Middle East & Africa Public Sector Solutions, Swiss Re

- **Risk reduction.** Insurers contribute to risk reduction by incentivising the adoption of safer practices and risk mitigation measures. For example, they offer lower premiums for buildings built to high safety standards or retrofitted to withstand natural disasters. This economic incentive encourages businesses and homeowners to invest in risk reduction measures. In addition, insurers are actively involved in public discourse and policymaking to advocate stronger building codes and land-use planning to take disaster risk into account.
- **Preparedness.** The insurance industry supports disaster preparedness by developing and promoting effective insurance products that include coverage for rapid response and recovery. These products can and are bundled with services such as risk consultancy and disaster management training. In addition, insurers invest in the development and dissemination of early warning systems and preparedness information that benefit the wider community, enhance local response capabilities, and help protect lives and livelihoods.
- **Financial protection.** Insurance is a fundamental component of disaster financial protection strategies. It provides governments, businesses and individuals with the liquidity they need after a disaster to recover and rebuild without compromising their financial stability. The availability of insurance also helps to stabilise economies in the aftermath of disasters by providing rapid payouts that support recovery efforts and sustain economic activity. Insurance markets also promote broader financial resilience by spreading the economic impact of disasters over a larger pool of resources.
- **Resilient reconstruction.** In the aftermath of a disaster, the insurance industry plays a key role in ensuring that reconstruction efforts are resilient. Insurers assess damage and losses, and their financial support can be instrumental in rebuilding infrastructure and homes to make them less vulnerable to future disasters. They also advocate and fund the incorporation of improved building standards and resilient practices into the rebuilding process. Through the claims process, insurers gather data on the vulnerabilities exposed by the disaster and use this information to better price and underwrite future policies.

DISASTER RESILIENCE INSURANCE RISK TRANSFER SOLUTIONS IN AFRICA

Insurance risk transfer solutions are a powerful way to manage the impact of disasters in Africa. These solutions require carefully designed catastrophe risk financing frameworks that are tailored to specific coverage needs and prevailing local risks and social conditions. The effectiveness of these solutions can vary widely depending on the regulatory framework, the maturity of the insurance market, and the specific products offered by insurers in different African countries. In addition, to build sustainable disaster resilience in Africa, it is crucial for the re/insurance industry to collaborate and develop innovative insurance solutions that enhance the affordability and accessibility of risk protection, thereby effectively narrowing expanding protection gaps.

Key insurance lines of business that promote disaster resilience

Property insurance is a leading form of protection for disaster risk in Africa as it covers damages or losses to individual and business properties caused by disasters such as fires, floods or windstorms, including business interruption losses, which are vital for financial stability and recovery.

> The insurance industry in Africa plays a pivotal role in bridging awareness and cooperation between government entities and the insuring public, as well as bolstering infrastructure against catastrophes. It has actively advocated for risk prevention measures and provided crucial models and research to assess and mitigate risks. Post-disaster, insurers step in to aid in the restoration of livelihoods and provide relief efforts. Furthermore, they contribute substantial funds towards establishing, maintaining and enhancing local infrastructure in Africa, a vital element for building stronger disaster resilience. However, the government must play a primary role in enhancing disaster resilience, a critical area where African markets are notably deficient in preventive measures. Compounded by limited financial resources, governments often find themselves reactive rather than proactive, significantly impeding their capacity to effectively support and restore citizen" lives post-disaster.
>
> **Wole Oshin, Group Managing Director, Custodian Investment Plc**

Agricultural insurance also plays an important role, addressing Africa's dependency on agriculture and its susceptibility to climate variability by covering losses from crop failures and/or loss of livestock due to events like droughts and floods. It can include parametric insurance which pays out benefits on the basis of a predetermined index (e.g. rainfall level) for loss assessment, rather than traditional individual loss assessment. This is particularly useful in areas where it is hard to assess individual losses.

Property and agricultural insurance solutions in North Africa are evolving to better address natural and man-made catastrophes. In Algeria, compulsory property insurance covers natural catastrophe risks such as earthquakes and floods, but coverage is still limited. Morocco requires insurance against natural and man-made catastrophes, with recent payouts demonstrating effective disbursement for post-disaster reconstruction. Both countries are also making progress in agricultural insurance, with Algeria setting up group insurance schemes including drought cover, and Morocco implementing a public-private partnership to cover multiple risks, with successful payouts to farmers and potential for expansion to other African countries.

Additionally, **engineering insurance** is significant for covering a variety of risks related to construction and infrastructure projects, essential for Africa's economic development and disaster resilience.

For more information, please refer to the market survey insights section on page 38 of this report.

The insurance sector can make a significant contribution to strengthening the resilience of African societies and economies by providing financial protection against risks of all kinds, encouraging investment, promoting innovation in risk management and supporting health and social security.

Abdallah Benseidi, CEO, Compagnie Centrale de Réassurance

The insurance sector has a critical role to play in scaling up disaster resilience on the continent. With more robust risk analytics, it can help to better quantify future extreme events from a more holistic perspective. Forward-looking climate and systemic risk assessments in particular would help better to anticipate and characterise the magnitude and sources of vulnerability that countries are exposed to. Analytics that cut across lines of business, factors in climate trends and that consider the overall effects – direct and indirect, socio-economic and financial – from multiple, compounding shocks and disasters. The continent is indeed facing a number of threats which are still poorly understood – therefore poorly managed – as they affect multiple sectors and sub-sectors, livelihoods and geographies with both immediate and also long-term consequences. With such comprehensive risk assessments, the insurance industry could further raise public authority risk awareness and would ultimately be better equipped to take on more risk.

Antoine Bavandi, Global Head of Public Sector, Parametric & Climate Resilience Solutions, Gallagher Re

Innovative ways to enhance disaster resilience in Africa

Interview with Mikir Shah, Founder and CEO Africa Specialty Risks

Mr. Shah, can you briefly describe the key factors challenging disaster resilience in Africa?

Unfortunately, we see a steady increase in natural catastrophe events hitting the African continent. In the recent past, the continent has experienced the earthquake in Morocco and tropical cyclones making landfall in Mozambique and Mauritius. In addition, Kenya and parts of East Africa are being affected by torrential rain more and more frequently. This is a fundamental change to the past, when these events were rare in Africa.

Still, Africa is a vast continent with varying degrees of vulnerability to natural catastrophes. Its sheer size and scarcity of risk and loss data make it difficult to model natural catastrophe risk. The rising frequency in severe events is compounded by the lack of cash and resources to respond after a disaster has hit. Although there are institutions that will provide some help to the people affected, available support is insufficient to restore or rebuild what has been destroyed.

There is an urgent need for the insurance industry to improve Africa's resilience to natural disasters, including the reduction or mitigation of risks caused by human intervention such as inadequate building codes or lack of as well as poorly maintained urban drainage systems. These improvements are critical in reducing the overall impact of such events.

Despite the challenges, innovative re/insurance solutions are available. Can you provide some examples?

Yes, insurers and reinsurers are at the forefront of disaster resilience in Africa, offering a variety of solutions. For example, in Mozambique, Africa's second-most disaster-prone country, Africa Specialty Risks, as the lead reinsurer alongside PULA, a global Insurtech company, and the World Bank, wrote a wind speed and rainfall parametric insurance – the first ever parametric tropical cyclone insurance in Africa. This insurance was triggered by Tropical Cyclone Freddy in March 2023. Tropical Cyclone Freddy formed near Australia, travelled close to 10,000 km across the Indian Ocean, remained a named tropical cyclone for 39 consecutive days making it the longest-lasting tropical cyclone on record, made landfall in Mozambique twice, and had an accumulated cyclone energy equivalent to the average full North Atlantic hurricane season.

For this product, we had divided Mozambique into 40 areas for which we calculated the potential loss amount, which was verified by an independent third party. Following Tropical Cyclone Freddy, pay-out was executed within seven days, supplying the population with urgently needed resources to begin rebuilding and getting back to their former lives. By comparison, a traditional indemnity insurance policy would most likely have taken six to nine months to pay-out to policyholders. We also launched an agricultural parametric insurance in Eastern and Central Africa to protect 2.25 million smallholder farmers against natural disasters, including pests, on a yield-basis. This is designed to help farmers to continue farming, even in times of severe hardship, and not to have to leave their land.

Insurers and reinsurers have the data and the technology – including parametric covers– to create new solutions utilizing existing products possibly in different ways. An important key in enhancing Africa´s resilience against disaster lies with national governments, as they have the best access to their citizens. We provide a solution whereby governments can bundle their natural catastrophe risk in a dedicated captive. Africa Specialty Risks will then administer such a captive, which is reinsured on the international market and helps its owner to lower its cost of risk, improve risk management and even turn the captive into a profit center. In addition, the captive is licensed in Mauritius, enabling the owner to pay premiums not in only US dollars, but other currencies too – another advantage for many African countries.

Africa Specialty Risks has also launched an interesting parametric solution for the energy sector. Can you share the highlights of this solution and its benefits for Africa's resilience?

Yes, as an example of what insurance can do to enhance the resilience of the African population – parametric insurance can be used to insure renewable energy projects, protecting these against a wide array of perils, thereby enhancing investment certainty and facilitating cash flow.

Less than 50% of the population – 570 million people – in Sub-Saharan Africa have access to electricity. To bridge that gap, Africans are turning towards renewable energy, namely the solar photovoltaic cell market which is earmarked to grow in Africa at a compound annual growth rate of 30% from 2023 to 2029.

However, potential investors have been slow to enter this market, concerned about volatility, political and regulatory uncertainty, and lack of infrastructure. Africa Specialty Risks has launched a parametric insurance to address some of these investor concerns, for instance by guaranteeing a minimum price for the Day-Ahead-Market, into which the electricity is sold. This energy price floor provides investors with the certainty needed to execute their renewable energy investment plans. By helping to de-risk investments in Africa´s renewable energy sector, parametric insurance pushes the boundaries of traditional insurance, helping to accelerate the transition to renewables and away from coal plants, strengthening resilience by enhancing energy provision and reducing carbon emissions.

Making pastoral communities in the Horn of Africa more resilient to global warming

Introduction and background

The De-Risking, Inclusion and Value Enhancement (DRIVE) project, a four government project (Kenya, Somalia, Ethiopia and Djibouti) funded by the World Bank with a budget of USD 360.5 million and implemented by ZEP-RE (PTA Reinsurance Company) and national agencies, is designed to enhance disaster preparedness and response capabilities in the Horn of Africa. This region has been suffering from its worst drought in 40 years, putting the livelihoods and lives of millions of pastoralists, their families and local communities at risk. The project's goals include improving access to financial services for drought mitigation (insurance and savings), incorporating pastoralists into value chains and facilitating livestock trade. DRIVE has reached over 2.5 million people surpassing the 1.6 million target, enabling them to adapt to climate change, commercialise livestock production, and include marginalised and vulnerable groups, such as women, into these economic activities.

Key strategies and innovations

DRIVE focuses on:

- **Capacity building.** Enhancing the technical and operational capabilities of local insurers, to handle disaster risks as well as aggregators capacity to understand and distribute the solutions.
- **Risk transfer solutions.** Developing reinsurance products that allow risk pooling across different African countries, thereby stabilising insurance markets against the financial impacts of localised disasters.
- **PPPs.** Facilitating partnerships between governments and the private sector to foster a supportive policy environment for disaster risk financing and to improve the affordability of such solutions to the end user.

Impact and achievements

The DRIVE project has increased the capacity of local insurance markets to underwrite large-scale disaster risks and played a crucial role in raising awareness and understanding of the benefits of disaster risk insurance in reducing economic vulnerabilities.

Challenges and solutions

DRIVE addresses challenges, including the complex nature of disaster risk, by fostering international collaborations and leveraging advanced technologies like satellite data and mobile based application to enhance risk assessment, management and distribution capabilities.

Future plans and sustainability

DRIVE aims to expand its initiatives to more countries in Africa and develop new innovative insurance products that meet the specific needs of different African regions and communities affected by various types of disaster.

Learn more about the DRIVE project at ZEP-RE's DRIVE project website page.

Interview with Hope Murera, Managing Director and CEO of ZEP-RE and Sylvia Mwangi, DRIVE Lead at ZEP-RE.

Why do many pilot projects in disaster resilience management fail to transition into mature market products, and what successful strategies have been implemented in the DRIVE project to overcome these challenges?

Many pilot projects in disaster resilience management struggle to scale-up due to several factors including inadequate funding (making the product unaffordable to the end user), insufficient integration into local policies and practices, high distribution costs and inappropriate risk mitigation solutions that don't demonstrate the immediate value to beneficiaries. These projects often start with high innovation but face difficulties in adapting to changing local conditions or in securing ongoing financial and institutional support to transition from a pilot phase to full-scale implementation.

In the DRIVE project, we have taken specific steps to effectively address these challenges:

– **Stakeholder engagement.** We have prioritized engagement with local communities, governments and private sector partners from the onset to ensure that the solutions are well integrated into the local economic and social fabric, enhancing their relevance and adoption.

– **Policy integration.** By working closely with government agencies, we have helped shape policies that support disaster resilience, ensuring that our project aligns with national strategies and receives support beyond the pilot phase.

– **Sustainable financing.** DRIVE has focused on establishing financial structures that ensure the project's initiatives are economically viable in the long term, including developing insurance products that are financially sustainable and appealing to markets.

– **Robust monitoring and evaluation.** Implementing a comprehensive monitoring and evaluation framework has allowed us to track effectiveness in real time and adjust strategies as necessary, which helps in demonstrating value and securing further funding and support.

These approaches have helped DRIVE to move beyond the typical limitations of pilot projects, aiming for a lasting impact in disaster resilience across the Horn of Africa.

What strategies have you employed to expand the reach of the DRIVE project to an even larger number of pastoralists?

To extend its reach to more pastoralists and more African countries, the DRIVE project will focus on several key strategies. First, increased collaboration with local and regional stakeholders, including governments and community leaders, development partners, insurers, reinsurers, financiers among others to help tailor the project's interventions to the specific needs and circumstances of different pastoralist communities in a changing risk landscape. Second, increased investment in technology and infrastructure to improve access to insurance products and financial services in remote areas. Finally, ongoing capacity building and training programmes for local insurers and financial institutions will enable them to provide more effective and sustainable services to pastoralists. These efforts, combined with ongoing monitoring and adaptation of strategies based on real-world results, will be critical to scaling up the project's impact across the region.

Public-private partnerships

Public-private partnerships (PPPs) are collaborative endeavours involving multiple stakeholders from both the public and private sectors. They are aimed at achieving common objectives in areas like infrastructure, healthcare and disaster management. Key players in PPPs include government entities that provide essential regulatory frameworks and funding, private sector companies contributing expertise and capital, international institutions that finance projects, and regulatory bodies ensuring compliance with laws. Furthermore, development banks can provide invaluable financial expertise, particularly in developing countries. NGOs can provide invaluable advocacy and community insights, ensuring that projects gain broader acceptance. Consultants and legal advisors can offer unparalleled technical and legal support, while local communities and civil society can play a vital role in ensuring that projects meet local needs and gain public support.

PPPs not only mitigate the impacts of disasters but also foster deeper insurance penetration, alleviating the economic and societal burdens faced by governments and communities.

Such partnerships are crucial for pooling resources and sharing the financial burden. High severity, low frequency events in at-risk regions, particularly in Africa, where the need for collaborative disaster risk management strategies is critical, simply cannot be managed without them. Without PPPs, reliance on government disaster relief becomes more pronounced, straining local resources. PPPs promote proactive investments in risk reduction, enhancing affordability and expanding insurance capacity for catastrophic risks.

However, the implementation, risk allocation and governance structures of PPPs can be complex, and must be tailored to specific regional challenges.

Risk pools

By distributing costs and losses among members, e.g. member countries, risk pools make insurance coverage more accessible and affordable, which is especially important for Africa, where countries often face high disaster risks but have limited economic capacity to handle such shocks. Risk pools enhance the ability to manage risks effectively, promoting stability, economic development and resilience. Pools can also reduce reliance on international aid by ensuring quicker, more predictable funding for disaster response and recovery, fostering greater self-sufficiency in disaster management.

For example, the African Risk Capacity (ARC) is a pivotal initiative under the African Union that enables member states to share and manage the financial burden arising from disasters more effectively. This collective approach not only facilitates quicker financial payouts following disasters, which are critical for prompt response efforts, but it also enhances the ability of countries to secure larger pools of capital and access reinsurance markets under more favorable terms. Additionally, the ARC's operational framework, which involves providing parametric insurance, ensures rapid disbursement of funds based on predetermined disaster severity indicators, crucial for immediate disaster mitigation actions.

The ARC's strategy also encompasses the development of national disaster risk capacities through the implementation of early warning systems and the formulation of disaster contingency plans aimed at minimising disaster impacts, helping to reduce dependency on international aid and promote self-sufficiency in disaster response. The ARC's strategic plan includes expanding insurance coverage, enhancing disaster risk management through research and innovation, and integrating disaster risk management into national and regional development agendas. These efforts are geared towards protecting vulnerable populations and ensuring that resilience building remains a priority across Africa. For more information, visit the African Risk Capacity website.

Microinsurance

Microinsurance in Africa has shown significant growth and development, particularly in adapting to the unique needs of low-income populations and leveraging technology to increase accessibility.

According to the Microinsurance Network's Landscape of Microinsurance study, more than 34 million people in 14 African countries were covered by microinsurance programmes in 2021. These countries include Burkina Faso, Côte d'Ivoire, Egypt, Ghana, Kenya, Morocco, Nigeria, Rwanda, Senegal, South Africa, Tanzania, Uganda, Zambia and Zimbabwe. The total market value of microinsurance for the 14 countries was estimated at approximately USD 9.1 billion, 11 % of the total estimated insurance market value.

Based on a smaller sample of five countries, Imarc has projected that the microinsurance market could experience a compound annual growth rate (CAGR) of 7.7 % from 2024 to 2032. This expected growth is attributed to the critical role of microinsurance in providing financial protection against various risks, including sickness, injury and death, with tailored, low-premium plans designed specifically for the financially weaker sections of society.[22]

Microinsurance has benefited from innovative distribution strategies that integrate technology and mobile networks, increasing the reach and efficiency of service delivery. In Ghana, for example, microinsurance products are often bundled with mobile phone subscriptions, offering basic insurance schemes that scale coverage based on the customer's use of mobile airtime. In addition, partnerships with mobile money operators, such as M-Pesa in Kenya, facilitate the collection of premiums and payment of claims directly through mobile platforms, streamlining operations and effectively reaching rural clients. These advances highlight the insurance industry's dynamic adaptation to the challenges of distribution and high cost of insurance products, striving to make insurance accessible and affordable for all.

Insurance market pools have inherent value because they create incentives to reduce risk. Local and regional risk sharing not only promotes discipline but also improves the quality of risk management. However, it is crucial to move beyond mere discussions and translate intentions into concrete actions to establish these market pools effectively.

Salvatore Orlando, P&C EMEA, Head of Western and Southern Europe & CEERTA, PartnerRe

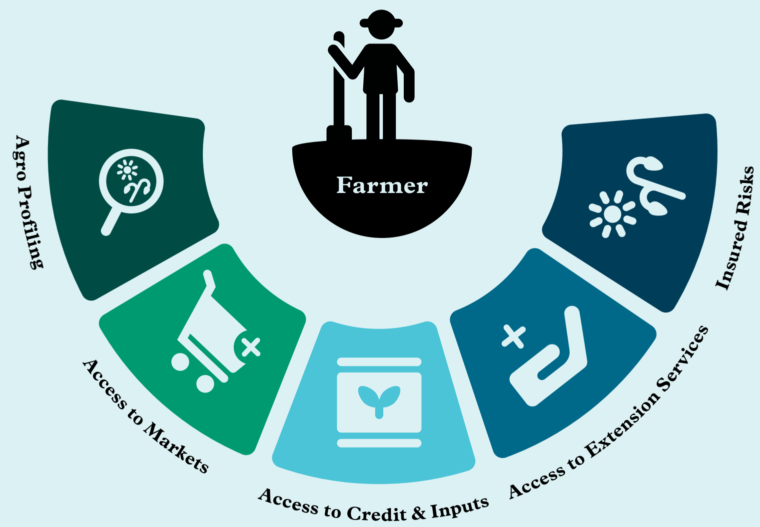
22 Imarc Africa Microinsurance Market Report, Imarc, 2024

ACRE Africa: Risk management solutions to protect smallholder farmers across Africa

Introduction and background

Agriculture and Climate Risk Enterprise (ACRE) Africa focuses on enhancing the resilience and productivity of African farmers by addressing agricultural and climate-related risks through innovative risk management solutions, such as insurance against drought, floods and excessive rainfall. ACRE Africa is dedicated to transforming the agricultural sector towards greater equity and innovation, supporting farmers through services like agricultural profiling, capacity building and insurance market access. Their efforts are aligned with Sustainable Development Goals aimed at eliminating poverty and hunger and promoting climate action, ultimately working towards a vision of agriculture being free from the adversities of climate variability.

ACRE's Approach (Integrated Risk Management)



Key strategies and innovations

ACRE Africa has developed a range of innovative insurance products leveraging weather data and agricultural indices to determine payouts. These products are designed to address various agricultural risks:

- **Area Yield Index Insurance** provides collective coverage for farmers within a specific region, offering payouts if average yields fall below a predefined threshold due to adverse weather events like droughts or floods.

- **Picture-Based Insurance** utilises smartphone images to regularly monitor and assess crop health, making insurance more accessible and affordable for farmers.
- **Soil Moisture Index Insurance** measures soil moisture levels using satellite and in-field sensors, and issues payouts when the soil becomes excessively dry or wet.
- **Weather Index Insurance** compensates based on local weather conditions such as droughts or heavy rainfall, with crop impacts monitored daily via satellite and weather stations.
- **Farmer Protection Cover** is a comprehensive bundle that protects against a variety of risks, ensuring stability by covering crops, livestock, health, and assets during tough times.

Impact and achievements

Since its inception, ACRE Africa has assisted more than 3.1 million farmers in obtaining climate insurance throughout the continent, providing over USD 100 million in payouts following weather shocks and empowering farmers to enhance their yields and build resilience.

Challenges and solutions

To address the low penetration of agricultural insurance in Africa (1 % in Sub-Saharan Africa), characterised by transparency issues, affordability and a lack of farmer education, ACRE has partnered with Etherisc to integrate blockchain technology into its insurance products. This innovation uses blockchain to feed weather data directly into a digitised insurance policy, enabling a faster and more cost-effective weather index insurance solution. In addition, the product is distributed through scratch cards and bundled with agricultural inputs and services to increase uptake, allowing farmers to access micro-insurance for as little as USD 0.50 in premiums.

Future plans and sustainability

ACRE Africa aims to continue expanding its range of insurance products and increase its geographical footprint across Africa, ensuring that more farmers can benefit from affordable and reliable insurance solutions.

For more details, visit ACRE Africa's website.

Catastrophe bonds and other insurance-linked securities

Catastrophe bonds and other insurance-linked securities (ILS) are important financial tools for managing natural and man-made disaster risks. Catastrophe bonds were first introduced in 1997, but are not yet widely used in Africa. Catastrophe bonds are high-yield debt instruments issued by re/insurance companies that allow them to transfer the financial risk of major catastrophes to investors. ILS is a broader category that includes catastrophe bonds and other vehicles such as collateralised reinsurance, sidecars and industry loss guarantees, all of which are used to transfer insurance risk to the financial markets. These instruments are structured around specific triggers, such as the magnitude of an earthquake or the category of a hurricane. Such solutions help to increase the capacity and penetration of insurance in regions prone to natural disasters, which might otherwise be uninsurable.

In 2017, the World Bank launched a catastrophe bond to provide financial support for the Pandemic Emergency Financing Facility (PEF), a facility created by the World Bank to channel surge financing to developing countries at risk of a pandemic. The facility, which has provided more than USD 500 million for pandemic preparedness, has been of significant benefit to African countries, many of which are members of the International Development Association (IDA) and therefore eligible for funding. Drawing on lessons learned from the Ebola outbreak, this initiative represents a strategic use of capital markets, insurance expertise and international cooperation to improve global, and in particular African, health security.[23]

Looking ahead – Technological innovations that could further boost the provision of insurance capacity for disaster resilience in Africa

As described in a 2023 study[24], integrating satellite imagery, drones and artificial intelligence (AI) into the processes of risk assessment and management can play a pivotal role in enabling insurance capacity provision for disaster resilience. These technologies deliver real-time data that is vital for swift evaluations and responses following natural catastrophes. Such data can not only improve the precision of risk models, but also ensure

Our industry must play a leading role in promoting disaster resilience in Africa by developing innovative risk transfer solutions, supporting resilience-building initiatives, advocating for sustainable risk management and investing in research. By doing so, African reinsurers and brokers can significantly improve the continent's ability to withstand natural disasters and extreme events.

Lamia Ben Mahmoud, CEO, Tunis Re

23 World Bank Launches First-Ever Pandemic Bonds to Support $500 Million Pandemic Emergency Financing Facility, World Bank Group, 2017
24 Sheehan, B. et al., On the benefits of insurance and disaster risk management integration for improved climate-related natural catastrophe resilience, Environ Syst Decis 43, 639–648, 2023

more timely insurance payouts, crucial for effective recovery and mitigation efforts. For example, to improve the accuracy and speed of payments for parametric insurance, satellite and drone technology could be used to validate payment triggers, while blockchain-enabled smart contracts could speed up claims processing.

CONTACT

Smart contract-enabled policies

The integration of blockchain and smart contract technologies can significantly improve the efficiency of insurance systems by enabling the immediate deployment of capital to manage ongoing or recover from past climate events. This is in contrast to traditional insurance systems, which often involve significant administrative burdens, leading to higher costs, reduced coverage capacity and delays in funding for areas affected by climate events. By automating payouts through smart contracts that are executed based on pre-defined criteria met by real-time catastrophe monitoring data, insurers can ensure a rapid financial response. This automation offers three main benefits: immediate funding for local authorities to deal with extreme climate events; reduced waiting times for policyholder payouts, supporting faster economic recovery; and significant reductions in administrative costs and human error.[25]

DRONE

Drone technology

Drone technology can significantly improve the insurance industry's efficiency in inspecting properties and managing claims before, during and after catastrophic events. Equipped with advanced sensors, drones can autonomously create detailed 3D models of properties that can be analysed using machine vision to assess catastrophe risks such as fire hazards. This capability allows insurers to assess risks more accurately, reducing the need for costly expert inspections and potentially lowering insurance costs. During disasters, drones serve as dynamic tools for real-time risk communication, helping insurance companies confirm parametric triggers, model loss exposure and communicate risk reductions to policyholders. They also help public authorities manage disasters proactively by integrating with early warning systems such as the European Flood Awareness System and the European Forest Fire Information System. In the aftermath of a disaster, drones accelerate the claims processing and adjudication phase, improving speed and reducing the risk of fraud.[26]

25 Ibid.
26 Ibid.

Satellite technology

Such technology, particularly remote sensing, has been recognised as a valuable asset to the insurance industry in providing comprehensive contextual information. The European Space Agency has highlighted the usefulness of these technologies in generating detailed catalogues of parameterised phenomena and ground objects. This data is critical to risk assessment and mitigation efforts within the insurance industry. In addition, remote sensing data helps to extract critical hazard, vulnerability, and exposure information that can be used to develop and calibrate new natural catastrophe models, particularly for regions where detailed risk data are lacking. The insurance industry can also use micro-satellite remote sensing for specific tasks such as reporting changes in regional risk profiles, such as coastal erosion, and for dynamic purposes such as verifying natural catastrophe events.

We recognise that developing disaster resilience and recovery models is a major challenge in Africa. The primary constraint is the unstructured nature and paucity of data to enable risk modelling. Parametric and index insurance, and AI capabilities, are potential game changers in this landscape and offer a beacon of hope. Their reliance on alternative data streams, rather than traditional exposure and claims data, for underwriting and claims adjustment, and 'big data' analysis proficiencies, allows us to navigate uncertainty with confidence. Embracing these innovative insurance models and technology is not just a choice, but an imperative that we at Continental Re embrace with enthusiasm.

Lawrence Mutsunge Nazare, Group Managing Director, Continental Re

Role of regulators in building resilience

Insurance regulation serves a critical role in safeguarding consumers by setting licensing requirements, ensuring the financial solvency of insurers, developing insurance markets, sharing expertise (including for risk prevention, mitigation and transfer), mandating insurance protection such as for vital, climate-vulnerable communities, supporting innovation and educating consumers. As both a foundation element and enabler of protective measures, insurance regulators are pivotal in shielding communities from disaster risk.

EXAMPLES OF AFRICAN INSURANCE REGULATORS WORKING TO ENHANCE DISASTER RESILIENCE

As shown in the examples below, African insurance regulators are taking diverse and even significant steps to strengthen their populations' resilience to disasters and expand the reach of insurance solutions.

Introducing mandatory disaster insurance in Algeria and Morocco. Algeria introduced mandatory natural catastrophic insurance in 2003 for property and commercial and industrial premises. However, uptake has remained low (12 % as of 2019[27]). As discussed by the UNDP Insurance and Risk Finance Facility[28], further efforts to enhance inclusive insurance uptake, e.g. by tailoring products, educating consumers and incorporating lower cost distribution networks, could help to deliver growth. The finalisation of a new insurance bill in Algeria in 2023 may help to bring this about.[29]

Morocco similarly introduced compulsory natural and man-made disaster insurance in 2019, by compulsory extension of property insurance policies (though insurance penetration is currently below 5 %). This is a PPP solution which additionally includes a solidarity fund for the non-insured.[30] Continuing with the expansion of insurance solutions, in 2023, Morocco approved a draft law mandating compulsory basic sickness insurance for professionals and non-wage earners in the private sector.[31]

Allowing index-insurance in the CIMA region. The adoption of the «CIMA Book VII» in 2012 allowed and regulated the development of microinsurance and index-insurance in 15 countries in the CIMA region of Africa. The Senegalese Insurance Supervision Agency also worked in partnership with the Global Index-Insurance Facility (GIIF) to develop supervisory and customer protection tools for index-insurance.[32] Collaborations with the regulator

27 Inclusive insurance and risk financing in Algeria - Snapshot and way forward 2023, UNDP Insurance and Risk Finance Facility, 2023
28 Ibid.
29 Bill regulating insurance activity finalized, Atlas Magazine, 2023
30 Morocco: Mobilizing the financial sector for improved resilience against disasters and climate shocks, World Bank Blogs, 2024
31 Morocco Approves Draft Law Mandating Compulsory Basic Sickness Insurance, Morocco World News, 2023
32 Assah, F. C., Sberro-Kessler, R., Supporting Effective Regulation and Supervision of Index-Insurance in Francophone Africa, Global Index Insurance Facility Knowledge Notes, World Bank Group, 2011

to expand inclusive insurance are continuing at pace, as evidenced by the Insurance Development Forum's 2023 inclusive insurance roadmap for Senegal implementation update.[33]

Working towards inclusive insurance for Zimbabwe's smallholder farmers. Agriculture makes up 70 % of Zimbabwe's workforce and is dominated by smallholder farmers. Zimbabwe's insurance regulator, the Insurance and Pensions Commission (IPEC), and the IFC announced a partnership in 2022 to create an enabling environment for innovative and inclusive agricultural insurance solutions for smallholder farmers, to protect them from weather-related crop damage and other shocks.[34]

Opening up of the insurance market in the Democratic Republic of Congo. In 2016, the Insurance Regulatory and Control Authority (ARCA), a regulatory body dedicated to reviving the Congolese insurance market, opened up the market beyond the state-run insurance provider to other national and international players and introduced a range of compulsory insurance and a system of compensation for personal injury.[35]

Strengthening solvency in Nigeria. To strengthen the insurance industry and ensure sustainability, and also to help build consumer trust, several African governments have strengthened their solvency requirements. For example, Nigeria's National Insurance Commission (NAICOM), increased the minimum capital requirement for composite insurers from NGN 5 billion (USD 13.1 million) to NGN 18 billion (USD 47.3 million).[36]

Supporting technological innovation across Africa. Traditional insurance license categories sometimes present a challenge for Insurtech and digital distribution solutions. Under Section 110 of Ghana's Insurance Act of 2021, Ghana's National Insurance Commission (NIC) can issue a license to technical service providers (TSPs) to operate in the insurance industry. The NIC has also issued guidelines for TSPs on the application process and compliance requirements.

BimaLab is an innovation accelerator initiative for Insurtech and start-ups in Africa, with the aim of improving insurance access and inclusivity to enhance the resilience of underserved and climate-vulnerable communities. It brings together innovators, investors, corporate partners and regulators, helping innovators to refine their value proposition, assess viability and scale their solutions.[37] BimaLab continues to expand its reach, and is expected to be operating in 15 African countries by 2025.[38]

Recent developments such as heightened geopolitical tensions, economic volatility and climate change have increased Africa's vulnerability. At Gallagher Re, we are working with various stakeholders on a number of initiatives, such as Senegal's Public Solidarity Fund, to improve financial stability and disaster resilience. Our approach includes comprehensive analysis, modelling, product structuring and risk financing to effectively prepare for and mitigate global threats.

Natalie van de Coolwijk, Regional Director, Middle East & Africa, Gallagher Re

33 Implementation Update: Pioneering an Inclusive Insurance Roadmap in Senegal, Insurance Development Forum, 2023
34 IFC, Zimbabwe regulator to develop agricultural insurance to protect smallholder farmers, Engineering News, 2022
35 The Congolese Insurance Market, Atlas Magazine, 2020
36 The African insurance market is set for take-off, McKinsey & Company, 2020
37 www.bimalab.org
38 FSD Africa's Bimalab Africa Insurtech Accelerator Program Gets $600,000 For Africa Expansion, Empower Africa, 2024

GLOBAL ISSUES NECESSITATE GLOBAL SOLUTIONS

Importantly, however, disaster risk does not necessarily respect national borders. Disasters linked to climate change and extreme weather events, for example, are a transnational, even global problem. Such global issues require comprehensive solutions.

A crucial initial step is coordinating insurance regulations across African insurance markets, an effort that remains underway. Speaking at the OAISA General Assembly in Abuja, Olorundare Sunday Thomas, Commissioner for Insurance at NAICOM, stressed that collaboration among African insurance regulators is essential for managing large-scale disaster risks but it is only the beginning. He emphasized the need to align regulatory frameworks with the African Continental Free Trade Agreement (AfCFTA) to enable seamless trade and economic integration across the continent.[39] However, aligning regulations such as proposed in the context of the AfCFTA, while essential for African economies, is not sufficient to make Africa more resilient against disasters.

Drawing on European experience, Petra Hielkema, head of the EU's insurance regulator EIOPA, argues for a much broader approach. She emphasises the urgent need for collective action by insurance companies, member states and society to address the escalating losses from natural catastrophes exacerbated by climate change. Hielkema proposes comprehensive strategies such as tightening building codes, developing risk-sharing schemes at the national and EU level, and making better use of reinsurance markets. She also warns against excluding high-risk areas from coverage, which could undermine confidence in the insurance industry, and encourages the development of PPPs and a possible EU-wide scheme to ensure coverage for major events. This approach underlines that a balanced engagement of all stakeholders is crucial to improve affordability and access to insurance, thereby promoting greater resilience to disasters.[40]

> We recognise the critical role of working with governments and regulators to develop sustainable disaster solutions. By joining forces and leveraging our risk management expertise, we are committed to creating comprehensive frameworks based on catastrophe models that mitigate immediate risks and build resilience for the future. Such partnerships are critical to protecting communities and strengthening economic stability across the continent.
>
> **Dorra Berraies, Public Sector and Climate Resilience Senior Advisor, Gallagher Re**

39 NAICOM boss mulls improved regulation of insurance to drive AfCFTA, The Nation, 2024
40 EU regulator urges action on climate threat to insurance, Financial Times, 2024

TAKING DISASTER RESILIENCE TO THE NEXT LEVEL – RECOMMENDATIONS FOR THE CONSIDERATION OF AFRICAN INSURANCE REGULATORS

The recommendations outlined below are intended solely for discussion among relevant stakeholders around the problem of disaster resilience. They derive from the comments kindly shared by the re/insurance professionals who took part in the survey for this edition of Africa Insurance Pulse, and reflect the various initiatives and strategies that African insurance regulators have implemented to improve disaster resilience. These proposals can be considered as a starting point for dialogue.

- **Introduce and promote mandatory disaster insurance.** Protection needs to be relevant, accessible and understandable. With increased reach, come economies of scale and enhanced capacity provision and pricing.
- **Adapt regulatory frameworks for inclusive and emerging insurance models.** Vulnerable groups, including smallholder farmers and those in disaster-prone areas, need customised protection. Emerging insurance models, such as index-insurance and microinsurance require legal and operational flexibility to accommodate new insurance technologies and distribution methods.
- **Establish regulatory sandboxes.** These allow insurance companies to test new products and business models in a controlled, low-regulation environment, facilitating faster adaptation and implementation of innovative, effective insurance models.
- **Build partnerships with private and international entities.** Encourage collaborations between governments, international organisations and the private sector to develop and distribute insurance products customised to local needs.
- **Implement and maintain robust solvency standards.** Strict solvency requirements ensure that insurers can meet their obligations and are vital for building consumer trust in the sector.
- **Instigate consumer awareness campaigns.** Disaster resilience relies on consumer awareness and understanding of disaster risk and the immense value of insurance solutions.
- **Facilitate access to insurance through technology.** Create legal frameworks that allow and encourage technological innovation, as this can increase accessibility and lower the cost of insurance.

- **Develop and fund solidarity mechanisms for the uninsured.** Such funds support vulnerable communities and help to spread the financial risk of disasters more broadly within societies.
- **Monitor and evaluate insurance impacts:** Establish mechanisms to regularly monitor and evaluate the effectiveness of insurance solutions for disaster resilience, adapting strategies based on lessons learned and the ever-evolving risk landscape.

Through partnerships, clear, informed directives, an enabling, cross-border mind-set and the mandating of insurance protection, such as for vital, climate-vulnerable industries, Africa's insurance regulators can protect consumers and enhance the overall disaster resilience of communities and economies.

Insurance regulators across Africa hold the key to enabling the re/insurance industry to distribute disaster risk at the global level. By opening up re/insurance markets, allowing innovation and improving cross-border regulation coordination and conformity, regulators can facilitate a sustainable financial ecosystem to fortify local economies and social structures.

Through our extensive engagement with regulators across Africa, we've found that the most effective regulators are able to strike a fine balance between establishing and protecting the insurance industry and their mandate to close the protection gap. By enabling the re/insurance industry to spread large and catastrophe risks across national borders, regulators can better protect their local economies and social frameworks. It's also important for regulators and industry bodies to provide clear direction on where enhanced risk protection is needed. Such clarity is essential for governments to take specific, effective action, including mandatory protection against climate change for vital industries such as agriculture or those in vulnerable areas. Adopting this strategic methodology not only strengthens consumer protection, but also increases the resilience of African economies and communities to disasters. This approach is essential to fostering a sustainable and robust financial ecosystem that can withstand the challenges of today and tomorrow.

Priyen Mehta, Market Head Sub-Saharan Africa Market Units P&C Reinsurance, Swiss Re

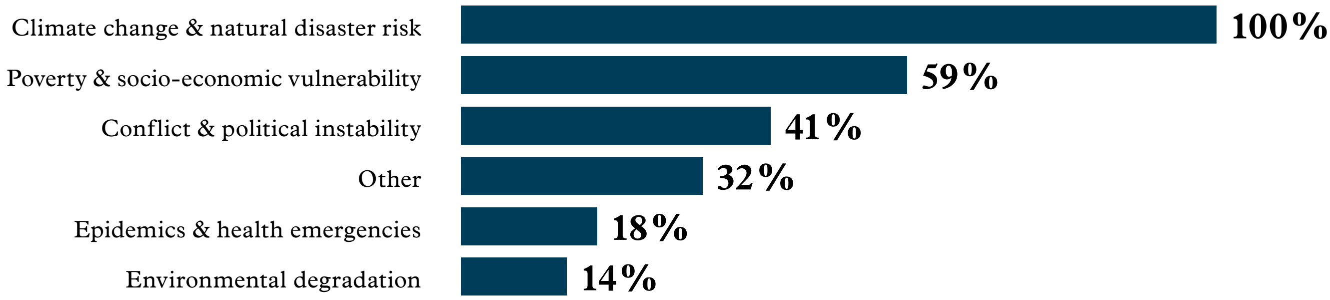
Market survey insights

We are extremely grateful to the 22 survey respondents from senior and executive tiers of the re/insurance industry who kindly shared with us their insights into the key disaster resilience challenges and solutions in Africa. Respondents also shared valuable indications of what is needed to enable the insurance industry to play an even greater role, and thereby to help close protection gaps and enhance Africa's disaster resilience.

Please note that in survey questions where respondents can select multiple answers, total chart percentages will often exceed 100 % because each percentage reflects the proportion of respondents who selected that specific answer among their preferences. This survey approach provides a more comprehensive understanding of respondent preferences beyond a single-choice format.

SURVEY RESULTS

Figure 5: From an insurance perspective, can you identify the main risks that challenge the disaster resilience of African societies and economies? Please select up to 3.



Survey respondents identified climate change and natural disasters, particularly extreme weather events like droughts and floods, as the main threats to Africa's disaster resilience. Most respondents who chose this category ranked it as the top concern among their 3 choices. They also noted that critical infrastructure often fails to withstand natural disasters such as floods, storms and earthquakes, leading to increased losses and reduced resilience.

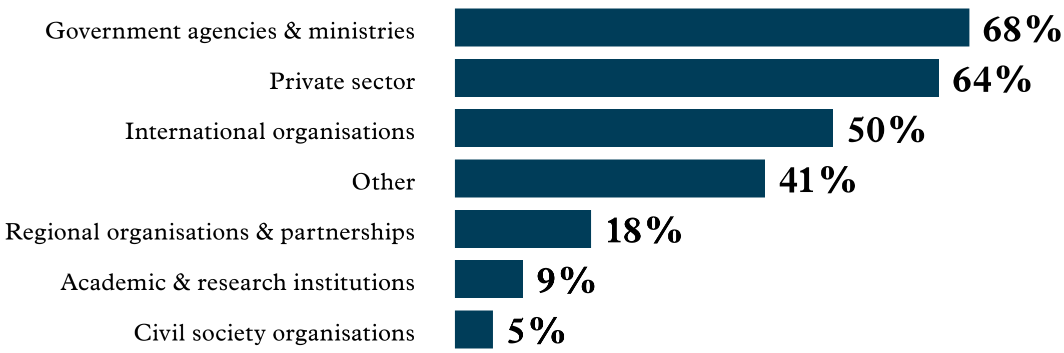
Additionally, there is a strong link between these risks and poverty, with socioeconomic vulnerability exacerbating Africa's exposure. The IPCC and World Risk Report 2023 emphasized how poverty and discrimination worsen these vulnerabilities, noting that many Africans lack adequate insurance against natural disasters.

Respondents also pointed to the significant impact of conflicts and political instability on businesses and the challenge of insuring goods in conflict zones. Environmental degradation, particularly from informal mining, was also a concern.

Other identified risks included infrastructure financing, food security challenges from climate change, supply chain and economic issues, cyber risks, fraud, corruption and governance problems.

Addressing all of these risks will be paramount to building disaster resilience in Africa, and thereby to enabling Africa's sustainable development, with solutions addressing climate, poverty and discrimination likely to make the most significant and immediate impact. Re/insurers are experts in assessing, pricing and advising on the mitigation of natural disaster risks, and are therefore an important part of Africa's disaster-resilience solution.

Figure 6: In your view, which organisations are best placed to help strengthen the resilience of African societies and economies? Please select up to 3.



This result underscores a clear consensus among respondents on the most effective approach to addressing disaster resilience in Africa: public-private partnerships (PPPs).

Government agencies and ministries emerged as key actors in this endeavour, with the private sector – particularly the re/insurance industry – playing a complementary role as risk experts. In emphasising the critical role of the re/insurance industry, respondents highlighted its ability to provide high-quality risk transfer solutions, raise local risk awareness and prevent, mitigate and compensate for disaster risks – largely due to its sophisticated risk modelling capabilities.

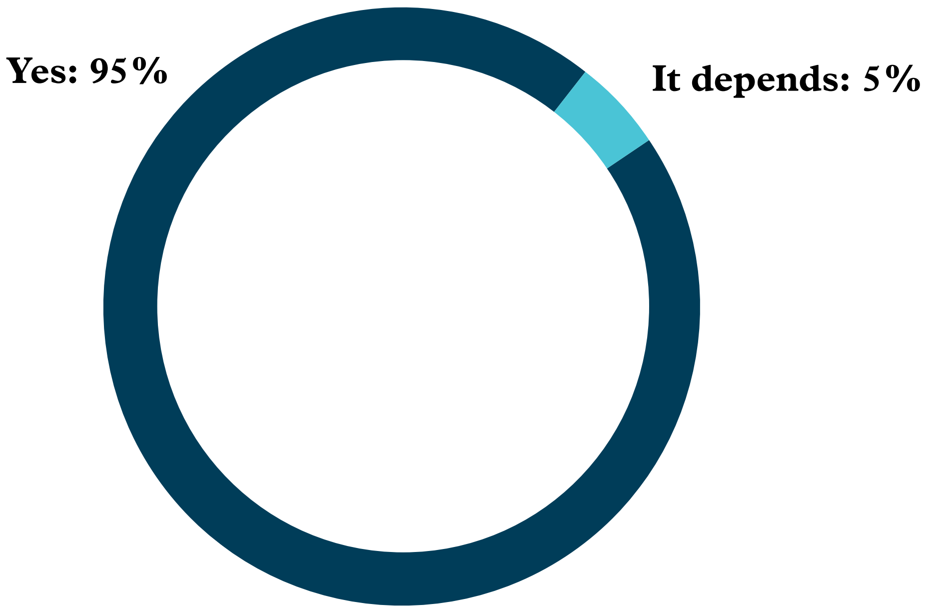
Respondents notably supported government policies such as mandatory insurance coverage and premium subsidies as a means of building resilience.

International organisations such as the World Bank, WFP and IFC were also highlighted as key partners in strengthening disaster resilience across the continent, mainly due to their funding capacity.

This result aligns with the previous survey question's identification of climate and natural disasters as the primary risks to Africa's resilience, and it underscores the urgency and scale of the challenge.

Respondents additionally noted, however, that organisations outside the governmental and international spheres face limitations in making a significant impact on Africa's disaster resilience, citing inadequate capacity and financial resources. Addressing these constraints would require increased funding and capacity building efforts.

Figure 7: Should and can African insurers, reinsurers and brokers promote disaster risk reduction and resilience-building efforts in Africa?



The response was a resounding yes, with comments including that insurers can and must contribute to disaster risk reduction and resilience building.

Respondents described how insurers are well positioned to do this given their deep understanding of risk and risk management, expertise in assessing and quantifying risk, product development capabilities and ability to provide enhanced technologies.

Furthermore, respondents stressed that insurers can help to raise awareness of risk and risk prevention, and that more should be invested in this area, in particular for flood and fire hazards. Others noted how insurers can and should advise on risk management practices, hazard safety and building codes.

To summarise the main resilience roles for the re/insurance industry, respondents described:

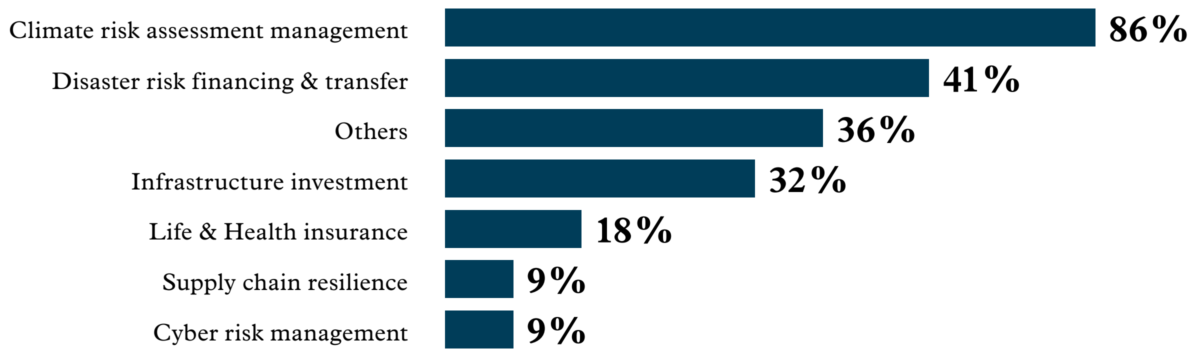
- Educating communities about the risks they face and how to prepare for them, in particular by providing information on risk management and mitigation measures.
- Promoting sustainable risk management practices, such as resilient construction, land and water resource management, and environmental protection.
- Collaborating in disaster resilience-building initiatives with governments and other organisations.
- Undertaking comprehensive risk management, enterprise risk management and risk analysis.
- Raising awareness of secondary perils.
- Developing innovative insurance products aimed at fortifying protection against disasters, including inclusive products and pioneering distribution channels.
- Leveraging digital technologies to reduce costs, facilitate insurance processes and service delivery.
- Supporting research endeavors aimed at enhancing the understanding of disaster risk.

Respondents also noted that more could be done given improved conditions. Giving an insight into what might be needed for this, respondents noted the need for improved data quality and availability, and that financial incentives for capacity providers could help to promote sustainable risk transfer solutions.

NamibRe's collaboration with the United Nations Environment Programme Finance Initiative (UNEP FI) in hosting and participating in market events has positioned the company as a thought leader in sustainable development advocacy in Africa and globally.

Rudolph Humavindu, General Manager Reinsurance, NamibRe

Figure 8: Where can the insurance industry make the most important contributions to enhancing resilience in African societies and economies? Please select up to 3.



Climate risk assessment and management leads the board, with 86% of respondents putting this in their top 3 choices. Respondents noted that insurers are quantifying risks and developing solutions to encourage climate-resilient practices and investments, potentially covering renewable energy projects, green infrastructure, carbon capture and storage initiatives, and sustainable agriculture.

This survey result shows that where re/insurers feel most able to impact disaster resilience, is also the top-identified risk that threatens Africa's disaster resilience (see figure 5). This again emphasises the key role of re/insurance in supporting Africa in disaster resilience and sustainable development.

Climate risk assessment and management is followed by disaster risk financing and transfer. As one respondent noted, companies are offering products such as catastrophe bonds and parametric insurance. The provision of re/insurance solutions linked to vital, resilience-enhancing infrastructure investment also scored highly. As one respondent noted, insurance already provides substantial funding for infrastructure.

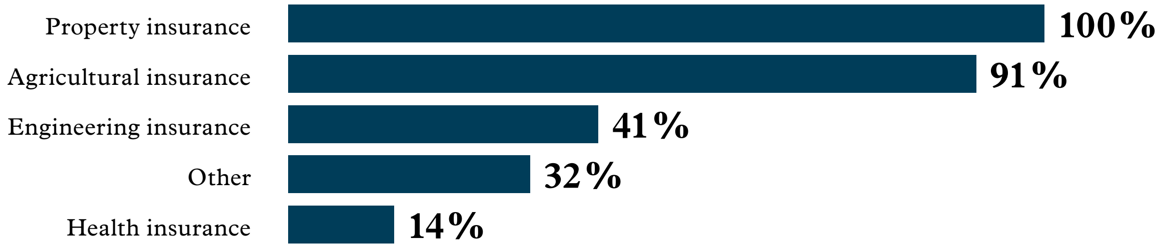
The resilience benefit of a dual approach that includes supporting/enabling infrastructure investment was highlighted in a respondent comment that noted how health infrastructure is inextricably linked to life and health insurance.

Cyber risk was raised several times by respondents in their comments as being an up-and-coming risk in Africa and an area where re/insurance can add value. One respondent noted that growing digitalisation and technological advancements have increased the risk of cyberattacks and other cybersecurity-related issues in Africa, and that cyber insurance can help to protect companies against such risks.

The pace of change in cyber security is unprecedented, fuelled by the rapid adoption of new technologies by organisations across Africa. This has increased their vulnerability to cyber threats. At SAA, we understand the seriousness of these risks. We are committed to providing effective cyber insurance solutions tailored to Algerian businesses. Our next product should not only help reduce cyber risks, but also assist businesses so that they can continue to thrive in the digital age with confidence and peace of mind.

Youcef Benmicia, CEO, Société Nationale d'Assurance (SAA)

Figure 9: What insurance solutions promoting disaster risk resilience are most widely offered by your company and used in your markets? Please select up to 3.



Survey respondents indicated that property and agricultural re/insurance are the predominant solutions offered by their companies to promote disaster resilience, and are widely used within their respective markets. Property insurance also scored highest overall in terms of the ranking assigned by respondents to their top 3 choices.

This result underscores a robust alignment between the insurance industry and the primary threat facing Africa's disaster resilience, climate change-related and natural disaster risks, highlighting the key role of the re/insurance industry in bolstering disaster resilience across the continent.

The revelation that 91% of respondents' companies provide agricultural insurance is particularly noteworthy, given the importance of the agriculture sector to Africa's GDP.

Engineering insurance was another key resilience-building insurance solution for Africa. Construction and infrastructure are vital for economic development and can be decisive for disaster resilience.

Other insurance solutions described by respondents included political violence and terrorism, and the ongoing preparation of a PPP-based solution for strike, riot and civil commotion. One respondent noted that political risk has matured and is now widely offered, but that it is no longer insurable where it has become a certainty.

Examples of successful insurance solutions highlighted by respondents:

1. Mandatory insurance solutions:

Respondents outlined various successful property insurance solutions, including mandatory insurance protection in jurisdictions such as Algeria and Morocco.

- In Algeria, implemented since 2003, mandatory coverage is mandated for natural catastrophe perils, encompassing earthquakes, wind/storm, floods and landslide. Despite the current 12 % insurance penetration rate, efforts are underway to augment this figure.
- In Morocco, compulsory coverage extends to natural and man-made catastrophe perils, including floods, earthquakes, tsunamis and terrorism. Respondents attested to the efficacy of this coverage, citing instances such as the earthquake in the Marrakesh region, where the re/insurance industry swiftly facilitated substantial disbursements for the reconstruction of affected properties and infrastructure.

2. Parametric/index insurance products and insurance pool solutions:

Parametric covers were the most frequently cited successful solutions, indicating
their alignment with client needs and key role in building disaster resilience in Africa.

- Index insurance products were referred to by respondents as game-changers, particularly benefitting small-scale farmers and gaining traction.
- The African Risk Capacity (ARC) fosters optimal risk management practices among farmers.
- Sovereign insurance pools and market pools offer robust incentives for risk reduction.

3. Other successful insurance covers:

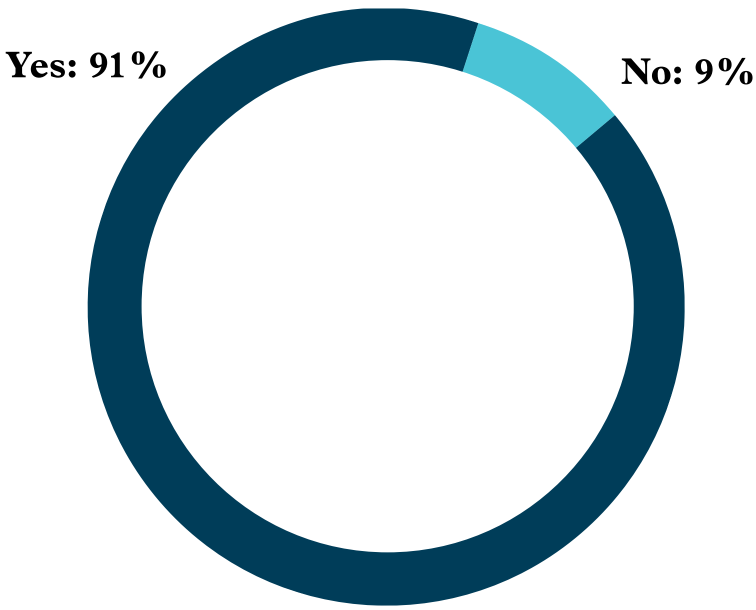
- Various forms of catastrophe protection, including general catastrophe excess of loss treaties and specific covers for earthquake, flood and agriculture.
- PPP funds in Tunisia support disaster prevention and mitigation initiatives, including infrastructure development and relief efforts.
- Agricultural and political risk insurance initiatives in Ethiopia.
- Egypt's credit insurance scheme supports credit default for mortgages.
- Introduction of a new emergency medical insurance product.

The most successful insurance solutions promoting disaster varied greatly among respondents, reflecting regional variations in risks and client requirements across the continent.

Very low insurance penetration is a major obstacle to strengthening Africa's resilience to disasters. The lack of economies of scale makes it difficult to develop effective solutions. While the introduction of compulsory insurance for certain risks may offer a way forward, it must be complemented by robust awareness and education campaigns. Equipping communities, individuals and businesses with the knowledge to make informed decisions is as important as providing them with insurance.

Jean-Alain Francis, CEO, EllGeo Re

Figure 10: Is your company already supporting existing or investing in future initiatives to build disaster resilience in African countries?

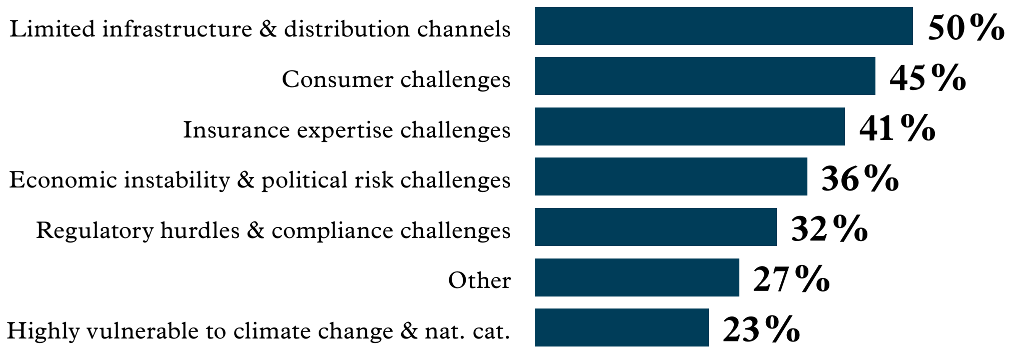


The vast majority of respondents' companies are supporting existing and/or future disaster resilience-building initiatives in Africa. This indicates a long-term commitment from the insurance industry to increasingly support and enable the sustainable development of the communities that they serve across this important region. Mirroring the diversity of the most-successful insurance solutions, examples of resilience-building initiatives were equally varied, again likely indicative of the diversity of main risks and clients' needs across Africa.

In addition to the many insurance solutions already on offer from the insurance industry, examples of resilience-building initiatives supported by respondents' companies included:

- Collaborating with the Algerian government to develop new agricultural insurance solutions.
- Partnering with the Moroccan government to assess and model risks for a PPP initiative aimed at the non-insured, particularly focusing on protection against climate risks such as floods, earthquakes, tsunamis and man-made disasters.
- Conducting flood mapping for Lagos, Nigeria, to facilitate urban planning efforts.
- Promoting risk awareness and knowledge-sharing, including insights into risk modelling.
- Providing advisory services to governments on resilience-building measures.
- Advocating for increased governmental participation in risk transfer solutions.
- Contributing to the establishment of best market practices for sustainable development, such as endorsing the UN Environment Programme Finance Initiative.
- Supporting projects aimed at enhancing protection for farmers, such as the DRIVE project (for more on this project, see page 24).
- Establishing a training academy to educate insurers, regulators and government representatives on disaster risk and potential solutions.

Figure 11: What do you see as the main obstacles for the African insurance industry in providing more robust insurance solutions that support resilience in African markets? Please select up to 3.



The consensus on the vital role of re/insurance in bolstering disaster resilience in Africa underscores the urgent need to address any obstacles hindering progress. The survey highlighted a diverse array of obstacles.

Half of respondents identified limited infrastructure and distribution channels as primary concerns. Interestingly, in figure 8 of this survey, over a third of respondents considered that insurance solutions enabling infrastructure investment were important for moving the disaster-resilience needle – so by offering solutions to facilitate infrastructure investment and enhance resilience, insurers would additionally be helping to remove a key obstacle to insurance industry growth, which would also work to enhance resilience.

Respondents emphasised personal lines distribution issues and misalignment between insurance providers and sellers/agents, particularly noting the concentration of distribution investment in urban areas. Technological advancements were cited as a promising solution, allowing for improved distribution, even reaching nomadic farmers.

On the consumer front, respondents outlined a spectrum of challenges including poor financial literacy, limited insurance awareness, wavering confidence in insurance products, inadequate incentives for purchasing insurance, restricted access to insurance, deficiencies in payment discipline and prevalent reliance on self-insurance among families, clans and smaller communities. Addressing these challenges necessitates concerted efforts to educate and tailor insurance solutions to meet the needs of low-income households.

Lack of insurance expertise was the third-highest scoring obstacle to the provision of robust and innovative insurance solutions. This category also scored highly in terms of the order of importance of respondents' top 3. Adding insights as to the specific expertise that is lacking from an insurance industry perspective, respondents noted insufficient actuarial expertise, data availability, data quality, modelling capabilities and risk capital, as well as the high cost of data. Insufficient economy of scale (market size) was also noted as an important factor limiting current levels of capacity provision. These obstacles all reflect a market in its relative infancy and will improve with collaboration and as risk awareness, risk mitigation and knowledge of risk transfer solutions grow.

Respondents also highlighted the need to improve risk and insurance knowledge and expertise amongst decision makers outside of the insurance industry, in particular governments, in order to increase understanding of the need for protection and immense value and potential of insurance. Respondents were clear on the fact that increasing insurance knowledge and improving collaboration between the private and public sectors would help to increase the provision of risk transfer solutions. This overlaps with concerns shared by respondents about the absence of enabling regulatory insurance environments – respondents commented that an inconsistent application and lack of harmonisation of regulatory frameworks across Africa inhibit innovation and increase operating costs. Shared insurance expertise could therefore have a significant and positive effect.

Deteriorating economic stability was seen as a significant obstacle to insurance growth in some economies, negatively impacting government funding levels (including for premium subsidies) and poverty (impacting the ability of businesses and individuals to afford insurance).

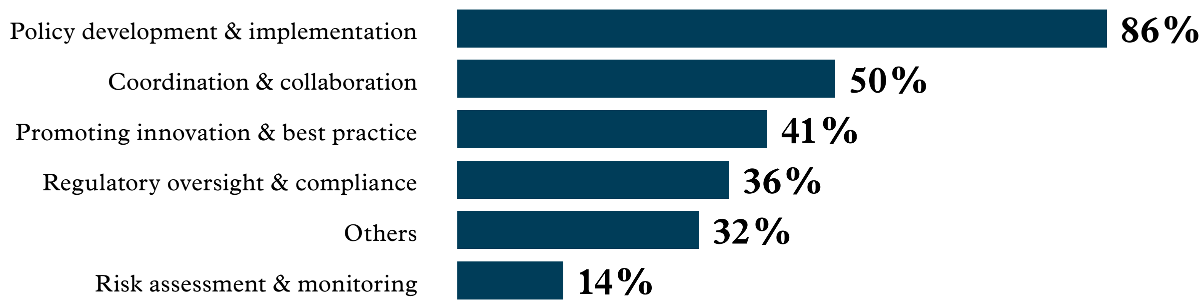
To significantly improve the resilience of Africa, particularly vulnerable agricultural communities, the re/insurance sector needs to pioneer more financial inclusion solutions. Affordability remains a critical challenge, an area where government subsidies could play a transformative role. In addition, the insurance industry needs to evolve beyond its traditional reliance on agents, brokers and local units by adopting technology-driven ‹last mile› distribution models to effectively manage costs and extend reach.

Regina Kwengwere Gunda, Monitoring and Evaluation (M&E) expert, ZEP-RE

A central obstacle in the African insurance industry's effort to offer more robust risk transfer solutions that improve disaster resilience in African markets is the limited capacity for innovation. This constraint stems from three critical factors: a shortfall of human resources and expertise, an absence of appropriate technology, and the excessive costs involved in collecting certain essential disaster-related data.

Michael Mbaka, Country Relationship Manager – DRIVE, ZEP-RE

Figure 12: What is the role of regulators/policymakers in building disaster resilience? Where should they focus? Please select up to 3.



Respondents identified a range of focus areas, but saw the implementation of clear, sound disaster resilience policies as most critical for regulators and policymakers. There was a strong response in the survey that resilience policies across Africa, including building codes, land-use guidelines and environmental protection standards, are currently inadequate and that a long-term approach to this critical issue is required. Unplanned urban expansion and construction on wetlands were raised as example problems. Respondents noted that clear legal frameworks are essential, thereby avoiding grey areas that can lead to disputes.

The high-scoring obstacle of inadequate insurance knowledge identified in the previous survey question (figure 11) helps explain why half of respondents consider coordination and collaboration to be so important for governments. Parties need to come together to learn from risk experts, develop sustainable resilience solutions, close knowledge gaps and raise public awareness.

> Regulators must shift their focus from stifling constraints to fostering innovation and creating an enabling environment for insurance; without appropriate policies, the private insurance sector remains Africa's untapped ally in strengthening disaster resilience.
>
> **Fikru Tsegaye, Executive Officer, Strategy, Business Development and Company Secretary, Ethiopian Re**

In terms of insurance regulation, the importance of finding the right balance between consumer protection and enablement to help close the insurance protection gap– including to promote healthy competition – was highlighted by several respondents. Comments included that regulators should avoid overregulation and focus on solvency and transparency, and that a wider mandate enabling diversification across national borders and the establishment of domestic and regional pools would help to enhance risk transfer. The concept of regulatory sandboxes to attract new players and allow them to test their solutions before moving into the regulated environment was also raised, as was the importance in general of promoting and enabling new product innovation.

Respondents also noted how regulators and policymakers can promote innovation and best practice by supporting research and development and piloting projects and initiatives that explore new technologies, approaches and solutions to disaster resilience.

The insurance industry's ability to improve risk management practices and contribute to disaster resilience is currently neither understood nor exploited by most regulators and policymakers. The current level of cooperation is fundamentally inadequate, which is why actual progress falls far short of potential.

Kamal Tabaja, Chief Operating Officer, Trust Re

Morocco's adoption of a rigorous solvency framework, very close to the European Union's Solvency 2 standard, has been adjusted so as not to reduce the insurance industry's ability to manage risks on both the liability and asset sides of the balance sheet. In order to improve our ability to cope with major catastrophes and to provide insurance solutions that are acceptable to major reinsurers, it is imperative that African regulators strike the right balance between maintaining sufficient capital reserves and necessary risk-taking. This balance is essential for a resilient and vibrant insurance industry.

Bachir Baddou, CEO, CAT Assurance et Réassurance

To help strengthen the disaster resilience of African economies and societies, insurance regulators need to be empowered with a broader mandate that includes market development, national and regional risk pooling, and fostering collaboration between the public and private sectors. However, a widespread reluctance among regulators to engage in collaborative efforts is hampering progress. The current narrow mandate, coupled with underfunding and understaffing, is hampering the insurance regulatory landscape and inhibiting the opportunities to grow and sophisticate the insurance market. It's imperative that regulators are given the resources and authority they need to make meaningful progress.

Dr. Corneille Karekezi, CEO, Africa Re

Are there specific regulatory or policy changes that you believe could encourage greater investment in disaster resilience measures by the insurance industry in African countries?

Examples of enabling regulatory or policy changes highlighted by respondents:

- Implementing **mandatory insurance** – such as in Algeria and Morocco - was identified as a powerful way to boost disaster resilience. It was stressed, however, that for mandatory insurance to be effective, it must go hand-in-hand with initiatives to increase risk awareness and educate about the purpose and value of insurance.
- **Building codes,** including to prevent settlements in wetlands and floodplains, and ensuring enforcement.
- **Drought-related policies** were reported by respondents as lacking, but these could significantly help to mitigate the impacts of drought and increase risk transfer options.
- **Giving regulators a broader mandate and preventing overregulation** would empower collaboration and data sharing, allow the insurance industry to take more risk, encourage product innovation and help to facilitate a sustainable risk-transfer market development for disaster resilience. Enabling micro-insurance and cost-saving technological distribution platforms for insurance products were given as particular examples.
- **Tax incentives** for investing in disaster resilience.
- **Establishing pools** was a key topic for respondents. Despite efforts by the insurance industry, the political will for insurance pools is often lacking, an issue that further expertise-sharing would hopefully help to address.
- **Allowing and encouraging private sector investment in infrastructure** would have widespread positive impacts on Africa's disaster resilience, supporting economic development, enabling greater insurance penetration and allowing communities to cope and recover faster after disasters. Insurance can also help in this respect by protecting investments from specific risks.
- **Enhancing political and economic stability,** such as through labour laws and by stabilising interest rates and reducing risk, including insurance risk, policy risk and exchange rate risk.
- **Investing in technology** to assess disaster risks more accurately and implement more effective disaster prevention and management measures, such as early warning systems and disaster management platforms.
- **Encouraging strategic partnerships** between insurance companies and other stakeholders, such as governments and research institutions, to enable effective disaster resilience solutions.
- **Training and capacity building** to help insurance companies better understand disaster risk and develop more effective risk management strategies.
- **Risk and protection awareness** raising to encourage people and businesses to mitigate risk and utilize insurance-based solutions.

CONCLUDING SURVEY REMARKS

In conclusion, respondents underscored the critical role of the insurance industry in bolstering disaster resilience in Africa, emphasising that its full potential remains untapped. Respondents also highlighted the imperative need to enable innovation and technology in order to help close insurance protection gaps and fortify the continent against disasters.

Moreover, the overwhelming consensus was for proactive collaboration between the insurance industry and other stakeholders, including governments, regulators and international institutions. Key actions encompass data sharing for enhanced risk comprehension, advocacy for insurance value, investment in research, and dissemination of best practices for disaster resilience and risk management.

To bridge the protection gap and ensure a resilient future, we need to extend our expertise beyond the boundaries of traditional insurance. Working with international organizations, governments, and agencies, we at Santam are committed to the principle of building back stronger. Together, we aim to strengthen our critical infrastructure to ensure our broader communities continue to thrive in the face of future adversity.

Sory Diomande, CEO, Santam Re & International

One of the key contributions of the insurance industry is its ability to assess risks and make them transparent. In strengthening Africa's resilience, re/insurers use their access to technology to accurately model, assess, price and cover or mitigate risks. Regulators could further encourage generating and sharing data across the industry to help demonstrate risks in greater detail and point out where governments, communities and public and private institutions need to take precaution and better prepare for disasters.

Nico Conradie, CEO, Munich Re of Africa