

# How Africa Specialty Risks is Transforming Risk Management in Africa

*In recent years, the insurance industry has witnessed a wave of innovation driven by technology, data analytics, and artificial intelligence.*

Africa Specialty Risks (ASR) has been at the forefront of this transformation, spearheading innovative insurance and reinsurance solutions tailored to the unique challenges of the African continent and beyond. Through strategic initiatives, such as our groundbreaking cyclone insurance in Mozambique, solar farm bankability guarantees via innovative parametric insurance, and an innovative hybrid weather and area yield cover, ASR is setting new benchmarks in the industry.

## Parametric Cyclone Coverage

In December 2022, the Mozambique Government, through the National Institute of Disaster Management (INGC), secured cyclone insurance to bolster resilience against escalating climatic risks. Mozambique, Africa's second most disaster-prone country, has faced repeated cyclone devastations which have severely impacted its coastal regions. For example, Cyclone Eloise in January 2021 and Tropical Storm Gombe in 2022 caused extensive damage in the region of USD 100 million, highlighting the urgent need for a sustainable natural catastrophe insurance solution. ASR provided a robust parametric cover, offering clear payout conditions based on predetermined triggers such as rainfall and windspeed, with the parametric insurance model eliminating the need for prolonged claims processes, enabling rapid fund disbursement, and facilitating swift recovery from disasters.

The innovative approach leveraged earth observation technologies for rapid assessment and calculation of rainfall levels and windspeed thresholds across Mozambique, ensuring swift claims settlements. The calculations included windspeeds which were modelled by ASR across Mozambique's topography, a first for the insurance industry, enabling precise payout calculations and live loss monitoring. The novel approach to model design and data enabled detailed back-testing on historic data, increasing confidence to both the insured and insurer, as both parties had the same expectations for the product.

The successful placement of this program, which had previously stalled for three years, underscores ASR's commitment and expertise. By adjusting the program's limit to USD 35 million, ASR ensured its viability without compromising the coverage needed. The program's effectiveness was proven during Cyclone Freddy in February/March 2023, where rapid settlement facilitated immediate rebuilding efforts. Our proactive approach not only mitigates the economic impact of natural catastrophes but also strengthens the resilience of affected communities. By ensuring that funds are available promptly, ASR's solution supported the rebuilding of infrastructure, restoration of livelihoods, and overall economic recovery, reinforcing the importance of tailored insurance products in disaster-prone regions.

## Unlocking the Solar Revolution

In a bid to address the volatility of energy prices and the impact it has on the viability of solar farms, ASR introduced another innovative parametric insurance solution. This triggers payouts when energy prices fall below the production costs of solar power, ensuring the economic sustainability of photovoltaic installations. This not only mitigates financial risks for solar farm operators but also enhances the attractiveness of solar projects to investors.

This forward-thinking approach plays a crucial role in advancing Africa's renewable energy sector. By providing financial security, ASR's insurance solution helps secure necessary funding, promotes operational stability, and encourages further investment in solar energy, contributing to the continent's energy transition and sustainability goals.

## Weather & Area Yield Cover

The agricultural sector has been at the vanguard of parametric approaches to insurance. Agriculture remains a cornerstone of Africa's economy, yet it is vulnerable to climatic risks such as droughts, floods, and soil degradation. In Zambia, these challenges have led to acute food insecurity affecting 1.59 million people. In collaboration with PULA, ASR supported a USD 105 million hybrid weather and area yield cover, supporting smallholder farmers by providing timely risk-sharing mechanisms that alleviate the financial burdens of improving agricultural productivity.

The hybrid cover combines weather and yield triggers to streamline claims and recovery processes, making insurance more accessible and affordable for farmers. By supporting the Zambian Farmer Input Support Program (FISP), this initiative enhances resilience, boosts agricultural innovation, and broadens private market reach, ultimately contributing to food security and economic stability.

In partnership with PULA Advisors and VIVA Seguros Angola, ASR also introduced an USD 11 million Area Yield Index Insurance (AYII) cover in Angola. Angola has an abundant resource of arable land and diverse climates, however only 10% of its 35 million hectares are currently cultivated. Angola, like Zambia, faces challenges from climate change that could adversely affect crop yields. This innovative product protects over 80,000

farmers by providing financial security against climatic perils. Using a five-year 'average production history' (APH), the product sets yield benchmarks for specific agri-ecological zones (AEZ). Payouts are triggered based on the productivity forecasted for each zone and are proportioned by the value of individual farmer inputs, offering a comprehensive "all risks" yield proxy.

The AYII initiative is vital for mitigating agricultural risks and fostering resilience among smallholder farmers. By aligning payouts to farmer input costs, this product enhances farmers' ability to invest and adapt, contributing to sustainable prosperity and food security in Angola.

## Data Analytics and Technology Utilisation

Advanced technology and data analytics, which are increasingly utilised by insurers can only enhance the products offered to the insured. The use of earth observation technologies for real-time data collection and analysis leverages the power of technology and real-time data. Models facilitate accurate risk assessments, trigger calculations, and back-testing, providing confidence to both insurers and insured parties.

Data analytics also plays a crucial role in understanding risk patterns, optimising insurance coverage, and predicting future trends. By harnessing these technological advancements, insurers can design and implement insurance solutions that are both effective and efficient, addressing the specific needs of African markets and beyond.

## Summary

There is no doubt that insurance and reinsurance is reshaping the landscape in Africa and the Middle East. Parametric products are crucial in providing support to vulnerable communities and sectors. These efforts not only mitigate risks but also unlock investment opportunities, foster economic stability, and promote sustainable development.

*As climate risks intensify and the need for robust insurance solutions grows, our commitment to innovation, backed by technology and data analytics, positions us as a leader in the industry. By continuing to push the boundaries of what products are available in insurance, ASR is ensuring a resilient and prosperous future for Africa and elsewhere globally.*