





www.arc.int/arc-limited



For the third consecutive year, the insurance industry's global leader in ESG.



## **WELCOME** AND INTRODUCTION

## 2022: HIGH IMPACT, ALBEIT AN EXTREMELY CHALLENGING YEAR FOR INSURANCE

Valued members, donors, strategic partners and stakeholders,

"A Year of Impact" best describes the extent to which ARC Ltd. fufilled our duty to Africa's development in 2022.

This was a duty we did not shoulder alone. Our donors and partners stood with us as we sought to protect the most vulnerable from climate change impacts in Africa. No one person or organisation can make the impact alone, and we are heartened that behind ARC Ltd. is a powerful and dedicated group of stakeholders who are fully committed to our success.

Together, we faced unprecedented challenges, but also achieved significant milestones. With this support, ARC Ltd. continued to grow and innovate in the face of adversity, and we are proud of our progress.

It gives me great pleasure to outline this progress in our 2022 Annual Report, an opportunity for us to reflect on our accomplishments and the challenges we faced throughout the year, and share our plans for the future. We also detail our strategic initiatives, corporate responsibility efforts and financial performance.

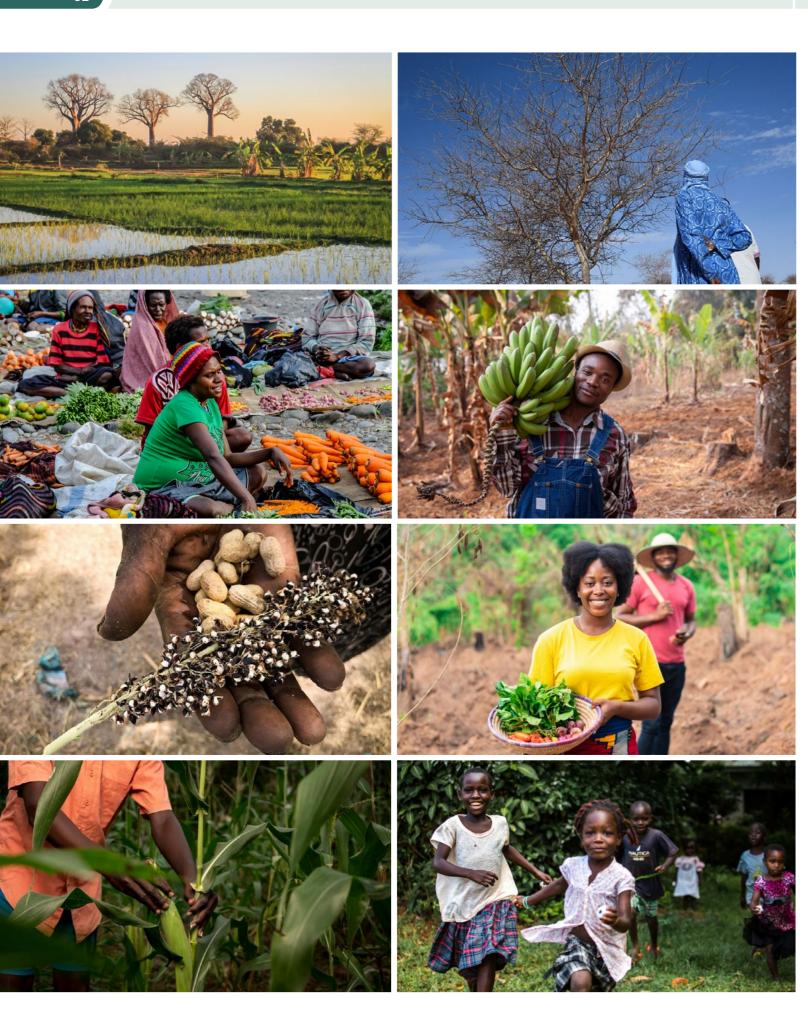
Further, we are committed to transparency and accountability, and this report provides a comprehensive overview of our operations and our progress towards our goals.

Thank you for your interest, commitment and contribution. We look forward to continuing our journey together.

Sincerely

DR ABDOULIE JANNEH

CHAIRMAN ARC Ltd. Board



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ABOUT THIS REPORT

## **ABOUT THIS REPORT**

African Risk Capacity Limited (ARC Ltd.) is committed to designing and delivering climate change risk management solutions for African governments.

By combining traditional approaches to risk management (including mitigation, disaster relief and quantification) with risk pooling and risk transfer, ARC aims to create sustainable, African-led strategies for managing extreme weather events, disasters and disease outbreaks. The 2022 Integrated Annual Report reflects on our progress and activities during the year, how we create value in the short-, medium- and long-term, and our commitment to best practice within the parameters of commercial insurance and sustainable development. We have endeavoured to present a concise summary of the year past, and a clear description of our strategy, operations, business environment and the impact of our activities on all our stakeholders.

#### **REPORTING BOUNDARY**

This integrated report is a comprehensive account of ARC Ltd.'s operations and activities for the financial year ending 31 December 2022. It focuses on material matters relating to our strategy, business model, the context within which we operate, and our performance and governance structure. It is both a record of our core activities and disbursements during the year, as well as a reflection of our highest risks, priorities, opportunities and highlights.

#### REPORTING FRAMEWORK

This report meets the standards and requirements of the International Sustainability Standards Board's Integrated Reporting Framework. Our Annual Financial Statements, from page 91 to 122, were prepared in accordance with the International Financial Reporting Standards (IFRS), and in the manner required by the Bermuda Monetary Authority (BMA).

#### **HOW TO NAVIGATE THE REPORT**

Use the following icons for more information on our approach, activities and mandate – and how they are closely connected to our six Capitals:



FINANCIAL CAPITAL



INTELLECTUAL CAPITAL



HUMAN CAPITAL



MANUFACTURED CAPITAL



SOCIAL AND RELATIONSHIP CAPITAL



NATURE CAPITAL

For more on our Capitals, see page 12.

#### **MATERIALITY**

All material matters, described in more detail on page 48, have been disclosed in this report. We consider an issue to be material if it is useful to existing and potential investors; relevant to our partners and stakeholders; influences decision-making; or has the potential to impact our ability to deliver on our mandate. The material matters were determined by a review of ARC Ltd.'s Inclusive Growth Strategy (page 35); our six Capitals (page 12); our environmental, social and governance (ESG) (page 66); and through engagement with our stakeholders to better understand their expectations and concerns (page 74).

#### FORWARD-LOOKING STATEMENTS

This report includes forward-looking statements pertaining to our long-term strategy, financial targets and operating environment. By their nature, however, these statements include certain assumptions, uncertainties, risks and opportunities. Given that the business is rooted in a dynamic, ever-changing environment, as yet unknown factors could cause our actual results, performance or achievements to look materially different in the future. The forward-looking statements have not been reviewed or reported on by our auditors, and we undertake no obligation to update or revise these statements publicly beyond the date of this document.

## DIRECTOR'S STATEMENT OF RESPONSIBILITY

ARC Ltd.'s executive management, assisted by the reporting team, is responsible for producing this integrated report and financial statements in accordance with applicable regulations and the International Sustainability Standards Board's Integrated Reporting Framework. The Board of Directors (the Board), supported by the audit, finance and risk committee, also acknowledges their responsibility for ensuring the integrity of the report.





## **2022 HIGHLIGHTS**



\$60M

Payout total for 2022. Largest total payout since our inception



18M

Individuals covered in drought and tropical cyclone-afflicted countries





Total Pool 9 value



new MoUs signed: **Comoros and Somalia** 

to our raison d'être.



12.8M **Total Africans** insured



\$127.8M

Total risk covered for Pool 9



Total claims for Pool 9A



**AUNCHING** of O&E and flood

risk products

This year, ARC Ltd. furthered its commitment to making a difference in the lives of vulnerable populations in Africa with the largest total payout since its inception -\$60 million - covering some 18 million individuals in drought and tropical cycloneafflicted countries, such as Mali, Malawi, and Madagascar. This brings the total sum

The disbursements have had a direct impact on enhancing Africa's ability to respond to climate-related disasters, as well as promoting resilience-building and food security on the continent.

of ARC Ltd.'s payouts since 2014 to \$125 million across eight risk pools, a testament

A YEAR OF **IMPACT** -\$60M IN **PAYOUTS** 

**CREDIT: © MEDAIR / TOM RUSSELL** 



#### **FIVE-YEAR REVIEW**



- Number of payouts: 14
- Total claims paid: \$60 million
- Number of people covered: 18 million
- Two new countries joined the pool: Comoros and Somalia
- Launch of Africa's first Outbreaks and Epidemics and Flood Risk products
- Creation of the **contingency fund** to cover risks below the insurance attachment point



2021

- 14 payouts totalling \$59.6 million
- \$21.7 million drought claim paid to Mali
- \$10.7 million tropical cyclone claim paid to Madagascar
- \$14.2 million drought claim paid to Malawi
- Gross written premium increased by 46%



- **\$28 million** drought claims paid to Senegal, Madagascar and Zimbabwe
- Gross written premiums increased by **30%** from 2019
- Launch of tropical cyclone product



• Senegal, Côte d'Ivoire, Madagascar and Zimbabwe received **\$26 million** from ARC Ltd. to assist in providing early action to support more than **7 million** people affected by drought in the 2019 agriculture season.



- **\$2.4 million** payout to Mauritania the first of its kind received by that government in response to a progressively severe drought
- Funds subsidised livestock reserves



#### IN 2022, **PAYOUTS** WERE DISBURSED TO:





\$1.2M Burkina Faso: Drought



\$0.8M Madagascar: Drought

\$1.1M

Drought

Mauritania:

\$10.7M Madagascar: Tropical cyclone





\$7.1M Mali: Drought



\$14.2M Drought





2022 IN REVIEW

## **2022 IN REVIEW**

In 2022, the tangible impact of ARC Ltd. was felt across several African states and their populations, underscoring the profound importance of our efforts.



Our vision is to cover 200 million Africans annually by 2025, although the need is much greater, with 700 million vulnerable Africans needing coverage.

Our journey has not been one we have walked alone, as we have been supported steadfastly by our member states, donors and strategic partners, who are united in our mission to shield the most vulnerable populations across Africa from the dire consequences of climate change. This unwavering dedication and commitment to ARC Ltd. is invaluable in helping us achieve our ambitious vision.

It is thanks to this commitment that ARC Ltd. achieved an unprecedented milestone in 2022 by disbursing an exceptional sum of over \$60 million in payouts to countries like Malawi, Zambia and Madagascar, accounting for almost half of the organisation's cumulative disbursements since its inception in 2014.

The expeditious disbursement of these funds empowers governments and humanitarian organisations to launch relief efforts swiftly following a natural disaster, thereby preventing dire circumstances from escalating into full-blown crises. While we acknowledge that each drought, flood, tropical cyclone or disease outbreak constitutes a calamity, we take immense pride in our pivotal role in financing the response, thereby contributing to mitigating the challenges that arise.

The culmination of this year's endeavours in a record payout is the most notable achievement for ARC Ltd.; a testament to the purpose of our organisation and its distinctive role in safeguarding the most vulnerable African populations from the devastating impacts of severe weather phenomena.

Having provided coverage to over 18 million Africans this year and disbursed a cumulative total of nearly \$125 million in claims to date, we have ambitious aspirations to expand our reach further. Our focus will be directed towards fostering initiatives and innovations that will facilitate sustainable growth for ARC Ltd. in the forthcoming year.

Our goal entails increasing the participation of African nations within the ARC framework, ultimately positioning ARC Ltd. as the leading institution for disaster risk financing on the continent. To realise this vision, we have expanded our product offerings to encompass comprehensive coverage for flood risk, outbreaks, and epidemics.

Furthermore, we have innovated in the sphere of non-sovereign, meso/micro insurance pilot projects and will continue to do so to fulfil our mandate.

# ARC LTD.'s STRONG CREDIT RATING AND COMMITMENT TO SUSTAINABILITY

ARC Ltd. has earned an exceptional accolade for its comprehensive environmental, social, and governance (ESG) performance, receiving the highest ratings from Sustainalytics, a globally renowned authority in ESG research and evaluation.

In addition, Fitch Ratings has reaffirmed ARC Ltd.'s Insurer Financial Strength (IFS) rating at "BBB+" and its Long-Term Issuer Default Rating (IDR) at "BBB", with a revised outlook of positive. This recognition reflects ARC Ltd.'s commendable progress in fulfilling its development objectives and signifies its potential for an even stronger company assessment in the future.

ARC Ltd. acknowledges the vital role the insurance industry plays in advancing sustainable development across Africa. As an ardent proponent of this cause, we have aligned ourselves with the Nairobi Declaration, a crucial initiative that supports the achievement of the UN Sustainable Development Goals (SDGs).

#### CHAMPIONING CLIMATE RESILIENCE THROUGH ADVOCACY AND PREMIUM SUPPORT

Driven by our objective to enhance the perception of insurance as an innovative tool for Disaster Risk Management (DRM), and to establish ARC Ltd. as the foremost institution for disaster-risk financing in Africa, we have actively participated in many global events. These engagements aim to raise awareness of our DRM role in Africa and advocate for Disaster Risk Financing (DRF) to mitigate the impacts of climate change on the continent. Our collaboration with the World Economic Forum, among other high-profile global organisations, has played a pivotal role in advancing this mission.

In our pursuit to cover more vulnerable communities in Africa, our ongoing advocacy efforts assist countries to access funding for subsidised premiums and to this end, we facilitate their enrolment in the ARC Ltd. risk pool.

We are grateful to share the news of substantial donor support (62.4%) for the drought pool, made possible by generous contributions from organisations such as the Africa Disaster Risk Financing Programme, Premium Support Facility, and Swiss Agency for Development. As a result, countries including Somalia and the Comoros have been empowered to actively participate in the pool, strengthening their resilience to drought-related challenges.

We sincerely thank our donors, including KfW Development Bank and the UK Foreign, Commonwealth and Development Office, for their steadfast support in advancing our shared objectives. Their unwavering commitment has enabled ARC Ltd. to make meaningful progress in disaster risk financing and building climate resilience.

Finally, we are grateful that our mission of expanding coverage and protection of climate-change vulnerable communities is shared by our Replica Partners, the World Food Programme (WFP) and the Start Network, which have played an integral role in strengthening ARC over the past year. Their commitment to fostering resilience in the face of climate risks has proven invaluable.

#### INNOVATION AND DIVERSIFICATION

Promoting financial stability and catering to the specific disaster-risk mitigation and management needs of African governments are crucial to incentivising greater sovereign participation in ARC. We are therefore pleased to announce the successful completion of pilot programmes for our flood risk and outbreaks and epidemic products, marking a significant milestone in diversifying our product portfolio.

"ARC Ltd. now provides coverage for the most prevalent weather-related risks on the African continent, including drought, tropical cyclones, and flood risk."

With these valuable additions, ARC Ltd. now provides comprehensive coverage for the most prevalent weather-related perils on the African continent – droughts, tropical cyclones, floods, outbreaks and epidemics.

Throughout 2022, we initiated successful micro- and meso-insurance initiatives that yielded promising results. Notably, our climate insurance pilot for rice farmers in Côte d'Ivoire has laid the groundwork for a robust operational framework that can be replicated across various agricultural value chains, such as cotton, maize and cacao. Much potential lies in initiatives such as these to safeguard vulnerable populations and expand our reach.

In Nigeria, ARC Ltd. partnered with the InsuResilience Solutions Fund, the Nigerian government and the Insurance Development Forum to launch the Flood Insurance Programme, which provides much-needed coverage for the State of Lagos.

ARC Ltd. has also developed an innovative anticipatory action drought product, in close collaboration with ARC Agency and UN OCHA, which is set for pilot testing in Malawi and Zambia. This pioneering effort demonstrates our commitment to proactively addressing the continent's drought risk.

Moreover, our dedication to tackling health-related risks that affect the continent resulted in a significant milestone in December. ARC Ltd. issued Africa's first outbreak and epidemics insurance policy to the government of Senegal.

To further enhance our offerings, we have introduced a contingency fund, enabling countries to allocate resources for events that may not meet the threshold for triggering a payout. This flexible solution strengthens our ability to support African nations in effectively managing a broader spectrum of risks.

These innovations and advancements exemplify our commitment to continued growth, resilience-building and protection for the African continent.

## SUCCESSFUL COP27 PARTICIPATION AND SIGNING OF RISK POOL MOU

ARC Ltd. actively participated at COP27 held in Sharm-el-Sheik, Egypt, establishing meaningful engagements with key stakeholders, including member states, African governments, and donor partners, the latter of whom play a vital role in funding risk transfer activities. ARC Ltd. signed a Memorandum of Understanding with two prominent global risk pools, a landmark agreement which aims to cultivate joint efforts in developing cutting-edge parametric insurance models and innovative DRF instruments. Further, it sets the stage for collaborative advocacy, capacity-building initiatives and comprehensive training programmes.

#### **Global Shield Against Climate Risks**

The launch of the Global Shield Against Climate Risks during COP27 heralded a significant milestone in the DRF landscape. This ground-breaking initiative provides ARC Ltd. with the opportunity to amplify its influence and impact by enhancing the accessibility and affordability of insurance solutions. To ensure seamless implementation and optimise effectiveness, ARC Ltd. will collaborate with Senegal and Ghana as pilot countries for the Global Shield. The aim is to identify potential areas for refinement and gather valuable insights before it is deployed across other countries.

#### 2023 - ACCELERATING IMPACT

The escalating impact of climate change, food insecurity, and epidemics underscores the need for mainstreaming parametric insurance on the African continent. We must act urgently.

Our unwavering commitment to forging robust partnerships and our tireless advocacy efforts throughout the year have positioned us favourably to advance towards our vision. With the backing of our members, partners and donors, we remain a leading organisation in terms of innovation, impact and influence.

## WHO WE ARE

Established in 2014, the ARC Ltd. is a hybrid mutual insurer and the financial affiliate of the African Risk Capacity Group.

Our primary focus is to provide parametric insurance services to AU member states and farmer organisations, employing innovative financing mechanisms to pool disaster-related risk across Africa and transferring it to international risk markets. Through this approach, we enhance the continent's ability to respond to climate-related disasters, bolster resilience-building efforts and ultimately contribute to food security.

We continuously strive to ensure that our ARC Ltd. product portfolio remains attuned to the evolving needs of our member states, while delivering progressive solutions to climate-change-induced disasters.

ARC Ltd.'s mandate as a Class 2 mutual insurance company, backed by seed capital funding from the UK Foreign, Commonwealth & Development Office (FCDO) and Germany's KfW Development Bank through BMZ, was designed to fulfil a commercial objective.

Operating in accordance with national regulations for parametric weather insurance in Bermuda (where it is located until such time as an equally favourable legal and regulatory framework exists in an AU member state), ARC Ltd. carries out vital commercial insurance functions of risk pooling and risk transfer.

By relieving governments and their populations of the burdensome risks associated with natural disasters, ARC Ltd. enables a more deliberate and measured approach to the disaster response. Through disaster risk financing, we provide crucial funding for pre-approved contingency plans, allowing for swift and predictable responses to disasters as they occur.

#### **OUR DONORS AND PARTNERS**

We are grateful for the invaluable support of our donors and partners, which empowers us in our work on the African continent. Their expertise and funding have enabled us in our efforts to boost the resilience of our member states. Together, we have worked diligently to implement robust disaster management and funding systems, enabling more effective responses to perils. To gain deeper insights into our performance, we invite you to read their valuable assessments on pages 22, 40, 46, 58 and 60.



#### **OUR VISION**

To be the development partner of choice, spearheading innovative disaster risk management solutions for climate resilience in Africa.



#### **OUR MISSION**

To promote harmonised resilience solutions for protecting African lives and livelihoods vulnerable to natural disasters caused by climate change and other perils of importance to the continent.



WHO WE ARE MEMBER STATES 13

#### **OUR VALUES**

#### **EXCELLENCE:**

We challenge ourselves and our colleagues to offer the highest quality services and products.

#### **INTEGRITY:**

We act in the best interests of the countries we serve, supported by comprehensive data, and through open and frank discussions with all stakeholders.

#### **INNOVATION:**

We continuously look for new ways to deliver needs-based creative solutions for our member states.

#### **SERVICE:**

We identify needs, are genuinely helpful, and take prompt action to resolve problems collaboratively.

#### **OUR CAPITALS**



#### FINANCIAL CAPITAL

- Investment
- Financial reserves
- Premiums



#### **HUMAN CAPITAL**

- Employees
- Board and organisational culture
- Funders
- Partners
- Auditors and underwriters



#### **SOCIAL CAPITAL**

- Regulators
- Legislators
- Member states
- Media
- Communities



#### INTELLECTUAL CAPITAL

- Researched best practice
- Regional benchmarking
- Strategy and operational frameworks
- Investment management
- Information technology and systems
- HR practice and initiatives
- Business intelligence



#### MANUFACTURING CAPITAL

- Development of new products/distribution channels (ARC Group lead)
- ARV system
- Non-sovereign underwriting system (NSB),
   Dynamics 365, SAGE X3
- IT security systems



#### **NATURAL CAPITAL**

- Water usage
- Energy usage
- Carbon emissions

#### **OUR BUSINESS STRUCTURE**

ARC Ltd., as an affiliate of the ARC Group, (ARC Agency) provides commercial insurance through risk pooling and risk transfer. ARC Ltd. is registered in Bermuda, with a branch office in South Africa.

#### **AGENCY**

#### Specialised Agency of the African Union

- Managed by member states
- Political engagement
- Capacity building
- · Operational monitoring

#### **INSURANCE COMPANY LIMITED**

#### **Regulated Commercial Insurance Company**

- Carries ARC's risk pooling and insurance functions
- Transfers risks to markets
- Other financials asset management functions
- Established in Bermuda on an interim basis

#### **OUR MEMBER STATES**

In the fiscal year that has been concluded, the ARC Group expanded its reach to encompass 35 member states and signed Memoranda of Understanding with 25 countries. As part of the ARC Group's capacity-building programme, countries that successfully complete the programme and receive a certificate of good standing become eligible to join the ARC Ltd. risk pool. During this period, we welcomed two new members into the programme – Comoros and Somalia.

African governments that hold a certificate of good standing and maintain active insurance policies with ARC Ltd. are classified as Class A members. To qualify for this classification, governments must be signatories to the ARC Treaty and have a contingency plan, approved by the Board, outlining the utilisation of insurance payouts in the event of a disaster.

All member states are also required to utilise Africa RiskView (ARV), our customised, proprietary drought risk modelling tool that converts satellite rainfall data into meaningful indicators and measurements. Additionally, member states must ensure that their premium payments are up to date. Member states gain access to the ARC Group's disaster risk management tools and support through fulfilling these obligations.

For more information on how we use innovation, please see page 86.









MEMBER STATES CAPITAL CLASSES 15

#### **OUR FOOTPRINT** NIGER \$2.1M \$0.6M SENEGA, \$32.2M **ALGERIA** LIBYA **MAURITANIA** NIGER SUDAN MALI CHAD BURKINA FASO GUINEA **NIGERIA** SOMALIA CENTRAL AFRICAN REPUBLIC DROUGH? \$1.2. SI.2. SI.2. **KENYA** \$2.8M GABON **DEMOCRATIC** REPUBLIC QUIGHT BURUNDI **OF THE CONGO** \$21.1M \$5.3M DROUGH DROUGH ZAMBIA \$5.4N LIMBABWE • ZIMBABWE ANIBIA \$1.75M MEMBER STATES WITHOUT MOUS SOUTH AFRICA MEMBER STATES WITH MOUS CUMULATIVE HISTORICAL PAYOUTS

#### **OUR CAPITAL CLASSES**

ARC Ltd. has four capital classes, categorised as A to D members.



These are our member states.

Premiums paid by Class

A members contribute to capitalisation.



The United Kingdom and Germany are classified as Class C members. Their valuable contribution is in the form of seed capital provided through interest-free loans, which are refundable over 20 years. This financial support is channelled through the UK Foreign Commonwealth and Development Office (FCDO) and Germany's Federal Ministry for Economic Cooperation and Development (BMZ). Both countries are longstanding ARC Ltd. partners, having been with us since our inception.



Within our membership structure, Class B members represent contributors who provide grants without expecting any financial return. Class D members, on the other hand, make equity available in anticipation of a return on their investment. Currently, these two categories are not active, however, we remain committed to pursuing their inclusion as part of our comprehensive growth strategy.

#### Capital contribution

#### \$50 MILLION

UK Foreign, Commonwealth and Development Office (FCDO) (formerly the Department for International Development (DFID))

#### Capital contribution:

#### \$48 MILLION

Kreditanstalt für Wiederaufbau (KfW), the German Development Bank, through the Federal Ministry for Economic Cooperation and Development (BMZ)

#### PREMIUM FUNDING PARTNERS



## PREMIUM SUPPORT PARTNERS

Premium support partners play an important role in assisting member states procure risk insurance coverage.



16 CAPITAL CLASSES OPERATING ENVIRONMENT 17

#### **OUR DONORS AND PARTNERS**





14 CLASS A MEMBERS OF ARC LTD.:

Chad, Côte d'Ivoire, Kenya, Madagascar, Malawi, Mali, Mauritania, Niger, Senegal, Sudan, The Gambia, Togo, Zambia and Zimbabwe



6 COUNTRIES THAT RECEIVED PAYOUTS IN 2022:

Burkina Faso, Madagascar, Mali, Mauritania, Malawi, Zambia

#### **OUR OPERATING ENVIRONMENT**

While parametric insurance has been in use for over two decades, the implementation of disaster risk management (DRM) and disaster risk financing (DRF) measures in Africa is still in its early stages. Within sub-Saharan Africa, governments have traditionally relied on launching international donor appeals after natural disasters have occurred. This reactive approach leads to fragmented relief efforts, delayed funding and an inability to effectively and swiftly address the situation. The consequences are devastating, resulting in loss of life, damage to infrastructure, disruptions in essential services, compromised health and food security, and population displacement.

In DRM and DRF, the humanitarian sector plays a pivotal role. Recognising this, the ARC Group's Replica Programme offers a unique opportunity for humanitarian agencies to procure a matching policy on behalf of a country. This innovative approach has demonstrated tangible value in enhancing these nations' resilience. By engaging in this collaborative effort, we can work towards a more proactive and coordinated approach to future disasters, ultimately mitigating the impact and protecting lives, livelihoods and communities.

Within the current landscape, ARC Ltd. has a crucial role in providing rapid access to finance, enabling swift response and recovery in the aftermath of disasters. Importantly, ARC Ltd. disburses payouts before the impact of a disaster escalates into a crisis.

The ARC Group's Replica Programme enhances existing government-led risk management programmes, transitioning from the traditional post-disaster relief model to a predominantly ex-ante system integrated at the sovereign level. This initiative is guided by two key principles: the gradual development of government capacity and fostering government ownership of planning and response.

While the recognition of the importance of DRM and parametric insurance is on the rise, the ARC Group continues to encounter various challenges, including fiscal constraints, limited insurance culture in Africa, inadequate government policies, competing macro-economic factors, changes in the political landscape, and limited understanding of parametric insurance among key decision-makers.

However, the escalating frequency of extreme weather events and natural disasters resulting from global warming and climate change has compelled governments to acknowledge the importance of a proactive approach. It is increasingly evident that safeguarding against these impending threats necessitates embracing comprehensive measures to ensure the resilience and protection of vulnerable populations.

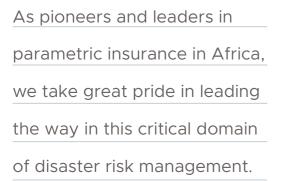


In sub-Saharan Africa, temperatures have risen at a much faster rate than the global average over the last 40 years. It is projected that large portions of the region will experience warming exceeding 2°C by 2100, along with an increase in both frequency and severity of droughts and floods. This has a disproportionate impact on poorer countries that rely on rain-fed agriculture. -The World Bank

MESSAGE FROM THE CHAIRMAN 19



ABDOULIE JANNEH
CHAIRMAN, ARC LTD. BOARD



Valued members, donors, strategic partners and stakeholders,

As pioneers and leaders in parametric insurance in Africa, we take great pride in leading the way in this critical domain of disaster risk management. Our current focus is to scale up our efforts and expand coverage for vulnerable populations in the face of increasingly frequent and catastrophic climate-related disasters. The impact of these disasters is immense, and the value of index-based parametric insurance is immeasurable.

Parametric insurance is the sole tool capable of providing immediate assistance to affected populations before the impact of the disaster becomes insurmountable. We are delighted to witness the growing relevance of parametric products on a global scale.

Our mission as a development partner is to expand our support to the people of Africa, and continue saving lives, increasing food security and mitigating the impact of natural disasters, rather than focusing solely on profit. To this end, we recognise the importance of innovation and the utilisation of increasingly sophisticated data gathering and modelling techniques. However, we are aware that accessibility is linked to cost, and many countries still find affording insurance premiums challenging. ARC Ltd. is therefore committed to facilitating the channelling of disaster finance to those in need.

As Africa continues to bear the brunt of climate-change-induced disasters, parametric insurance is a crucial DRF mechanism, extending beyond mere backup to ensuring rapid access to funding in times of disaster.



Reflecting on the past year, we are proud to highlight significant achievements resulting from our ongoing efforts to innovate and expand coverage. Recognising the importance of adapting to increasing and emerging risks, we launched new products for outbreaks, epidemics and flood risk, and we remain committed to further expanding our product portfolio.

#### INNOVATION TO THE FORE

Innovation serves as a cornerstone of our operations. Previously focusing primarily on sovereign states, we have now expanded our non-sovereign portfolio. This expansion necessitates engaging with new stakeholders and countries not previously part of our network. As an organisation fostering African unity, we are actively pursuing engagement with stakeholders in Ethiopia, the Democratic Republic of Congo and others so that they, too, may experience the benefits of coming on board.

Our ongoing innovation and initiatives have yielded increasing success. In 2022, we witnessed strengthened partnerships in the Caribbean and the Pacific aimed at raising awareness, popularising the understanding of parametric insurance, and increasing the value of DRF.

#### **FOCUS ON 2023**

The upcoming year presents us with numerous growth opportunities. We perceive challenges as prospects for development and progress. One of our key priorities is

to expand the risk pool by bringing more countries on board, as we have observed that many have yet to seize the available insurance opportunities fully. ARC Agency will assist us in this endeavour.

"Our mission as a development partner is to expand our support

to the people of Africa, and continue

Flooding has emerged as a significant problem for numerous African countries, including Madagascar and Mozambique. To address this pressing issue, ARC Ltd. aims to take the lead in expanding flood risk insurance, a development that could benefit millions of individuals. As challenges arise, we will continue to innovate and find effective solutions.

We would like to express our gratitude to our donors and partners who have been instrumental in our journey. A special thanks to KfW Development Bank in Germany, the UK FCDO, USAID, the Swiss Agency for Development and Cooperation, the African Export-Import Bank, and the African Development Bank. Their support has been invaluable in our efforts to innovate and facilitate access to the risk pool for those facing difficulty in paying premiums.

We firmly believe that our growth in the past year has been largely driven by the support of our donors and partners, and we eagerly anticipate continuing this upward trajectory in the coming year.

Best regards,

#### **ABDOULIE JANNEH**

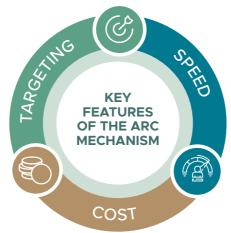
Chairman, ARC Ltd. Board

## **CREATING VALUE**

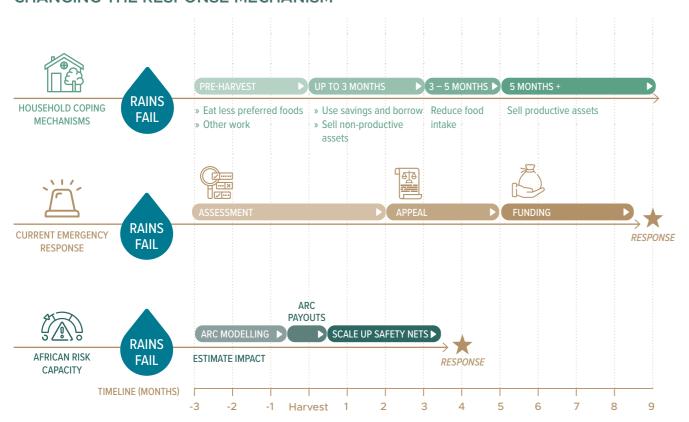
The ARC approach provides a significant economic benefit compared to traditional emergency response mechanisms, driven by the triad of early, quick and targeted inventions.



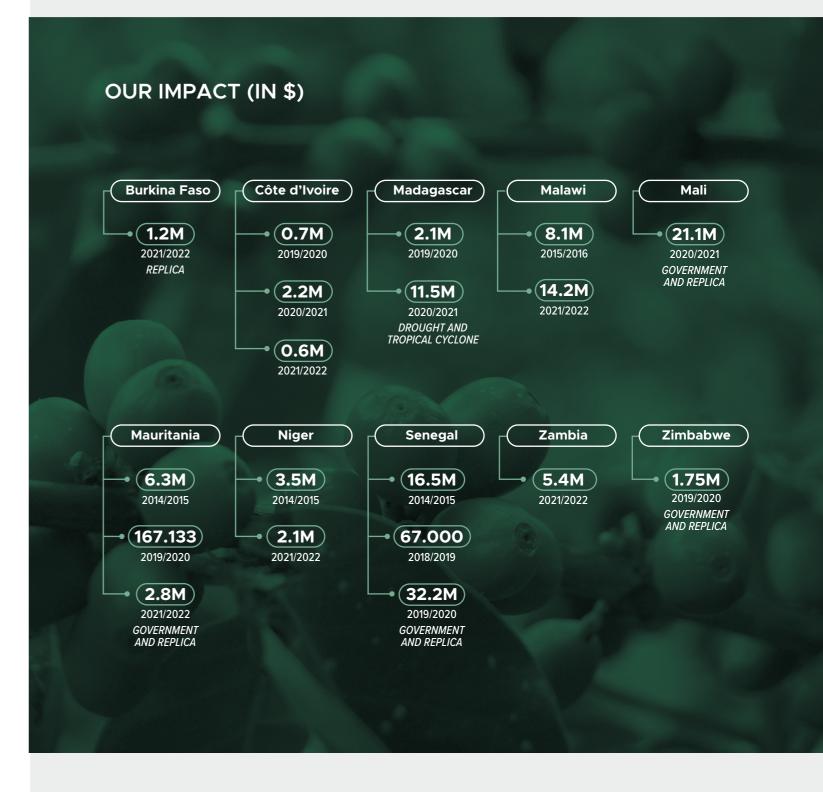
Our cost-benefit analysis found that for **every \$1 spent** on an insurance premium, there is an **economic gain of almost \$2** for the participating country.



#### CHANGING THE RESPONSE MECHANISM



As the commercial arm of the ARC Group, ARC Ltd. supports member states with risk pooling and transfer facilities, providing them with the means to strengthen their disaster risk management systems and quickly access financing to protect their vulnerable populations in the event of a natural disaster.



By pooling disaster risk among member countries, the ARC Group is able to reduce the costs of individual premiums as the risk is shared by the collective. This approach has been estimated to reduce emergency contingent funds by up to 50%, providing significant financial benefits to member states.

Over the years, ARC Ltd. has established eight risk pools gradually and steadily. It started with four countries participating in the 2014/2105 risk pool and expanded to 13 countries in the 2021/2022 pool. Since its inception, ARC Ltd. has written a total of 90 policies, demonstrating the success and growth of the risk pooling strategy.

PARTNER INTERVIEW 23

## **GLOBAL ALIGNMENT**

KfW DEVELOPMENT BANK INTERVIEW

#### INTERVIEW

MALTE MAREK
SENIOR PORTFOLIO
MANAGER AT KFW





#### STAYING ON COURSE

A pioneer in parametric insurance in Africa, ARC Ltd.'s focus has been on scaling up efforts to expand coverage for vulnerable populations in the face of increasingly frequent climate-related disasters. The impact is immense and the value of index-based parametric insurance cannot be overstated.

#### **EVOLUTION OF ARC LTD.**

ARC Ltd. has set ambitious growth targets, aiming to increase premiums from US\$30 million to US\$200 million within five years. However, it must be said that achieving this goal solely from the sovereign business is unlikely.

Although premium subsidies are available from other sources and the organisation could achieve its coverage goals by expanding on its non-sovereign business, we advocate for sovereigns to take charge of insuring themselves against disaster risk and building their capacity on the continent. It is crucial to continue supporting this idea rather than abandoning it.

The organisation's success, therefore, depends largely on its ability to diversify beyond the sovereign aspect, through potentially expanding Replica policies, as demonstrated in Somalia last year, while also persuading African governments to prioritise DRF and their participation in the ARC programme within their budgets.

The unique benefit of ARC Ltd. lies in its integration of insurance and disaster risk management mechanisms. To fully realise this concept, a strong partnership between ARC Agency and ARC Ltd. is crucial, fully understanding the respective roles of each to fulfil the overarching goals of why the ARC programme was initially established.

#### INTERVIEW

VERONIKA BERTRAM
CENTRE FOR DISASTER
PROTECTION





#### BEING PROACTIVE IN CHALLENGING TIMES

Throughout my long-standing relationship with ARC Ltd., spanning my previous role at KfW Development Bank and my current position at the Centre for Disaster Management, I have witnessed ARC Ltd.'s remarkable evolution in DRM on the African continent. It fills me with pride to witness their progress over time.

ARC Ltd.'s value proposition rests on a systematic approach that encompasses comprehensive analysis, the creation of financial products, and meticulous disaster planning, both before and after a disaster.

In 2022, ARC Ltd. achieved numerous substantial payouts, offering critical and expedited assistance to affected areas during times of crisis. Setting themselves apart from other organisations, ARC Ltd. demonstrates the ability to swiftly disburse funds by leveraging predefined triggers. This innovative funding approach significantly assists communities facing increased risks.

Under the leadership of CEO Lesley Ndlovu and his team, ARC Ltd. actively participates in the Global Shield initiative, a collaborative effort involving five countries pooling their resources to support disaster preparedness and response. Notably, Ghana and Malawi are two African countries engaged in the initiative, with Malawi being a current client and Ghana presenting an opportunity for potential engagement with ARC Ltd.

The company has shown remarkable proactivity in engaging with stakeholders and prioritising sustainability, exemplifying a forward-looking approach in a challenging market environment.

Recognising the importance of adapting to the dynamic and competitive landscape, we observe a growing necessity to co-finance premiums to build resilience. We encourage countries to take ownership of the ARC mechanism and integrate it into their DRM frameworks.

While there is still much to accomplish in terms of generating new business opportunities and innovative product offerings, 2022 stood out as an exceptional year for ARC Ltd. in many respects.

I commend ARC Ltd.'s leadership, the dedicated onthe-ground teams and member countries for their unwavering efforts to enhance DRM and uplift the lives of impoverished and vulnerable populations.

Veronika Bertram is a PhD economist with over 15 years' experience in international development and finance. Veronika has advised on disaster and climate risk finance in over 20 vulnerable countries. She has worked in development and commercial finance, as well as in academia, including the KfW Development Bank in Germany, the German Institute for Economic Research (DIW Berlin), and the World Bank.

RESILIENCE-FOCUSED RECOVERY AND RECONSTRUCTION RESILIENCE-FOCUSED RECOVERY AND RECONSTRUCTION































## **RESILIENCE-FOCUSED RECOVERY AND RECONSTRUCTION**

The ARC Group's mission and approach are consistent with various international DRM policy frameworks and underpin its position as a specialised AU agency.



- AU Agenda 2063
- UN Sustainable Development Goals (SDGs)
- Paris Agreement on climate change
- Sendai Framework for Disaster Risk Reduction 2015-2030

The Sendai Framework emphasises the importance of enhancing disaster preparedness to enable effective response and recovery, as well as "building back better" in the aftermath of disasters. This principle ties in with our core business methodology and guides our efforts to reduce disaster risk and promote sustainable development in Africa.

#### **SDGs - ENABLING PROGRESS**



#### **SDG #1 NO POVERTY**

During the reporting period, ARC Ltd. assisted in enhancing the risk-coping strategies of member states by providing weather index insurance and cash transfers to 90 million people (compared to 72 million in 2020).





#### SDG #2 & SDG #3

#### **ZERO HUNGER & GOOD HEALTH AND WELL-BEING**

Member states have been empowered to expand cash transfers and replenish strategic grain reserves, enhancing their ability to ensure food security at a sovereign level.



#### SDG #13 **CLIMATE ACTION**

ARC facilitates a more deliberate response approach to natural disasters by disbursing financing to fund pre-approved contingency plans to respond rapidly and predictably in times of need. These efforts also helped to build more resilient communities and reduce poverty (SDG #1) by strengthening risk-coping strategies.



#### **SDG #17** PARTNERSHIPS FOR THE GOALS

The economic benefits of our support for the SDGs and the value delivered to participating countries through the risk pool are extensively illustrated in our case studies featured on pages 26, 42, 62, and 66.



## **CASE STUDY:** FLOOD RISK IN **NIGERIA**











Contributing factors to flood risk are climate change, rapid urbanisation, poor urban development and infrastructure, and overpopulation. As the impacts of climate change accelerate in frequency and severity, on a continent that has contributed the least to CO2 emissions, the need to protect the most vulnerable has never been greater.

This is where insurance against natural disasters has an important role to play, however, in Africa, the uptake has been much too slow – only 3% of losses caused by natural disasters have coverage. Additionally, only 13 countries out of 54 have become signed up for the ARC Treaty and become member states.

Since its inception in 2014, ARC Ltd. has offered parametric insurance to member states in Africa for drought and tropical cyclones. However, product innovation and diversification have become critical to expanding insurance coverage on the continent and attaining the company's goal of 200 million people annually by 2025.

Diversifying will help ARC Ltd. address individual countries' climate financing and mitigation needs. To this end, the company has been working with several African governments to run pilot projects for additional products, such as flood risk.

## A NEW FLOOD RISK INSURANCE PRODUCT

Some member states have national and regional flood early-warning systems, but economic loss estimation to underpin a sovereign insurance scheme is lacking. To address this, ARC partnered with JBA Risk Management to devise a probability approach that would support a customisable parametric flood insurance product.

Pilots were run in Côte d'Ivoire, Ghana, The Gambia and Togo, while Malawi is currently piloting the flood risk product, and providing historical data and patterns, enabling ARC Ltd. to customise the risk model for the country. Having such a model will assist the Malawian government in making informed decisions about flood risks and identifying flood-prone districts where disaster coverage is needed.

In November 2022, a technical advisory committee of senior flood experts from global institutions assessed the ARC flood risk model. It acknowledged that despite the level of difficulty, it was "reasonably robust and efficient in terms of describing the risks associated with flood events". The ARC flood risk model was deemed ready for underwriting flood insurance policies, and ARC Ltd. earmarked early 2023 for the launch.



Compounding the socio-economic devastation of the loss of lives and livelihoods, the risk to food security when agricultural land is destroyed, and the damage to roads, property and infrastructure, is the fact that flood risk insurance does not play a significant mitigating role. Only multinational corporations, companies, and a few real estate owners have been signing up for coverage.

## FLOOD RISK COVER FOR LAGOS STATE, NIGERIA

For Lagos State, floods continue to be a growing disaster risk due to several factors, including climate change and urbanisation. This has led to ecosystem depletion, pollution, inadequate drainage systems and the prevalence of poor and vulnerable communities.

In the last decade, there has been a significant increase in the frequency of such events – 7.7 million people were affected, and assets worth over \$9.5 billion were destroyed in 2012.

Following heavy rain that began in early August 2022, Lagos State experienced flash floods and infrastructure collapse. A month later, floods across Nigeria were said to be the worst in a decade. Impacting 34 of 36 states, including Lagos State, the floods claimed more than 600 lives, and 1.4 million people were displaced.

Compounding the socio-economic devastation of the loss of lives and livelihoods, the risk to food security when agricultural land is destroyed, and the damage to roads, property and infrastructure, is the fact that flood risk insurance does not play a significant mitigating role. Only multinational corporations, companies, and a few real estate owners have been signing up for coverage.

This led to the launch of a sub-sovereign risk transfer scheme for Lagos State in November 2022. Intended to reach 8.5 million people by 2025, the €1.6 million project centres around a parametric insurance solution to be incorporated into Lagos State's flood-risk-management framework.











#### **SEQUENCE OF EVENTS**

#### **AUGUST 2022**

Following **heavy rain** that began in early August 2022, Lagos State experienced flash floods and infrastructure collapse.

#### SEPTEMBER 2022

Floods across Nigeria were said to be the worst in a decade. Impacting 34 of **36 states**, including Lagos State, the floods claimed more than 600 lives, and 1.4 million people were displaced.

#### NOVEMBER 2022

A sub-sovereign risk transfer scheme for Lagos State is launched, intended to reach 8.5 million people by 2025.

Payouts are often within days, allowing the government to deploy rapid emergency relief, direct cash transfers to affected households, and begin with infrastructure repairs.

ARC Ltd. is among the strategic partners in this project led by the Insurance Development Forum, AXA Climate and Swiss Re and supported by the United Nations Development Programme. Other partners are AXA Mansard, the Nigerian entity of the AXA Group, Finnish microsatellite manufacturer and flood data provider, ICEYE, and JBA Risk Management, who are flood data specialists.

The project seeks to compile and analyse flood risk data to create a customised insurance product, enable the mapping of vulnerability zones and help improve contingency planning and resilience in Lagos State. In the event of a flood, the parametric solution will pay out a pre-determined amount depending on the magnitude of the flood.

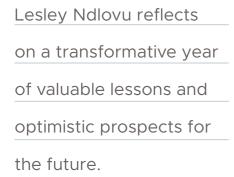
As the policy provider, ARC Ltd.'s role will be to disburse these funds to the Lagos Ministry of Finance. Such payouts are often within days, allowing the government to deploy rapid emergency relief, direct cash transfers to affected households, and begin with infrastructure repairs.

The InsuResilience Solutions Fund, funded by the KfW Development Bank on behalf of the German Federal Ministry for Economic Cooperation and Development, is providing the capital for the project, together with IDF insurance industry members.

MESSAGE FROM THE CEO 33

# MESSAGE FROM THE **CEO**

LESLEY NDLOVU CEO, ARC LTD.







Together, we have achieved a significant milestone by disbursing over \$60 million in payouts, the highest amount ever distributed in a single year and representing nearly half of our total sements since our establishment in 2014.

Looking back on 2022, we are humbled by the continued support of our network, which has joined us in our mission to protect the vulnerable from the impacts of climate change.

Together, we have achieved a significant milestone by disbursing over \$60 million in payouts, the highest amount ever distributed in a single year and representing nearly half of our total disbursements since our establishment in 2014.

This accomplishment is a testament to the value of ARC Ltd. and our critical role on the African continent.

Having provided coverage to more than 18 million individuals and with payouts reaching close to \$125 million, we are determined to expand our impact even further.

While we reflect on the year that was, we also set our sights on the future with a firm focus to robustly scale ARC Ltd. through innovative initiatives, while keeping our goal in sight of providing insurance coverage to 200 million Africans annually by 2025. However, the immense need of 700 million vulnerable individuals requiring protection remains.

#### **CHALLENGES**

The global macroeconomic environment experienced a weakening trend, leading to diminished financial capabilities of our member states. This reduced their ability to afford insurance premiums, as national priorities, such as healthcare and education, competed for limited resources. The effect of these challenges was evident in 2022.

Investment returns play a significant role in sustaining our business operations and supplementing our underwriting income. However,

the previous year presented mounting challenges due to rising interest rates caused by inflation and a stock market sell-off driven by macro-political dislocations, notably the war in Ukraine. These circumstances added complexity to our pursuit of favourable investment returns.

#### LESSONS LEARNT

The first key lesson we learned was the importance of maintaining a strong connection with our member states to effectively address their needs by offering innovative products and tailored insurance solutions.

The second lesson was about diversification. The widespread occurrence of drought during the previous year across the countries in which we operate, emphasised the need for expanding geographically. Additionally, while we have focused on drought insurance, we recognised that it is imperative for us to expand our scope to additional risks.

The importance of bolstering our capital base also came to the fore. By increasing our financial resources, we can assume a greater level of risk and reduce our dependence on global reinsurance markets.

#### **TEAM ARC LTD.**

At ARC Ltd., we are proud to have an exceptional, highly skilled team of individuals, and while we are a small group comprising approximately 12 full-time staff members, our impact on the continent far exceeds what one might expect from a team of our size.

We are committed to upholding gender equality principles in all our activities, both within our organisation and the member states we serve. We integrate a gender perspective into our operations and policies to ensure fairness and inclusivity. Promoting a balanced gender ratio, particularly by attracting more women actuaries and professionals, is a key priority for us at ARC Ltd. Our gender mainstreaming efforts extend to fostering a gender-sensitive staff and implementing gender-responsive systems.

In the past year, we have demonstrated our commitment and service to our member states by ensuring the prompt payment of claims and providing continuous support. Our dedication has also been evident in various internal projects, including the successful completion of IFRS 17, a new accounting standard, to ensure our readiness to assist our member states.

Moreover, we have expanded our portfolio by launching new products designed to address floods, outbreaks and epidemics and extended our reach in the realm of microand meso-insurance, allowing us to cater to a wider range of clients and communities. These achievements have been made possible by our small, highly dedicated team.

#### IT TAKES A VILLAGE

Once again, we extend our deepest gratitude to our donors. Their commitment also encompasses a significant advocacy component, particularly evident in their active participation in major global events focused on addressing climate change, such as COP27, which took place in Africa last year.

MESSAGE FROM THE CEO

OUR STRATEGY 35

Our donors launched several impactful initiatives during these events that further reinforced their dedication to the broader climate change agenda. Notable examples include the Global Shield and President Joe Biden's PREPARE (President's Emergency Plan for Adaptation and Resilience).

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The financing provided by our donors is not only welcomed, but it also represents a tangible commitment to supporting us in tackling the challenges posed by climate change.

We are also pleased to have engaged new donors, such as our collaboration with the Swiss Agency for Development and Cooperation (SDC), for the launch of the Outbreaks and Epidemics product. Through their support, the SDC has not only provided the capital necessary for the launch but also contributed the premium required for countries to participate.

Our Premium Support Facility, backed by the African Development Bank's ADRiFi Multi-Donor Trust Fund (MDTF) and KfW, continues to play a crucial role in enabling the participation of more African countries through the subsidisation of insurance premiums.

#### **FOCUS AREAS IN 2023**

In 2023, our strategic focus revolves around three key areas. Firstly, we prioritise growth as the foundation of our insurance business. By expanding our presence in more countries and diversifying our product offerings, we enhance our scalability and benefit from economies of scale. This allows us to achieve greater efficiency in administration costs for each insurance policy we underwrite.

Currently, we provide insurance coverage to an average of 30 million Africans annually, a significant accomplishment. However, there are approximately 700 million individuals whose economic activities are vulnerable to extreme weather events. To truly address the impact of climate change, we aim to extend our coverage to these 700 million people, as our focus on growth is driven not only by business expansion but also by the desire to create a meaningful impact and maintain our relevance amid everevolving challenges on the continent.

In terms of specific targets, we are committed to introducing new products, and we also seek to expand our Replica programme, partnering with more humanitarian organisations and launching it in additional countries to the six in which it is currently operational. The Replica programme plays a vital role in our growth strategy.

We are dedicated to expanding our work in microinsurance, catering to the needs of small and medium-scale farmers. These growth initiatives serve as key drivers for our business, enabling us to reach more individuals and strengthen our value proposition.

The second aspect of our focus in 2023 is capital. Capital is the foundation for underwriting insurance risks and for us to pursue our growth plans. We have been able to secure \$100 million in capital from KfW and FCDO, and in the coming year, our objective is to double our capital base by raising an additional \$100 million from development finance institutions (DFIs) and multilateral donors.

To alleviate their financial strain, it becomes crucial for us to retain a greater portion of the risk. This can only be achieved by securing additional capital.

By focusing on growth and strengthening our capital base, we are poised to expand our reach, enhance resilience, and better serve the needs of the communities we aim to protect.

#### IN CONCLUSION

As we embark on 2023, our primary focus centres on growth and capital. Looking back at the challenges and triumphs of 2022, we've found satisfaction in our ability to stand by our stakeholders during their moments of adversity.

The lessons learned throughout the year will serve as invaluable guidance as we navigate the path ahead. The urgency for disaster risk insurance has never been greater, given the escalating frequency and intensity of perils.

In the coming year, we remain committed to meeting the evolving needs and aspirations of our member states, and collaborating closely with stakeholders, partners, and our board of directors.

We are optimistic about building on the solid foundation laid in the previous year and with the support of our trusted stakeholders and the collective efforts of our exceptional team, we are poised to continue making meaningful strides in the fight against climate change.

#### LESLEY NDLOVU

Chief Executive Officer, ARC Ltd. Board

## **OUR STRATEGY**

The operating environment of the ARC Group has undergone significant changes since the development of the ARC Group Strategy 2020-2024 in 2019.

The outbreak of the Covid-19 pandemic left many AU countries ill-prepared and necessitated a diversion of resources towards response efforts, resulting in some member states being unable to pay their premiums and casting doubt on risk pool participation for future disasters

In response to these challenges, the Group reviewed and realigned its strategy to better adapt to this dynamic landscape. Additionally, ARC Ltd. formulated its Inclusive Growth Strategy 2025 to complement the Group's strategy and strengthen member states' capacity to rebuild following a disaster. The revised strategy not only supports member states with their existing disaster risk management strategies but also supports their ability to build back better.

#### **OUR STRATEGIC OBJECTIVES**

The ARC Ltd. strategy is based on ARC Group's three objectives: **Innovate, Strengthen and Grow.** 

These strategic objectives serve as the springboard for and guiding force behind our four priorities: market penetration, product development, market development and diversification. (Read more about our priorities on page 90).

These guiding principles are fundamental to ARC Ltd.'s Inclusive Growth Strategy 2025, and together, they will enable us to realise the ARC Group's vision of becoming a \$100 million insurer.



## INNOVATE

A dynamic approach to innovation

#### STRENGTHEN

Strengthening disaster risk management on the continent



#### GROW

Increased scalability and sustainability of ARC operations and insurance coverage

#### ARC LTD. INCLUSIVE GROWTH STRATEGY PRIORITIES

#### MARKET PENETRATION

Increase the current customer base participation and mitigate the loss of market share to existing and new competitors

# PRODUCT DEVELOPMENT Expand to new market

Expand to new market segments by leveraging our technical expertise

# MARKET DEVELOPMENT Develop and roll out new sovereign insurance products

DIVERSIFICATION
Expand business activities
to grow reinsurance,
co-reinsurance and
retrocession reinsurance

#### **ACTIVITIES TO ACHIEVE OUR STRATEGIC OBJECTIVES & PRIORITIES**

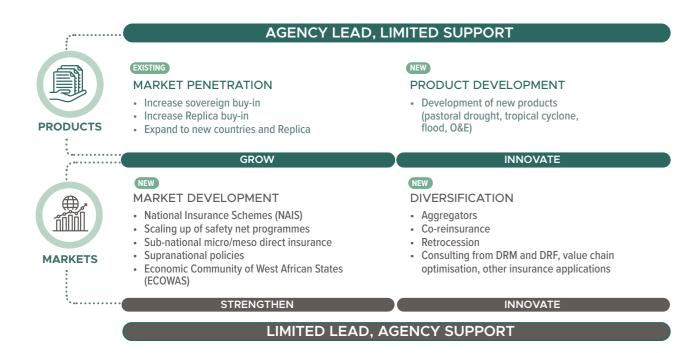
PREMIUM FINANCING

MICRO/MESO INSURANCE

FLOOD, OUTBREAKS AND EPIDEMICS AND CONTINGENCY FUNDS

OUR STRATEGY 37

#### AGENCY LEAD, LIMITED SUPPORT



#### OUR STRATEGIC APPROACH TO CREATING VALUE

Parametric insurance plays a crucial role in providing quick liquidity after a catastrophic event, especially in the context of increasing climate change and disasters that disproportionately affect vulnerable populations.

#### Diversification

While ARC Ltd. has not expanded as much as we had anticipated or need to for ensuring sustainability, it is critical for us to broaden our market reach and product range in the coming year.

Our growth will hinge on the advancement of our non-sovereign business, introducing novel products and adhering to sound underwriting principles. At the same time, cultivating strategic partnerships with global reinsurers and multilateral financial institutions will prove instrumental in unlocking these prospects.

#### The role of technology

The digital revolution has enabled us to generate and handle vast amounts of data and enhance our risk analysis capabilities through technology. With the aid of Africa RiskView, ARC Ltd.'s satellite weather monitoring system,

we can create accurate risk profiles for member states, assess the data collected and any contributing factors, and confidently underwrite new policies. This data-driven approach makes the insurance process transparent and highly scalable, allowing for guaranteed payouts within 10 days of a disaster.

#### **Delivering strategic objectives**



Premium Financing: the commitment of premium financing of almost \$100 million from partners and growth of ARC insurance programmes through premium support.



Micro/meso insurance: continued expansion of insurance programmes to protect micro/meso farming communities.



Flood and contingency fund: implementation of a contingency fund that could trigger payouts equal to contributions to the fund, for events below the attachment point.

#### THE ARC PROCESS

The diagram below illustrates the role of ARC Ltd. and how it fits in with the ARC Group process:

#### INITIATION

- Scoping
- Country Strategy
- MoU

#### **EVALUATION & LEARNING**

- Financial Audit
- Process Evaluation

#### **PAYOUT & RESPONSE**

- Field Monitoring
- Monthly Reporting
- Final Implementation Plan



## COUNTRY PROGRAMME DEVELOPMENT

- Technical Working Group
- Capacity Building
- Technical Support

#### **RISK POOL PARTICIPATION**

- Insurance Policy
- Premium Payment

#### **OUR UNDERWRITING PROCESS**

Review model for each country in the pool

Customise country-level risk model

Conduct risk transfer workshops with member states

Encourage development of local agricultural micro- and meso- parametric insurance through technical and financial capacity building

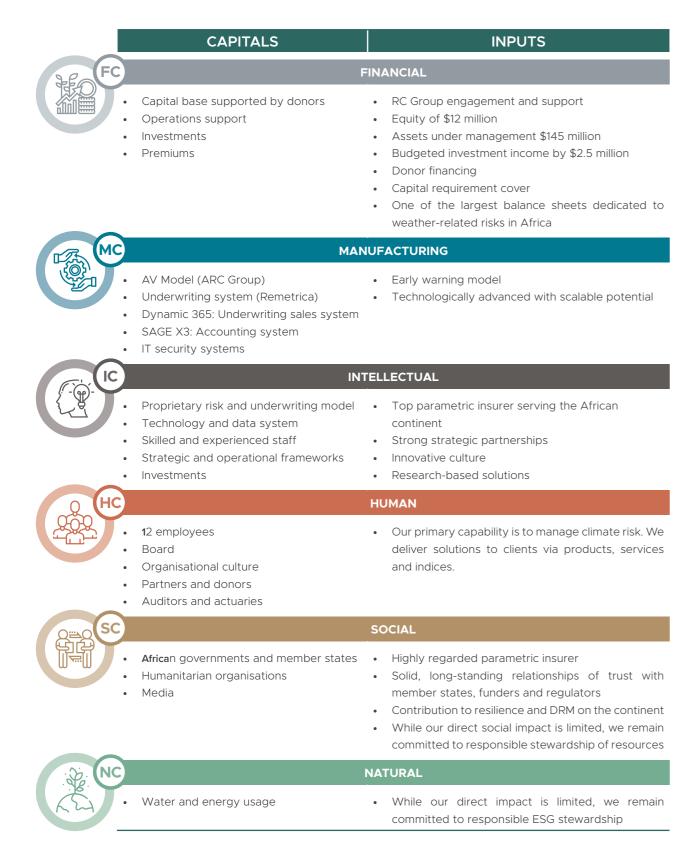
Underwrite and administer policies, including partial risk and transfer risk to international reinsurance

Lobby for premium finance to access sovereign risk insurance

Monitor season after administering policies and provide end-ofseason reports (MDRC) for all countries Ensure that amounts received by governments and Replica partners are utilised in accordance with a pre-agreed final implementation plan

Rapidly execute operations and enforce transparency and accountability OUR BUSINESS MODEL 39

#### **OUR VALUE-CREATION BUSINESS MODEL**





#### **OUR BUSINESS MODEL**

As the commercial arm of ARC Group, ARC Ltd. aims to mitigate hardships following an extreme weather event by proactively predicting disasters and providing the requisite insurance to help governments introduce safety nets rather than address full-scale ruin.

The ARC Group's capacity-building programmes are one way in which this is achieved. Recognising that African countries need support, the ARC Group focuses on strengthening their capacity, building their insurance knowledge and, consequently, their disaster preparedness. This approach makes ARC Ltd. unique in the world of parametric insurance operations.

Over the years, ARC Ltd. has built a skilled team and developed a best-in-class proprietary risk and underwriting model that allows us to deliver tailored parametric insurance to our member states. We are authorised to operate as a local insurer with exemption from local laws and regulations in countries that have signed the ARC Treaty, giving us a distinct advantage.

Ongoing research into natural disasters and their associated risks is the mainstay of our service offering.

40 PARTNER INTERVIEW 41

# ARC LTD.: A CENTRAL PARTNER IN AFRICA'S **DISASTER RISK FINANCE ECOSYSTEM**

#### INTERVIEW

#### **ANDREW WILSON**

GOVERNANCE ADVISER AT THE UK FOREIGN, COMMONWEALTH AND DEVELOPMENT OFFICE





#### ARC LTD.'S PROGRESS OVER THE PAST YEAR

Reflecting on 2022,
we acknowledge and
recognise ARC Ltd.'s
pivotal role in Africa's
disaster risk finance
landscape. Indeed,
within the UK's Foreign,
Commonwealth &
Development Office
(FCDO), we consider ARC
Ltd. a core partner for
disaster risk finance in the
region.

As such, we have actively advocated for ARC's engagement with our partners and stakeholders, aiming to maximise its impact, and we will continue to do so.

## PROMOTING ARC'S ROLE AND EXPANDING PARTNERSHIPS

In 2022, our focus was to encourage World Bank and ARC collaboration and we are delighted to have witnessed this collaboration materialise in Djibouti, where new policies were implemented successfully.

Furthermore, we consistently engaged with our embassies and high commissions across Africa to advocate for ARC's integration, not only within disaster risk finance arrangements but also as a vital component of comprehensive disaster response strategies. The DRF Team firmly believes that pre-positioned finance should be mainstreamed into humanitarian responses, and it is actively working towards this objective.

#### A CORNERSTONE OF OUR PORTFOLIO

ARC Ltd. holds a central position within our portfolio, offering sovereign products and the ARC Replica, which we support and facilitate access to. Through premium subsidies provided by the African Development Bank and the Multi-Donor Trust Fund, we empower countries to leverage their African Development Fund allocations and utilise donor funds effectively.

We also collaborate with ARC and such stakeholders as UN OCHA, the Start Network, and WFP Southern African Risk, which utilise similar mechanisms.



## HARNESSING SYNERGIES AND MAXIMISING OPPORTUNITIES

In our interactions with ARC Ltd., we have explored strategies to enhance engagement in their focus countries, leveraging our posts to facilitate this process effectively. We wear two hats in this partnership: as a donor to ARC and as a board member. Rachel Turner, our board representative, ardently advocates for ARC, using her political capital whenever necessary.

As co-founders of the anticipatory insurance pilot programme, we would be keen to expand our anticipatory action initiatives. We recently saw the first payout in Madagascar ahead of Tropical Cyclone Freddy, demonstrating the potential and effectiveness of this approach. Scaling up anticipatory action is essential, even in times when funding remains limited, as it enables us to respond proactively and optimise resources.

## CHARTING A PATH TO GROWTH AND SUSTAINABILITY

Focusing on innovative products like anticipatory action provides ARC Ltd. with a further opportunity to engage with more countries and scale up its operations on the African continent to expand its reach and impact. Such growth not only benefits individuals by providing insurance coverage but also ensures the long-term sustainability of ARC.

As donors, we recognise the importance of sustained growth in ARC's capital base, as it underpins our long-term objectives and commitments.

That said, FCDO remains committed to this flagship programme and is dedicated to its long-term success. We fully recognise and appreciate the challenges ARC faces and understand its significant role within our organisation and vice versa.

CASE STUDY:

OUTBREAKS & EPIDEMICS

44 CASE STUDY: OUTBREAKS & EPIDEMICS 45









The epidemic revealed that slow and unpredictable funding was a significant factor affecting the ability of the countries to roll out a rapid response at the beginning of the outbreak. ARC's lead advisor for Outbreak & Epidemics, Robert Kwame Agyarko, stated publicly: "Had Ebola been identified and the response begun two months earlier, the total number of deaths could have been reduced by 80%".

An outbreak in the Democratic Republic of Congo in the same year resulted in 2 200 deaths, and while in this instance, the response was much better, there were nevertheless significant social, political, security and economic consequences.

#### A CONTINENT AT RISK

In addition to Ebola, Africa is at risk of meningitis, Marburg virus disease and Lassa fever. Meningitis occurs across an area in sub-Saharan called the meningitis belt – from Senegal in the west to Ethiopia in the east – comprising 26 countries with an estimated population of 300 million. According to the Centres for Disease Control and Prevention, this region experiences significant epidemics every 5 to 12 years, reaching 1 000 cases per population of 100 000.

Marburg virus disease, similar to Ebola, has a fatality rate of about 50%, according to the World Health Organisation, and an outbreak also heavily impacts healthcare systems and the socioeconomics of affected countries.

Lassa fever is endemic to some West African countries with an at-risk population estimated as high as 59 million, with 3 million people in Sierra Leone, Guinea and Nigeria falling ill annually and a mortality rate of 67 000. A 2022 scientific study by Scripps Research and the University of Brussels found that climate change and other environmental factors will lead to fever spreading to the central and eastern parts of Africa in the next 50 years, with the result that the number of people at risk would increase by 600%.

Ebola highlighted the critical need in Africa to insure against outbreaks and epidemics, and, amid the epidemic in 2015, African finance ministers approached ARC to develop a product that would meet this need and ensure rapid financing to help countries contain high-impact outbreaks, as well as complement the efforts of the Africa Centres for Disease Control and Prevention.

#### THE PILOT PHASE

In September 2017, ARC launched a pilot of its outbreaks and epidemics parametric insurance product, which would release payouts on detection of an outbreak. This would assist governments with relief funding to contain the spread,

In 2022, the ARC Group and its partners were able to finalise the development of this product that would provide parametric insurance to member states for high-impact epidemic risks.

as well as deploy medical intervention without having to rely on traditional aid, which would take much longer. Early response has been documented to save more lives and prevent a worse crisis.

The product focused on severe diseases, including Ebola, Marburg virus disease and meningitis, and was to be piloted in Guinea and Uganda due to previous epidemics there. To minimise ARC's risk exposure, an entire epidemic could not be covered, however, the cost of government response would be covered.

Before the Covid-19 pandemic, ARC was poised to launch the outbreaks and epidemics product to market but was forced to hold off.

#### A FIRST FOR AFRICA

In 2022, the ARC Group and its partners were able to finalise the development of this product that would provide parametric insurance to member states for high-impact epidemic risks.

Four diseases were chosen with proven, high human and economic costs: Ebola, Marburg virus disease, Lassa fever and meningitis. The product will help reduce mortality, the costs of outbreak response; the indirect costs of illness (household expenditures, lost productivity); and secondary impacts on the economy (disrupted markets, lost investment, etc.).

This new peril added to ARC Ltd.'s natural disaster products is ground-breaking on the African continent, and in December, the first Outbreak and Epidemics insurance policy was issued to the government of Senegal. The maximum protection provided is US\$5m.

The parametric insurance product is supported by a capacity-building programme around epidemic preparedness, contingency planning for a swift and

effective response, and outbreak risk modelling from simulated outbreaks. A rapid payout will be released in the event of an outbreak of a pre-determined magnitude.

Recent history has shown that the threat of unforeseen diseases, epidemics and pandemics is ever-present and always catastrophic. With Senegal leading the charge in West Africa, it is hoped that other countries will follow suit and ARC Ltd. will continue engaging with member states in this regard.

#### STRUCTURE OF ARC O&E PROJECT

- Simple transparent trigger based on case numbers reported from creditable sources;
  - Low case numbers trigger(s) to ensure early intervention with early pay out;
- Three-year cover based on outbreak response cost needs of the country in question;
- Cat bond is issued by ARC (sponsor) to reinsurers, capital markets and donors (investors) for a premium plus coupons;
- Pay out is equal to debt issue amount (principal)
- Losses occurring during basis of cover: Events occurring in coverage period;
- Single pay out per cat bond tranche: each tranche pays 100% of pay out in contact when triggered:
- If trigger event occurs and the cat bond pays out, the debt is forgiven;
- Tranches of coverage per country staked at different probability of trigger thresholds.
- Total pay out cap is considered for now, corresponding to single event peak exposure but covering all four pathogens. Variation to this structure can be introduced.



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#### INTERVIEW

#### **DONALD SINGUE TANKO**

HEADS UP THE AFRICA DISASTER RISK FINANCING (ADRIFI) PROGRAMME AT THE AFRICAN DEVELOPMENT BANK.





#### STRENGTHENING RESILIENCE ACROSS THE CONTINENT

More and more countries are recognising the importance of insurance coverage for the most vulnerable, which enhances their resilience in the face of climate disasters.

ARC Ltd. is particularly valuable for economies with weak insurance sectors, as it helps governments transfer risks to the insurance market. However, achieving comprehensive coverage for the entire continent is a monumental task that requires collaboration with local insurance markets. By working together, ARC can strengthen governments' capacity and provide cuttingedge solutions in this emerging field. Local insurance companies can be brought on board to enhance their understanding of index-based and parametric insurance, thus ensuring the necessary levels of protection for governments and vulnerable populations against climate disasters.

#### PARAMETRIC INSURANCE AS A DRF MECHANISM

Parametric insurance offers several advantages. Firstly, it requires the design of contingency planning before signing a contract with an insurer. This process raises awareness about the potential risks and associated costs, emphasising the importance of taking action. This aspect distinguishes parametric insurance from conventional insurance. It ensures that all stakeholders understand their roles and the potential consequences of inaction.

In finance and economics, making informed decisions is crucial, and this requires data and evidence. Parametric insurance offers the opportunity to assess and determine the amount to transfer to insurance and the amount to retain, whether at a national or individual level. This is

where the value of parametric insurance lies. Additionally, parametric insurance is a catalyst, leading countries to explore other instruments and solutions. It sparks curiosity and prompts the consideration of different levels of coverage. Parametric insurance cannot be used in isolation but serves as a stepping stone to understanding and integrating other instruments. Many economies across the continent have recognised and implemented this holistic approach to achieve comprehensive and well-rounded protection.

#### **ARC LTD.'S IMPACT DURING 2022**

In 2022, ARC Ltd. played a crucial role in closing the protection gap for the most vulnerable across the continent. This achievement cannot be understated as it significantly contributes to building countries' financial resilience. An excellent example of this impact was evident in Madagascar, where the country received a payout soon after Tropical Cyclone Batsirai. This payout provided much-needed resources to the government for assisting the most vulnerable communities and exemplifies the purpose and effectiveness of a disaster financing instrument. ARC Ltd. has successfully achieved this transformative goal. However, it is important to acknowledge that there have been limitations and challenges, such as the availability of climate data and the performance of the model. Despite these obstacles, ARC Ltd. has been instrumental in closing the protection gap, strengthening the financial resilience of African countries, and driving forward the agenda on disaster financing and climate risk insurance at the continental level.

"ARC Ltd. is particularly valuable for economies with weak insurance sectors, as it helps governments transfer risks to the insurance market."

In 2023 it is important that the organisation strengthens its underwriting capacity, diversifies its pool of reinsurers, and ensures long-term sustainability. This is not a task that ARC Ltd. can accomplish alone; all stakeholders must contribute. The African Development Bank is fully committed to supporting ARC Group and ARC Ltd. in their efforts to enhance sustainability and viability. The Africa Disaster Risk Programme, which I coordinate, is central to this journey. It assists countries in taking out policies with ARC Ltd. and provides necessary resources to maintain stability in the risk pool. Additionally, we are working to help countries pool and diversify their participation. By bringing in more countries, ARC Ltd. can have a robust and diverse pool that can effectively handle multiple payouts. A strong and diversified pool is crucial for preserving capital, an aspect that has posed challenges for ARC Ltd. in recent years. By working together, we can help steer the company towards a sustainable path.

LOOKING AHEAD

#### THE IMPORTANCE OF COLLABORATION

No single actor can handle the extensive work required to bring countries up to speed with disaster financing instruments and encourage their adoption. It is essential for each organisation within the ecosystem to identify its unique value proposition. This means avoiding duplication of efforts and coordinating activities through a centralised platform. The African Development Bank has focused on supporting countries in adopting disaster financing instruments and will continue to do so. Additionally, the Bank recognises the importance of strengthening coordination at the country level through its Africa Disaster Risk Financing Programme.

However, solving only one aspect of the problem is insufficient. For example, providing premium subsidisation without capacity building leaves a gap once the subsidy ends. On the other hand, offering capacity building without premium subsidisation may be appreciated by countries, but they might lack the fiscal space to mobilise financial resources to pay for their premiums in the short term. Combining capacity building and premium subsidisation becomes ineffective if ARC Ltd. struggles with underwriting in the market. It is crucial for each organisation to identify its value proposition and for all stakeholders to collaborate at the country level to determine the most comprehensive package of support that can be provided.

#### A SPECIAL THANK YOU

We extend our gratitude to ARC Ltd. for their commendable work. Despite the challenges we have faced, we are encouraged by their efforts. We invite the entire ecosystem to join hands and support the ARC Group in advancing the agenda of disaster finance and climate risk insurance on the continent. Our goal is to make this a well-understood reality, with comprehensive buy-in from political level to the grassroots level.

## HARNESSING SYNERGIES AND MAXIMISING OPPORTUNITIES

In our interactions with ARC Ltd., we have explored strategies to enhance engagement in their focus countries, leveraging our posts to facilitate this process effectively. We wear two hats in this partnership: as a donor to ARC and as a board member. Rachel Turner, our board representative, ardently advocates for ARC, using her political capital whenever necessary.

As co-founders of the anticipatory insurance pilot programme, we would be keen to expand our anticipatory action initiatives. We recently saw the first payout in Madagascar ahead of Tropical Cyclone Freddy, demonstrating the potential and effectiveness of this approach. Scaling up anticipatory action is essential, even in times when funding remains limited, as it enables us to respond proactively and optimise resources.

## CHARTING A PATH TO GROWTH AND SUSTAINABILITY

Focusing on innovative products like anticipatory action provides ARC Ltd. with a further opportunity to engage with more countries and scale up its operations on the African continent to expand its reach and impact. Such growth not only benefits individuals by providing insurance coverage but also ensures the long-term sustainability of ARC.

As donors, we recognise the importance of sustained growth in ARC's capital base, as it underpins our long-term objectives and commitments.

That said, FCDO remains committed to this flagship programme and is dedicated to its long-term success. We fully recognise and appreciate the challenges ARC faces and understand its significant role within our organisation and vice versa.



**OUR MATERIAL MATTERS AND RISKS OUR MATERIAL MATTERS AND RISKS** 



In the year under review, ARC Ltd. identified six top risks deemed material to our ability to achieve our Inclusive Growth Strategy and create value over time.

## **OUR MATERIAL** MATTERS AND RISKS

#### **MATERIAL MATTERS**

During the year under review, a number of matters were identified as being material to the ability of ARC Ltd. to continue operating sustainably while fulfilling our mandate.

#### **RISK MANAGEMENT**

ARC Ltd. achieves its strategic objectives by assuming risk but, without careful management and monitoring, these risks have the potential to threaten our key resources and undermine stakeholder trust. At worst, these risks could necessitate a request for callable capital or even threaten the existence of ARC Ltd.

The Board, through the audit and risk committee, is responsible for the overall governance of risk and is mandated to regularly review ARC Ltd.'s risk management practices to optimise the risk-return trade-off.

During 2022, ARC Ltd.'s risk appetite statements were amended to reflect the ARC Ltd. Inclusive Growth Strategy. These statements include quantitative measures, including tolerance limits on metrics measuring capital adequacy, profitability, liquidity underwriting risk, market risk and credit, and qualitative statements, which address operational risks, and reputational and regulatory risks.

#### **OUR TOP RISKS**

In the year under review, ARC Ltd. identified six top risks deemed material to our ability to achieve our Inclusive Growth Strategy and create value over time. (Read more about our strategy and about how we create value on pages 35 and 20, respectively).

#### **ARC LTD. TOP RISKS**



#### **CLIMATE CHANGE**



#### **BASIS RISK EVENTS**



#### **MODEL ERROR**



continued to pose significant risks in an insured's loss and the payout 2022. The risk of more frequent and expected from the parametric policy. climate change is the key risk ARC Ltd. error or incorrect parameterisation. is facing. This can be evidenced by the Basis risk could result in significant significant payouts made in 2021.

OUR RESPONSE: ARC Ltd.'s Inclusive OUR RESPONSE: ARC Ltd. conducts OUR RESPONSE: ARC Ltd. enhances Growth Strategy is a comprehensive ground-truthing exercises where its season-monitoring procedures at plan detailing our market and model-generated payouts are the end of every season to improve the product diversification. ARC Ltd. is compared to conditions on the procedures that govern its underwriting also focused on understanding how ground at the end of each season. process. The policy wording and climate risks affect underwriting and ARC Ltd. enhances its season- dispute resolution mechanisms in the pricing. The underwriting criteria monitoring procedures at the end of event of any indeterminable failures, used to consider these risks were every season to improve its basis risk consequently reviewed.

Climate change and global warming Basis risk is the difference between reputational risk.

detection time.

There is a risk that the systems supporting rainfall reporting, accumulation, monitoring and control, fail severe extreme weather events due to This risk could arise due to model to capture complete, up to date and accurate data elements.

were improved in 2022.









#### **RISK OF INSUFFICIENT POOL GROWTH**



There is the risk that the ARC Ltd. pool does not grow. This **OUR RESPONSE:** ARC Ltd.'s Inclusive Growth Strategy up the continent and therefore the potential market, as well A lack of extensive, regular engagement could result in a failure to comprehend the disaster risk tools in the ARC Ltd. arsenal and perpetuate the perception of expensive premiums. This will result in unsustainable expenses and inadequate capital accumulation to repay Class C capital.

could be due to the limited number of countries that make is a comprehensive strategy that details the Company's market and product diversification with the aim of reducing as failure to engage effectively with this narrow market. dependency on the sovereign market for growth and sustainability. The strategy also details a plan for premium financing that addresses the affordability of premiums by the sovereign clients.













**CYBER RISK** 



Key functions such as research and development that are normally carried out by an insurance company have been outsourced to our affiliate, ARC Agency. As a critical outsourcing provider, any failure on the part of the Agency could significantly disrupt operations within ARC Ltd.

OUR RESPONSE: ARC Ltd. enhances its seasonmonitoring procedures at the end of every season to enhance underwriting and other outsourced operational procedures. We further revisit the documentation of processes and procedures to take into account any new functions or enhancements.

Cyber risk is the risk of a security breach of ARC Ltd.'s information technology systems. This would affect the availability or integrity of information, resulting in a financial loss or business disruption and thus significantly affect the

**OUR RESPONSE:** A rapid risk assessment is conducted annually and includes recommendations on keeping cyber risk at bay. Staff also receive annual training to enhance cyber security awareness.











OUR MATERIAL MATTERS AND RISKS

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A diversified portfolio comprising a larger and stronger customer base of sovereign and non-sovereign customers is essential to our continued existence.

#### **OUR PRIORITIES**

Following the analysis of our risks and material matters, ARC Ltd. has identified three priorities that will enable us to achieve our vision.

In order to achieve these priorities, the primary focus of ARC Ltd. during the year under review was to raise additional capital from potential stakeholders to remain sustainable as we scale up.







MARKET GROWTH

PREMIUM FUNDING

#### PRODUCT DEVELOPMENT

A diversified portfolio comprising a larger and stronger customer base of sovereign and non-sovereign customers is essential to our continued existence. Our new flood product has the potential to double the existing business and significantly increase diversification.

Similarly, while sovereign policies have demonstrated impact through payouts funds to countries in their moment of need, in most cases, they are nowhere near able to match a country's full liquidity requirements. The development of market-driven solutions will enable us not only to transfer some of the risk retained by government to local private insurance companies, but also to reduce the risk profile of sovereign governments.

Additionally, we identified that complementary disaster funding instruments, such as contingency funds and catastrophe bonds, would also improve client confidence and choice while laying the foundation for growth.

#### MARKET GROWTH

The historically limited number of countries regularly participating in the insurance pool poses a real challenge to ARC Ltd. and is not financially sustainable. Between 2017 and 2021, six new countries joined the pool, only two new countries signed MoUs and just one signed the ARC Treaty.

Another barrier to scaling is the size of our existing market. Of the 55 countries in Africa, 35 are signatories to the ARC Treaty and, by year end, 25 had signed an MoU and embarked on the capacity-building programme to become eligible to participate in the insurance pool.

We are exploring amending the onboarding process to make it easier for countries to join ARC Ltd. in either the sovereign or non-sovereign risk pool.

#### PREMIUM FUNDING

The affordability of insurance premiums remains a barrier to pool participation. A strategy to identify and secure additional donor partners for premium financing is a crucial piece of the puzzle, since premium financing has the potential to expand the market significantly and is critical to scaling the business.

So too is the drive to expand the number of Replica partners in fundraising windows beyond our existing partners – the Start Network and the World Food Programme (WFP).

In addition, competing products and guaranteed funding through the World Bank could significantly reduce our market and underscores the importance of securing premium financing and new donor partners.

ARC Ltd. envisages that at least 50% of premiums will be funded by premium financing subsidies in 2022. Read more about premium financing on page 15.

The risk of donors recalling capital loans, if the organisation fails to meet its development objectives is of further concern, although not immediate. This step would render the business unsustainable. Currently, our interest-free capital loans are to be paid in 2034.

#### **ENGAGING OUR STAKEHOLDERS**

We are committed to optimising the quality of our stakeholder relationships through structured engagement that seeks to understand and respond to the needs and expectations of all our stakeholder groups.

In line with this commitment, ARC Ltd. held its second retreat for members and partners in Malawi in July 2022. Read about the Malawi Retreat on page 74.

#### STAKEHOLDER OVERVIEW

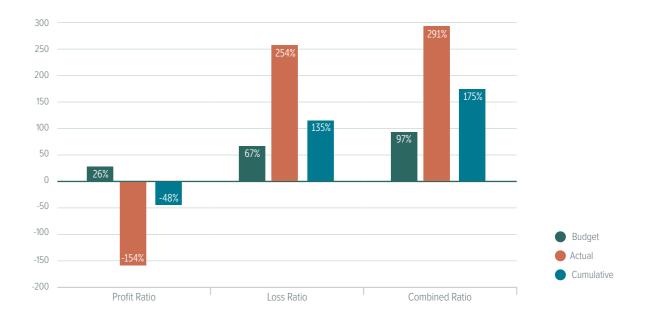
The stakeholder groups listed below are those we believe are material to achieving our strategic objectives and that impact the profile and competitiveness of ARC Ltd.

	STAKEHOLDER	FREQUENCY OF ENGAGEMENT	CHANNEL	FOCUS AREAS
	ARC MEMBER STATES AND BENEFICIARIES	Continuous throughout the year	ARC AGENCY	Insurance product offering and other capacity-building services
	CLASS A AND CLASS C MEMBERS	Minimum quarterly or as needed	ARC LTD. CHIEF OPERATING OFFICER	Business performance update and reporting
	BOARD	Minimum quarterly or as needed	ARC LTD. CHIEF EXECUTIVE OFFICER	Business performance update, reporting, strategic guidance
( ) ( ) ( ) ( ) ( ) ( ) ( ) ( ) ( ) ( )	FUNDING PARTNERS	Minimum quarterly or as needed	ARC LTD. MANAGEMENT	Business performance update and reporting
	REINSURERS	Continuous throughout the year	CHIEF UNDERWRITING OFFICER	Reinsurance placements

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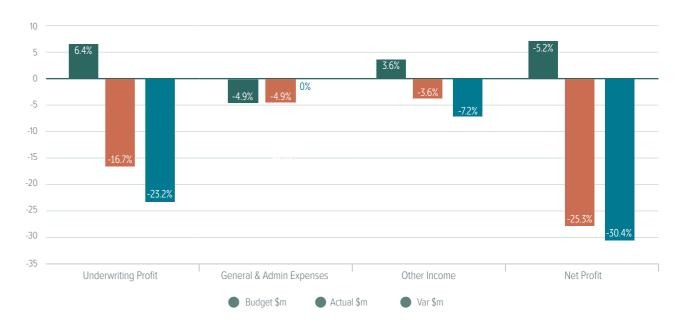
### **OUR FINANCIAL PERFORMANCE**

PROFIT AND LOSS ACCOUNT FOR THE PERIOD ENDED 31/12/2022				
	Budget \$m	Actual \$m	Var \$m	% Var
Gross written premium	31.8	23.1	-8.7	-0.3
Change in unearned premiums	0.2	-0.3	-0.6	
Gross earned premiums	32.0	22.8	-9.2	-0.3
Reinsurers' share of insurance premiums	-15.4	-10.4	5.0	
Reinsurers' share of change in unearned premiums	-0.1	-0.9	-0.8	
Reinsurers' share of gross earned premiums	-15.5	-11.3	4.2	
Net earned premiums	16.5	11.5	-5.1	-0.3
Commission income	1.0	0.8	-0.2	
Change in unearned commission	0.0	0.3	0.3	
Net earned commission	1.0	1.1	0.1	0.1
Policy acquisition costs	0.0	-0.1	-0.1	
Change in deferred acquisition costs	0.0	0.0	0.0	
Net policy acquisition costs	0.0	-0.1	-0.1	0.0
Claims paid	-23.2	-46.2	-23.0	
Movement in claims liabilities	-0.4	-3.7	-3.3	
Reinsurers' share of claims	12.5	20.7	8.3	
Net underwriting expense	-11.1	-29.2	-18.1	-1.6
Underwriting profit/(loss)	6.4	-16.7	-23.2	-3.6
Operations (without investment-related expenses)	-4.9	-4.8	0.1	
Investment-related expenses	0.0	-0.1	-0.1	
Total operational expenses	-4.9	-4.9	0.0	0.0
Interest & dividends	3.6	1.3	-2.3	
Realised gains / loss	0.0	-5.5	-5.5	
Unrealised gains / loss	0.0	-0.2	-0.2	
Provision for bad debt	0.0	0.8	0.8	
Net other income	3.6	-3.6	-7.2	-2.0



#### **KEY PERFORMANCE DRIVERS**

Overall, for the period we recorded a net loss of \$25.2 m vs a budgeted profit of \$5.2m.



#### Net underwriting profit: \$-16.7m vs a budgeted \$6.4m

- Gross written premium for Pool 9 was \$9.2m lower than budget due to policy withdrawal in Senegal, Côte d'Ivoire and Burkina Faso by \$9.2m
- Higher than normal loss activity due to droughts and tropical cyclones all over Africa
- The claims losses are within our retention and not covered by reinsurance except for Tropical Cyclone

#### Operational expense: budget \$4.9m vs actuals \$4.9m

• Overall flat on operational expenses due to stringent cost management

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#### **SUMMARY**

ARC Ltd. reported a net loss of \$25.3 million for the twelve months ended 31 December 2022, comprising \$11.5 million in net earned premium, \$1.0 million in net earned commission and policy acquisition costs, incurred net claims of \$29.2 million, other underwriting income of \$384K, a \$4.4 million investment loss and general and admin expenses of \$4.5 million.

During 2022, ARC Ltd. elected to enforce strict underwriting protocols, which entailed policy withdrawals due to non-payment of premiums for some territories, thus losing a total of gross written premium of \$5.5 million. Also, following the data failure experienced in risk Pool 8, the Company adjusted its policy wording to be clear on dealing with such instances of erroneous data and data failure, which took longer than expected, and led to delays in issuing policy documents to member states, leading to the non-renewal of the Replica Start Network policy for Senegal.

The Company was unable to secure a quota share reinsurance cover on the drought programme due to the following:

- (i) Model scepticism from the reinsurance markets due to model sensitivity during the sowing window and how sowing failures are picked up;
- (ii) The recent ARC2 NOAA data failure in 2021; and
- (iii) The triggered guaranteed payouts for some territories before policies were effectively placed on risk.

In November 2022, the Company registered as a segregated accounts company (SAC) to facilitate the entering into a new line of business, namely the Outbreaks and Epidemics Insurance Programme (O&E Programme). The first pilot programme managed through the Outbreaks and Epidemics segregated account is for the benefit of the Government of Senegal and is fully reinsured.

The Company's incurred net claims increased by \$10.9 million compared to the prior year and this is largely driven by claims on the drought policy of \$8.1 million from Mali on the 2022/23 policy year and \$2.0 million net claims from tropical cyclones recorded during the year.

The Company's investment portfolio shows YTD return of -4.13% performing below its customised benchmark of 3.18%. The negative performance was mainly attributable to rising global interest rates and rising inflation. The investment manager's outlook remains cautious going to 2023 as elevated inflation and continued Fed tightening impact corporate fundamentals and economic growth.

#### **INCOME STATEMENT**

Earned premium was \$11.5 million (2021: \$12.0 million) for the twelve months to 31 December 2022, reflecting a slight decrease compared to the prior year. The decrease was mainly attributable to the decrease in gross premium written during the 2022-23 renewal, due to the strict underwriting protocol enforced by the Company and delay in issuing policy documents to member states, offset by a decrease of reinsurers' share of insurance premiums, due to non-placement of quota share reinsurance cover on the drought programme.

The Company obtained a stop loss reinsurance contract for the 2022/23 policy year for a total reinsurance premium of \$2.3 million. There was a \$531k reinsurance premium adjustment on the expiring 2021/22 policies that was booked during the year. Also, an aggregate excess of loss reinsurance contract for \$2.0 million was obtained by the Company to cover the tropical cyclone policy for Madagascar and Comoros and 100% quota share treaty reinsurance coverage for the O&E pilot programme.

Premiums written are recognised on a pro-rata basis over the term of the risk period, while reinsurance premiums are recognised consistently with the underlying premium written.

Figures in US dollars	2022	2021
COUNTRY		
Côte d'Ivoire	-	1,577,489
Togo	1,000,000	944,625
Mali	-	2,037,216
Senegal	-	3,037,216
Niger	1,400,000	1,396,940
Mauritania	1,500,000	1,499,655
The Gambia	332,245	480,000
Sudan	-	1,500,000
Zambia	1,500,000	1,000,000
Malawi	3,000,000	3,000,000
Zimbabwe	300,000	2,500,000
Madagascar	500,000	499,859
Chad	500,000	-
Total sovereign drought policies	10,032,245	19,861,475
Madagascar		
Comoros	2,500,000	1,998,371
Total tropical cyclone	3,000,000	1,998,371
Save the Children Fund – Zimbabwe	1,000,000	
Save the Children Fund – Senegal	1,000,000	1,499,842
- Save the children's did Seriegal	2,000,000	2,000,000
World Food Programme Replica policies - The Gambia, Burkina Faso, Mail, Mauritania, Zimbabwe and Madagascar	7,110,887	4,500,000
Start Network – Zimbabwe	1,000,000	2,500,000
Start Network - Zimbabwe	9,110,887	8,499,842
	9,110,007	0,433,042
Non-sovereign policies	470,292	465,467
Outbreaks and Epidemics pilot programme	508,130	-
Gross written premium for 2022/23	23,121,554	30,825,155

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"The first pilot programme managed through the Outbreaks and Epidemics segregated account is for the benefit of the Government of Senegal and is fully reinsured."

**Net earned commission** decreased by \$1.0 million compared to the prior year due to non-placement of the quota share reinsurance on the drought programme during the current policy year.

Net underwriting expense of \$29.2 million during the full year to 31 December 2022 consisted of paid claims of \$46.2 million, an increase in reserves of \$3.7 million and reinsurance recoveries of \$20.7 million. Claims paid for the year represent claims on the drought programme to Mali (\$8.0 million) on 2022-23 policy year and Madagascar (\$800k), Mauritania (\$1.7 million) and Mauritania Replica policy (\$1.1 million), Burkina Faso (\$1.2 million), Malawi (\$14.2 million), Côte d'Ivoire (\$647k), Zambia (\$5.4 million), Niger (\$2.1 million) on 2021-22 policy year, claims payout of \$10.7 million to Madagascar on tropical cyclone programme and eight (8) claim payouts under the non-sovereign line of business of \$200k.

**Other underwriting income** of \$384K represents the amount of expenses recharged, which O&E cell incurred during the year.

**General and admin expenses** were \$4.5 million for the year ended 31 December 2022, slightly down by \$211k compared to \$4.7 million in the prior year. During the year, the Company was able to collect a bad debt that was expensed in the prior year.

**Realised investment loss** of \$4.3 million was mainly attributable to the negative performance of the Company's portfolio due to the rising global interest rate and elevated inflation experienced worldwide.

**Unrealised loss on investment** of \$176k, comprising negative performance on the Company's portfolio, due to rising interest rates and inflation, was offset by the strong performance of US dollar during the year.

#### **BALANCE SHEET**

**Other receivable** represents the amount collectible from WFP in relation to expenses incurred by the Company in managing the O&E pilot programme.

**Reinsurance assets** comprise unearned premium on the premium ceded (\$4.5 million) and reinsurance recoverable (\$784k) on claims paid by the Company. The decrease on the reinsurance asset was mainly due to the Company's inability to secure a quota share reinsurance cover on the drought programme during the year and collection of all reinsurance recoveries on the Pool 8 claims paid.

**Insurance receivable** of \$7.2 million largely relates to policies issued during the last quarter of the year.

Marketable investments decreased by \$35.6 million compared to the prior year. The Company made a drawdown of \$22.4 million and \$11.4 million in January and June respectively to settle outstanding claims. The Company's year-to-date return was -4.13%, performing below its customised benchmark of 3.18%.

**Investment in Pula Advisors GmbH Management** – the approximate fair value of the investment is assessed at \$316k, a decrease of \$1.7 million compared to the purchase consideration of \$2 million.

Cash and cash equivalents of the Company as at 31 December 2022 are valued at \$44.7 million. The components are set out below:

Figures in US dollars	PAYDEN & RYGEL	BANK OF BUTTERFIELD	HSBC	FNB	TOTAL
Marketable securities					
Bonds	26,626,147	-	-	-	26,626,17
Equities	3,698,902	-	-	-	3,698,905
Total	30,325,049	-	-	-	30,325,049
Cash and Cash equivalents (CC	E)				
Money Market Funds	19,110,291	-	-	-	19,110,291
Cash	3,600,751	21,825,032	117,103	12,794	2,500,000
Total CCE	22,711,042	21,825,032	117,103	12,794	3,000,000
Accrued interest	376,202	-	-	-	376,202
Total portfolio	53,412,293	21,825,032	117,103	12,794	75,367,222

**Class C Members'** returnable capital represents a contribution from two Class C members, which is a returnable capital with a maximum fixed term of 20 years.

**Unearned premium liabilities** are attributable to an unexpired portion of the premium base on the term of the risk period.

Claims liabilities consist of IBNR reserves amounting to \$19.4 million (2021: \$15.7 million) and claims payable of \$804k (2021: \$14.5 million). The decrease in the claims liabilities is mainly due to the settlement of claims payable in the prior year, offset by an increase in the IBNR reserve, due to Pool 9B policies added during the last quarter of the year.

**Reinsurance premium payable** decreased by \$3.7 million, mainly attributable to the Company not being able to place a quota share reinsurance cover for the policy year 2022-23.

Deferred income other is made up of the grant received from the Swiss Agency for Development and Cooperation (SDC) as base capital for the O&E segregated account, less operating expenses incurred during the year by the O&E cell not yet billed to SDC.

Accounts payable and accrued liabilities include \$1.3 million payable to Côte d'Ivoire as a return premium since they were not included in the Pool 9 cover, due to a delay in their premium settlement.

#### **REGULATORY CAPITAL REVIEW**

ARC Ltd. has a wide margin of safety under both the statutory test and internal Enhanced Capital Requirement (ECR) criteria. The capital and surplus held by the Company exceed the minimum regulatory requirement under the Bermuda Insurance Act as a Class 2 insurer and the minimum requirement established in the by-laws (150% of Class 3A ECR), as shown in the table below:

Figures in US dollars	REQUIRED	REQUIRED	150%	ARC CAPITAL
	- CLASS 2	- CLASS 2	OF ECR	AND SURPLUS
31 December 2022	1,944,097	13,484,120	20,226,180	52,120,302

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#### INTERVIEW

#### KATHRYN STAHLBERG AND LARA EVANS

**USAID** 





#### **EXPERT INSIGHTS**

As a company that values collaboration and partnership, ARC Ltd. counts USAID among its key allies. To shed light on the past year and future direction, Kathryn Stahlberg and Lara Evans share their insights.

ARC Ltd.'s growth is a positive step towards the longevity and sustainability of the organisation, says Lara Evans, Social Protection Advisor at USAID, in the Center for Resilience in the Bureau for Resilience and Food Security.

"ARC Ltd.'s role has been expanding, and it is seen as a positive development that the private sector is playing a key role in helping national governments manage climate risk, handle research and development, as well as product development."

The company is well run, adds Kathryn Stahlberg, Acting Division Chief and Senior Risk Advisor, also in the Center for Resilience in the Bureau for Resilience and Food Security, recognising the challenges of navigating the insurance market and working with multiple partners.

"ARC Ltd. is well-positioned to establish direct contact with member countries and provide prompt answers to any questions. If ARC Ltd. takes a stronger role in engagement, it will make sense for the system and help countries purchase their policies consistently year after year."

# THE IMPORTANCE OF PARAMETRIC INSURANCE AS A DRF MECHANISM IN AFRICA

Insurance is a critical tool within a set of tools designed to cover catastrophic events with low frequency and high impact.

"The steady increase of climatic events challenges the thresholds, triggers, and cost. While insurance remains an essential vehicle, I believe it needs to integrate better within a broader disaster risk financing infrastructure," says Evans.

However, there is hesitancy to purchase insurance due to uncertainty around trigger events leading to payments. While parametric insurance is a valuable tool, data-related issues have added uncertainty to an already fragile system. Stahlberg expresses hope that these issues will be resolved before the next policy purchase season, restoring confidence in the system.

"Despite these challenges, parametric insurance remains a great tool, and people worldwide are increasingly learning about and benefiting from it," she says

#### A LOOK AT THE YEAR THAT WAS

In 2022, parametric insurance payouts were proof of concept and a confidence booster. However, according to Evans, using other tools to address risk layering is imperative. Insurance products are meant to address high-impact and low-frequency events. When insurance triggers rely solely on this type of insurance for disaster risk financing, this creates market-oriented issues like increasing prices and nervous reinsurers. She emphasises that supporting the development of comprehensive risk management strategies at the country level, led and owned by the government, should be the focus, with ARC Agency assisting in understanding the risks and appropriate tools.



"The loss of lives and livelihoods and the eroding of national budgets cause financial impacts that could last for years. However, progress in this area is slow."

# DIVERSIFIED PRODUCTS, SOCIAL PROTECTION, AND TIMELY DISASTER RESPONSE

ARC Ltd.'s expansion into micro-insurance and the benefits of private sector involvement in developing disaster risk financing tools are commendable. To mitigate cost challenges and build confidence among reinsurers, ARC Ltd. must create strategic partnerships and diversify its products and increase capitalisation for bold business choices.

She notes: "Continued growth and expansion are expected in 2023, focusing on getting more countries to buy policies and expanding the product range. A bigger pool of policies means better risk-sharing."

Further, the foundation, or the base layer, of a comprehensive risk management system should be comprehensive national social protection systems, according to Stahlberg, who points out that while ARC Ltd. is contractually obligated to make timely pre-arranged disaster risk financing payments, delays in programming can hinder the efficient and effective distribution of funds.

"In 2023, a key focus for USAID will be improving social protection systems in countries like Kenya, Somalia, Madagascar, Malawi and Mozambique to meet the needs of the most vulnerable in the event of climate shocks."

#### LOOKING AHEAD

Evans has emphasised the importance of ARC Ltd. keeping abreast of global initiatives such as Global Shield, which could affect their operations.

"Although it may be tempting to dismiss political initiatives like those from G7 or G20, they can have tangible impacts on our work, even if they seem far removed from our day-to-day operations. For example, the Global Shield is allocating funding towards disaster risk financing and adaptive social protection in countries like Uganda right now. Therefore, engaging with these initiatives at the national level is crucial, especially in the designated Pathfinder countries. Being aware of the broader ecosystem that ARC sits within is key – a lot is happening, and ARC should be part of it."

Congratulating the ARC Ltd. leadership team on its achievements, both commend them for punching above their weight – they are a small team with a significant impact.

PARTNER INTERVIEW

#### INTERVIEW

#### PATRIK OLSSON

**DEPUTY HEAD OF THE THEMATIC** SECTION FOOD SYSTEMS, SWISS AGENCY FOR DEVELOPMENT AND COOPERATION (SDC).





#### **EXCITING TIMES AHEAD**

ARC Ltd. is a dynamic organisation dedicated to addressing critical issues such as droughts and floods in Africa. While it currently relies on donor support, we anticipate that in the future, the value of ARC's solutions will become evident to clients, rendering external assistance unnecessary.

falling into the poverty trap.

project focused on rice, maize and other food items, would be possible.

Parametric insurance holds tremendous significance showcasing promising prospects for the future. Our in Africa, as it serves as a vital safeguard against the organisation takes pride in having an in-house research and various risks individuals face, preventing them from development function, enabling us to drive innovation and stay at the forefront of our field.

In 2022, ARC Ltd. faced financial challenges due to Exciting times lie ahead for ARC Ltd., propelled by a strong complex circumstances in certain African countries. mission, refreshing ideas, and a steadfast vision. We express However, we view understanding the importance of our profound gratitude for our partners' continued support, the "bigger picture" as an investment in our clients. involvement, and enthusiasm, recognising that without their Presently, we are actively engaged in an agricultural commitment, none of the impactful work we undertake





"We would like to express our gratitude to our donors and partners. Their support has been invaluable in our efforts to innovate and facilitate access to the risk pool for those facing difficulty in paying premiums."

Abdoulie Janneh, Chairman, ARC LTD. BOARD



CASE STUDY:

**2022 IMPACT** 

CASE STUDY: 2022 IMPACT 65









Already in Q1, our mission to be impactful was evident with the highest payout in our history – \$10.7m to the Madagascar Government, following the devastation of Tropical Cyclone Batsirai, which made landfall on 5 February. It claimed the lives of 121 people and displaced more than 61 500. The rapid payout ensured an early response, supporting the government's emergency relief and recovery efforts in the country. Additionally, Madagascar had been impacted by food and water shortages and water-borne diseases.

By the end of 2022, we had succeeded in our intention with a record disbursement of \$60m for 14 payouts – the highest amount we have ever paid out in a single year.

The 2022 payouts went to:



#### **Burkina Faso:**

#### \$1.19m for drought

This payout helped the country combat hunger and malnutrition after the drought had affected crops and harvesting.



#### Madagascar:

#### \$797,049 for drought and \$10.7m for tropical cyclone

Not only did Madagascar have to contend with a series of cyclones and storms in early 2022, culminating in Tropical Cyclone Batsirai, but the southern region was impacted by the worst drought in decades with an estimated 30 million people facing food insecurity. This triggered the second payout in the second quarter.



#### Mali:

#### \$7.1m for drought

As an agricultural country with most adults involved in subsistence farming, Mali was hard-hit by drought. The country received its first-ever payout in March 2022, allowing as many as 204 000 vulnerable people to access food aid.

By the end of 2022, we had succeeded in our intention with a record disbursement of \$60m for 14 payouts – the highest amount we have ever paid out in a single year.



#### Mauritania:

#### \$1.14m for drought

A prolonged drought in Mauritania, which also depends heavily on agriculture, destroyed harvests, caused a shortage of grazing pastures and resulted in livestock starving to death. The payout made provision for much-needed food aid.



#### Malawi:

#### \$14.2m for drought

Malawi experienced the driest-ever agricultural season, some staple foods became depleted, and food prices soared to accommodate transport costs. The payout ensured the provision of food assistance or cash transfers to vulnerable communities impacted by the drought.



#### Zambia:

#### \$5.3m for drought

Zambia experienced an extreme drought event in the 2021/2022 agricultural season. The payout assisted the country with rapid emergency response activities in affected communities, including the provision of cash transfers and food assistance to vulnerable households during the lean season period.

Since its inception in 2014, ARC Ltd. has paid out a total of \$125m in claims from eight risk pools.

Currently, we cover more than 18 million people in Africa and although the need is far greater, our mission, to reiterate, is to cover 200 million by 2025.

This significant impact of 2022 will now also be extended in 2023 due to the addition of two new perils – flood risk and outbreaks and epidemics.



#### **DELIVERING VALUE**

We measure our impact by evaluating how effectively we have served the needs of vulnerable populations in our member states.

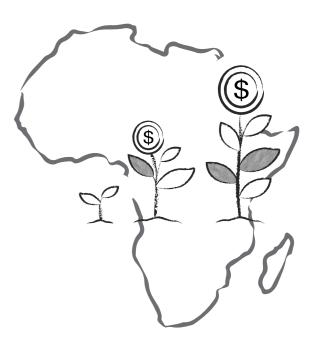
ARC Ltd.'s gross payouts are derived from actual rainfall estimates from the beginning of the season to the latest dekadal (10-day) precipitation observed. We apply previously observed rainfall data from 2001, which is then used to create estimates of drought response costs and payouts.

We also aim to strengthen the commercial capacity of insurance markets in Africa through our micro/meso product.



CASE STUDY:

**ESG** 



CASE STUDY: ESG 69









Predictions are that the global focus on ESG will shift from refining policy to action and measurability as more stakeholders add their voices to these expectations, while businesses continue to walk that fine line between risk and opportunity.

In Africa, the need for entrenching ESG practices to ensure sustainability has never been more critical in the face of climate change and pressure from the global community. The way the continent does business will inevitably have to change.

Historically, environmental and social justice have been the ambit of governments to facilitate; however, with companies increasingly stepping forward, public and private sectors working together could lead the charge on the continent.

#### HOW INSURERS ARE STEPPING UP

In April 2021, the insurance industry in Africa acknowledged its role in fostering sustainability, resulting in the signing of the Nairobi Declaration on Sustainable Insurance. This is a commitment to strengthening disaster-risk management on the continent, supporting the achievement of the UN Sustainable Development Goals, and implementing the Sendai Framework to build resilience. Fifty signatories indicated their willingness to incorporate ESG principles into their business models.

Since the signing of the declaration, ARC Ltd. has been motivating for more than commitment; it has been motivating for action and encouraging more countries to come on board. It continues communicating that all African insurance industry stakeholders have a critical role in promoting sustainable development. ARC Ltd. is also leading by example.

#### **ACHIEVING A TOP ESG SCORE**

In 2022, following an independent audit of its business practices and policies, ARC Ltd. received the global insurance industry's top environmental, social and governance (ESG) score. The evaluation by ESG research, ratings and data company, Sustainalytics, looks at ESG practices and preparedness to meet future risks, such as climate change, regulatory risk and reputational issues. ARC Ltd. moved from low risk to negligible risk, improving by two positions, and at 5.7, its ESG risk rating is the lowest among its peers worldwide.

In April 2021, the insurance industry in Africa acknowledged its role in fostering sustainability, resulting in the signing of the Nairobi Declaration on Sustainable Insurance.

ARC Ltd. remains a leader in the Diversified Insurance sector, with the lowest exposure among its peers (24.0) and the strongest management score (80.3). It also scored negligible risk ratings for data privacy and security, corporate governance, human capital, business ethics and ESG integration. As ARC Ltd. continues to make a difference on the African continent, it consciously partners with ESG-focused reinsurers and investors, thereby advancing the sustainability focus.

#### OTHER STRIDES IN ESG

#### Regional collaboration for risk:

- Communities in Africa relying on rain-fed agriculture are more at risk than ever, due to increasing weather variability and the forecasted spikes in global temperatures that are expected to cause longer and more intense droughts. In vulnerable countries, a minor climate shock, such low rainfall, can escalate into a crisis requiring an emergency response.
- The United Nations Framework Convention on Climate Change (UNFCCC) emphasised risk transfer and risk sharing through regional collaboration as crucial to climate change adaptation, and in answer, ARC:
  - implements a regionally driven, risk transfer and risk-sharing mechanism;
  - supports comprehensive climate risk management approaches, including scaling up and replicating good practice and pilot projects;
  - addresses loss and damage associated with climate change, including slow-onset events and extreme weather events; and,
  - strengthens and promotes regional collaboration and networks.

#### Gender equality

ARC has collaborated with the African Union to launch the Gender and DRM Platform (GDRMP). It aims to address the research and development gaps in gender and disaster risk management (DRM) and financing in Africa, through the collection and analysis of gender-disaggregated data, impact assessments, as well as the publication of best practices, among others.

Ultimately, the GDRMP will assist ARC's member states with gender awareness and practical steps for DRM gender mainstreaming. ARC has three objectives to its approach:



# KNOWLEDGE DEVELOPMENT AND MANAGEMENT:

Through the GDRMP, ARC mobilises DRM partners and practitioners, including governments, humanitarian actors, civil society organisations, the private sector and research institutions, to develop innovative continent-wide approaches to fill the gender and DRM knowledge gaps.



#### BUILDING INSTITUTIONAL AND INDIVIDUAL CAPACITIES AND TOOLS:

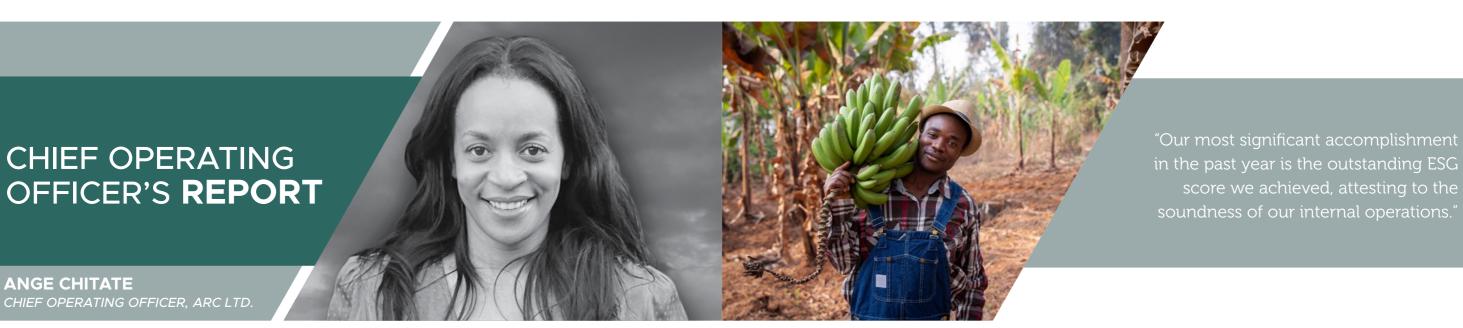
ARC supports member states in conducting DRM-targeted gender analysis followed by the development of tools and guidelines for gender transformative DRM capacity building, standards for gender transformative contingency plan and criteria for gender-sensitive monitoring and evaluation.



# ENGAGEMENT IN POLICY DIALOGUE AND ADVOCACY:

This contributes to a policy environment that enables a gender-sensitive culture of insurance, and other DRM financing mechanisms, including social protection programmes. Internally, ARC is implementing gender mainstreaming by ensuring gender-sensitive employees.

CHIEF OPERATING OFFICER'S REPORT CHIEF OPERATING OFFICER'S REPORT



ARC Ltd. has a clear vision to increase coverage for vulnerable people in Africa, with a keen focus on preserving capital contributed by its investors.

CHIEF OPERATING OFFICER, ARC LTD.

**ANGE CHITATE** 

#### **DEVELOPMENT BUT NOT AT ANY COST**

While pursuing development goals, the company maintains a commitment to run its operations like a business.

ARC Ltd. continues to be an insurance company that prioritises sustainability and development. We celebrated a record number of payouts in 2022, demonstrating our relevance in addressing climate-related disasters. We remain committed to perfecting our operations according to our mandate and increasing coverage for vulnerable people in Africa.

#### **GETTING THINGS RIGHT**

Our most significant accomplishment in the past year is the outstanding ESG score we achieved, attesting to the soundness of our internal operations. ARC Ltd. achieved the global insurance industry's top ESG rating, confirming our dedication to meeting the environmental, social, and governance mandate. The comprehensive assessment of our business was conducted by Sustainalytics, a leading ESG research, ratings and data company.

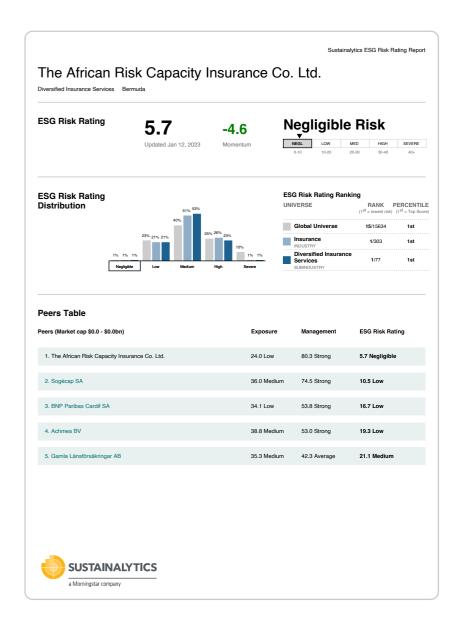
The evaluation is a comprehensive assessment of an organisation's preparedness to meet future risks and opportunities linked to ESG factors, such as climate change, regulatory risk and reputational issues, on a scale of 0 to 100, with 0 indicating the lowest risk.

ARC Ltd.'s ESG score was calculated following an independent audit of the company's business practices and policies. Improving from low risk last year at 10.2 to negligible risk this year at 5.7, Africa's premier institution for disaster financing edges up two positions to claim top spot in the global insurance sector ESG risk rating. ARC Ltd.'s ESG risk rating is now the lowest among its global peers.

ARC Ltd. also retained its leadership position in the Diversified Insurance sector this year, with the lowest exposure among its peers (24.0) and strongest management score (80.3) in terms of how well it manages its ESG programmes, practices and policies.

Additionally, ARC Ltd. scored negligible risk ratings in terms of Data Privacy and Security, Corporate Governance, Human Capital, Business Ethics and ESG Integration.

Throughout our key functions, such as underwriting, human resources, procurement, and the entire value chain, we have applied ESG best practices and despite the challenges we faced, we have demonstrated that our operations continue to be run in alignment with ESG requirements.



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The team's performance has been exceptional, with increased business volumes and a willingness to go above and beyond.





#### **OUR BIGGEST ASSET - OUR PEOPLE**

Unlike in 2021, where our focus was mainly on recruitment, at the beginning of 2022, we were able to assemble a permanent team.

Progressing through their probationary period, it was remarkable to see how well they adapted to their roles and developed expertise in their respective areas. It was also inspiring to witness their growth and transformation into ARC champions, speaking with authority and confidence about our mandate. While we encountered some challenges, we now have a team of highly skilled individuals, who are fully invested in their functions. It is our hope that we can continue to attract and retain such talent in years to come.

Furthermore, I am pleased to report we have achieved a zero staff turnover, which is a testament to our investment in our people. Despite our remote way of working, our team has adapted and proven that work is about achieving targets rather than physical presenteeism in an office. Our passion for ARC Ltd. shines through our work, and our staff retention also demonstrates our commitment to fostering a positive and supportive work environment.

The team's performance has been exceptional, with increased business volumes and a willingness to go above and beyond.

#### **INCREASING PARTNERSHIPS**

Looking ahead, we recognise the importance of strong partnerships to achieve our goals and deliver impact to those in need. To this end, we will continue to cultivate and maintain partnerships that align with our values and mission.

In 2022, we entered into a significant risk pool partnership that was initiated during COP27. This partnership brought together three different risk entities under one shared purpose: development insurance. Rather than competing with one another, we recognise that our partnership will draw attention to disaster risk management (DRM) and disaster risk financing (DRF).

By working together, we have a stronger voice and presence, which allows us to champion the value of DRM and DRF in different parts of the world, such as



the Caribbean, and the Pacific. We believe that our unified approach will help us to attract additional partners, funders, and key stakeholders to our cause.

#### A NEW COMMUNICATION STRATEGY

Our communication strategy has undergone a significant transformation in 2022. Although we remain an affiliate of the ARC Group, we launched a new LinkedIn handle that has allowed us to streamline our communication process and produce content at a faster pace. This shift in our communication strategy has been made possible by partnerships that we have forged in the realm of communications. Additionally, we have made progress in our partnerships with other organisations, and our increased impact is evidenced by our successful payouts. Overall, these achievements in communication and partnerships have been significant for ARC Ltd. in 2022.

#### FOCUSING ON THE FUTURE

I believe that in 2023, it is important to identify and overcome any obstacles that are hindering our ability to operate at maximum efficiency. One such obstacle may be the conflicting priorities within the ARC Group, such as the capacity-building focus of the ARC Agency versus the financial transfer solutions of ARC Ltd.

These disparities can sometimes impact our work negatively. However, improving our data and data sources is crucial for us. Therefore, I see 2023 as a year of tackling these barriers and finding solutions that allow us to offer the most effective and efficient business model possible.

I believe that our goal of reaching 200 million people annually is more achievable now. While it is important for countries to purchase our insurance policies, we also need to ensure that our products meet their needs.



We have made progress in our partnerships with other organisations, and our increased impact is evidenced by our successful payouts.

Chief Operating Officer, ARC Ltd. Board

# FACILITATING DIALOGUE BETWEEN MEMBERS AND PARTNERS

In July, ARC Ltd. hosted its second successful retreat for members and partners in Lilongwe, Malawi, providing stakeholders with an opportunity to share best practice, insights, challenges and recommendations to improve the ARC programme for future pools.

ARC Ltd. is committed to leading with purpose and creating value for our members and partners. Transparency and dialogue are at the heart of our business model, and the retreat in Malawi was an excellent way to connect, communicate and collaborate.

The two-day hybrid event brought together delegates representing Class A Members (Madagascar, Mali, The Gambia, Côte d'Ivoire, Mauritania, Togo, Senegal, Sudan, Zambia, Zimbabwe, Malawi and Niger) and Class C Members (United States Agency for International Development [USAID], the Swiss Agency for Development and Cooperation [SDC], Germany's KfW Development Bank and the UK Foreign, Commonwealth & Development Office); Replica Partner organisations (Start Network, and the World Food Programme [WFP]) and the ARC Agency and ARC Ltd. staff.

Special guests included Dr Abdoulie Janneh, ARC Ltd. Board Chair and Executive Director of the Mo Ibrahim Foundation, and Mr Patrick Zimpita, Principal Secretary of the Malawian Ministry of Finance and Economic Affairs.

Four member states—Malawi, Mali, Madagascar and Zambia—delivered presentations on the extent to which they valued the ARC mechanism as a tool in their disaster risk management strategy. They shared how the programme had been flexible in helping them adopt a proactive response to managing their respective disasters and swiftly assisting the most vulnerable populations on the ground.

With product diversification a key focus for ARC Ltd., several countries participating in piloting the company's alternative products (Flood Risk; Outbreaks and Epidemics) also shared their insights.

Outlining the level of their participation in these pilot programmes, Malawi (Flood Risk), Togo (Flood Risk) and Uganda (Outbreaks and Epidemics) highlighted some of the lessons learnt in the pilot programmes for shaping the

new products, notably the need for local technical context and endorsement to develop a sound model.

In their formal presentations, Class C Members and Donor Partners (USAID, the Foreign, Commonwealth & Development Office, the KfW Development Bank, the SDC, the WFP and Start Network) provided an overview of their activities and the extent to which these included support for ARC and the member states that were part of the programme.

While delegates highlighted several opportunities for improvement throughout the two-day retreat, there was widespread acknowledgement that ARC provides the most affordable disaster-risk system for Africa, and all stakeholders were committed to its long-term success, upscaling and diversification.

The ARC Ltd. team reiterated its commitment to improving where it can to ensure it remains relevant and meets the needs of member states.

#### **KEY TAKEAWAYS FROM THE EVENT:**

- The greatest achievement of the year was the payout of almost US\$60m for Pool 8 countries.
- As a matter of priority, ARC Ltd. should focus on the development of diverse products.
- Current processes were hampering the impact of ARC and leading to unnecessary delays.
- The Replica Programme expands insurance coverage across African countries in the most easily accomplished way.
- ARC's micro- and meso-level insurance initiatives are opportunities to expand coverage.
- Member states must collectively leverage the generous support received from partners.
- A collective effort is required to inspire peer groups across the continent to participate in ARC.





















CHIEF UNDERWRITING OFFICER'S REPORT CHIEF UNDERWRITING OFFICER'S REPORT



I am thrilled to report that we expanded our reach with Somalia and the Comoros having joined our pool, a

significant achievement for us.

#### ARC LTD.'S CATALYTIC ROLE

Senegal taking out the first-ever policy.

Our role is multifaceted, and this is a critical aspect of our work. We recognise numerous channels and activities through which we can leverage our influence to reduce the protection gap on the continent. Simply waiting for insurance policies to come through or assuming the role of an insurance company is no longer sufficient. Understanding the importance of being actively involved and bringing other stakeholders into the fold to work towards our goal, we are taking a proactive approach by convening and catalysing various actors within the disaster risk financing space.

We also launched our outbreaks and epidemics product, with

Due to its ease of implementation and scalability, parametric insurance is a crucial mechanism for Africa and other developing regions. While well-developed markets are accustomed to standard indemnity insurance products, parametric insurance's speed of implementation allows for a more significant impact in a shorter time, providing coverage to many people quickly in different locations. This is the unique selling point of parametric insurance.

We firmly believe that it is the principal tool that we and other stakeholders must use to significantly reduce the protection gap.

#### **LESSONS FROM 2022**

There is always an opportunity to learn in every situation, even when things are going well. Unfortunately, we experienced a repetition of the satellite data issues that affected us in 2021. This was due to incorrect data being transmitted by our data provider. As a result, we have learnt the importance of diversifying our satellite data providers and the drought indices we use for insurance coverage to reduce reliance on a specific data source or product. Basis risk is also a reminder that there may be a mismatch between our models and the situation on the ground, a challenge always associated with parametric insurance. We will strengthen our analytical and modelling capability to reduce basis risk as far as possible.

Education and awareness are vital to appreciating the role and use of insurance and disaster risk financing. We aim to continue raising awareness among governments, non-government organisations, and other entities, while acknowledging that ground-breaking initiatives like ours face challenges when working with institutions and countries new to this space. To this end, we will continue collaborating with various partners to increase awareness, particularly the use of insurance for resilience in the public sector.

#### 2022 - KEY BREAKTHROUGHS

In 2022, we achieved a significant breakthrough by launching a project with the World Bank in Djibouti. This was a departure from our traditional products and a positive step forward, as it was the first time a country had signed on to a non-ARC-developed product. The World Bank also funded the country's participation in the ARC pool for the first time. This partnership allows us to leverage our relationships with other partners and bring sustainable change to insurance uptake on the continent. We aim to expand this partnership with the World Bank

"We firmly believe that parametric

and other stakeholders must use to

Developments in Somalia were also significant. This is a country particularly vulnerable to drought, and the challenge we face is battling a level of scepticism for our products until a payout takes place and people see the benefits of it. Somalia received a payout for drought, and the effects are now being felt beyond the borders of Somalia, as the entire East Africa region is drought-prone. As we are still engaging with other East African countries to come on board, this payout was significant and served as proof of concept.

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#### **FOCUS AREAS FOR 2023**

Our focus on payouts is always directed towards growth, which requires expansion in various ways for the risk pool.

The first area is **SCALE**, which increases the average premium per country. While we understand that budget constraints exist, we aim to see the average premium grow. This can be achieved by promoting more insurance coverage in countries by adopting risk-layering strategies and additional premium financing.

The second area is **DIVERSIFICATION**, which has two subcategories.

The first is **geographical diversification**, where we aim to attract as many countries as possible from all regions on the continent. We aim to have a geographically diverse pool of countries participating in our risk pool. Having a diverse portfolio helps to mitigate risks, as different countries face different risks to varying degrees.

The second is **product diversification**: to attract different countries, we must be able to offer them different types of cover. We currently have droughts, tropical cyclones, and more recently, outbreaks and epidemics and we have launched our flood risk cover in Nigeria.

Then there is also **general diversification:** the one-size-fits-all approach does not work. Even while offering a drought product, there needs to be diversification, as countries experience unique circumstances for which our standard products do not cater.

Focusing on reinsurance/alternative risk transfer and protecting our balance sheet is also important. We are in a market where reinsurance rates are high and will remain so for the foreseeable future.

Additionally, we must be agile and creative when sourcing reinsurance and diversifying. We will look at alternative reinsurance vehicles in 2023 to reduce our exposure to traditional reinsurance structures.

**CAPITAL** is another focus area. For us to grow in a stable environment, we need additional capital. With the many payouts, our capitalisation is at a different level than before. The most important capital of all, human capital, will continue to demand the utmost attention, and we are proud that one of our team members has been selected for the Young Insurance Professional of the Year hosted by the African Insurance Organisation (AIO).

In summary, in 2022, we attracted two new countries, and we continue to target more. Although we had some data issues, it was a year in which we laid strong foundations for growth and diversification.

#### MALVERN CHIRUME

Chief Underwriting Officer, ARC Ltd. Board

# SAFEGUARDING VALUE

#### **OUR APPROACH TO GOVERNANCE**

Effective governance is a foundational element across all aspects of ARC Ltd., encompassing its financial, intellectual, and human capital. Detailed information regarding the roles and responsibilities of the Board can be found in our comprehensive governance structure outlined on the following page.

#### **EVALUATION OF BOARD MEMBERS**

Given the crucial role of the Board as the governing body of the Company, it is essential to ensure its efficient functioning. Therefore, the evaluation of Board members prior to the renewal of their terms is of utmost importance.

Director evaluations were done for two directors whose terms were up for renewal, at the Annual General Meeting in March 2021, based on an Institute of Directors' evaluation framework. The anonymous evaluation was conducted, reviewed and reported by Deloitte Bermuda, ARC Ltd.'s internal auditor and overseen by a former Company Board member. The evaluation was successful and revealed strong scores for both directors. The Board Chair also evaluated the overall Board performance for 2020 and found to be satisfactory.

#### **BUSINESS PLAN AMENDMENT FILED**

During the year under review the Board approved the amendment of the Company's business plan to include non-sovereign business activities and flood coverage once the R&D on the flood model was complete. The amendment was filed with the Bermuda Monetary Authority (BMA) and approved.

#### **OUR GOVERNANCE STRUCTURES**

#### **Board responsibilities**

The Board is responsible for ensuring a sustainable future for the organisation. It achieves this by exercising the necessary care and oversight to ensure it is well managed, that regulatory provisions are adhered to, that the principles of good corporate governance are applied, and that the organisation is not faced with any avoidable or unnecessary risks.

The committees below assist the Board in its duties and responsibilities. The Board reviews the mandate and terms of reference of each committee each year.



is a foundational element across all aspects of ARC Ltd., encompassing its financial, intellectual, and human capital.

SAFEGUARDING VALUE

SAFEGUARDING VALUE

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#### FINANCES & UNDERWRITING **GOVERNANCE AUDIT & RISK INVESTMENT** & REINSURANCE COMMITTEE COMMITTEE COMMITTEE COMMITTEE Responsibilities Responsibilities Responsibilities Responsibilities · Provide oversight on Ensure that the Provide oversight Provide oversight matters relating to organisation's accounts and guidance on the and guidance on ARC Ltd. governance and accounting policies Company's financial the organisation's practices and policies present a full and true viability and on the underwriting processes • Make recommendations account of the financial diversification of funds and procedures in light of OECD affairs of ARC Ltd. invested Monitor underwriting Principles of Corporate Provide oversight on Ensure stewardship of performance Governance and other operational risks and public funds Oversee the solvency relevant governance effectiveness of risk Oversee the planning, and capitalisation international mitigation strategies budgeting and requirements standards applicable Assess the effectiveness management of according to solvency to development of the external and operational costs rules, including internal auditor function Ensure investments the consideration institutions, subject to Bermuda/BMA legal and Provide oversight of made are socially of insurance and regulatory requirements compliance with the responsible and reinsurance risks Evaluate the Company's code of sustainable Review Africa RiskView composition of the ethics/conduct calculation engine Board to ensure it Monitor and review validation reports, possesses the requisite regulatory and legal including review diversity, perspectives, processes, procedures and challenge of experiences, skills and and compliance assumptions, calibration judgment to effectively and outputs for pursue its duties decision-making and Oversee the recruitment proposed changes of the CEO and other Board appointments Periodically review the performance of the CEO, the Board and Directors • Oversee and approve Board and staff remuneration policies

#### FINANCES & UNDERWRITING **GOVERNANCE AUDIT & RISK INVESTMENT** & REINSURANCE COMMITTEE COMMITTEE COMMITTEE COMMITTEE Responsibilities Responsibilities Responsibilities Responsibilities Focus Areas 2022 Focus Areas 2022 Focus areas 2022 Focus Areas 2022 Revised the draft Development of the Adoption of the 2020 · Housekeeping matters Annual Audited Financial Investment Guidelines Risk Management and delivering cost 9.0 to allow ARC Ltd. Protocol for non-Statements (IFRS efficiency related to the and Statutory) and to invest in loans and sovereign business business growth of the successful management infrastructure debt (NSB), learning lessons Company (in particular for clean from the NSB pilot of the process of · Exploring the possibility energy infrastructure). Tropical cyclone designing, overseeing of shared services and revising the Major re-allocations will reinsurance optimisation between ARC Agency be approved by the strategy for season Company risk mapping and ARC Ltd. Finance and Investment 2021/2022 and risk appetite Committee. framework Design of the risk register, directed by Deloitte. The process involved the Legal, Underwriting, Finance & Operations departments, and covered topics such as governance risks and market and credit risks

OUR BOARD MEMBERS 83

# OUR **BOARD MEMBERS**



MR ABDOULIE JANNEH
CHAIRMAN

TERM ENDS: April 2024

#### OTHER DIRECTORSHIPS:

Executive Director at the Mo Ibrahim Foundation.
Former UN Under-Secretary-General and Executive
Secretary of the Economic Commission for Africa (ECA)
(2005 – 2012). Prior to this, he served as Assistant
Secretary-General and UNDP Regional Director
for Africa.



MS DELPHINE TRAORÉ MAÏDOU

NON-EXECUTIVE DIRECTOR

TERM ENDS: April 2023

#### OTHER DIRECTORSHIPS:

Regional CEO of Allianz Africa and a non-executive member of the Board of AGCS Africa. Previously, Chief Executive Officer of Allianz Global Corporate & Speciality (AGCS) Africa (2012 to 2017).



DR JENNIFER BLANKE NON-EXECUTIVE DIRECTOR

TERM ENDS: 2023

#### OTHER DIRECTORSHIPS:

Former Vice President Agriculture, Human and Social Development at the African Development Bank Group.

Chief Economist at the World Economic Forum. Previously held positions there as Lead Economist and Head of the Global Competitiveness and Risks Team, and Senior Programme Manager.



MS LADÉ ARABA

NON-EXECUTIVE DIRECTOR

TERM ENDS: April 2024

#### OTHER DIRECTORSHIPS:

Managing Director for Africa at Convergence Finance.
Former Technical Adviser to the former Minister of
Finance of Nigeria, Head of the Strategic Monitoring
Unit, and Adviser in the Power Sector Team - Nigeria
Infrastructure Advisory Facility. Technical Adviser to
Executive Secretary of the United Nations Economic
Commission for Africa.



MS SARATA KONÉ THIAM

NON-EXECUTIVE DIRECTOR

TERM ENDS: April 2024

#### OTHER DIRECTORSHIPS:

Managing Director of UBA Côte d'Ivoire. Held senior positions at major international financial groups - HSBC and Citibank. HSBC Regional Director for West Africa for 12 years. Instrumental in developing the Group franchise in the region, with a focus on Ghana and Francophone Africa.



MR PHILLIP PETTERSEN
NON-EXECUTIVE DIRECTOR

**TERM ENDS: 2023** 

#### OTHER DIRECTORSHIPS:

Serves on the boards of several companies, including
Africa Reinsurance Corporation South Africa Ltd, Regis
Holdings Limited, and Ivory Holdings (Pty). He worked
as a Lloyds broker with Benfield Greig's as part of the
ReMetrics Division. Held leadership positions at Alexander
Forbes, Nelson Hurst Reinsurance, Partner Re, and
Towers Perrin Re.



MR JÜRGEN MEISCH NON-EXECUTIVE DIRECTOR

TERM ENDS: April 2025

#### OTHER DIRECTORSHIPS:

Founder and sole shareholder of Achalm
Capital GmbH. Former Chief Financial Officer
and member of the Executive Board of Gothaer.
Jürgen has worked in various functions at top-rated
international companies such as Morgan Stanley
and Cologne Re, where he was a Board member in
charge of asset management.



DR MICHEL JARRAUD

ADVISOR TO THE BOARD

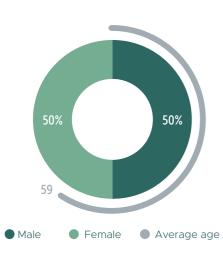
TERM ENDS: Ongoing

#### OTHER DIRECTORSHIPS:

Secretary-General of the World Meteorological Organization (WMO), after being appointed by the Fourteenth World Meteorological Congress and reappointed for second and third terms. Chaired UN-Water from 2012. Prior to joining the WMO Secretariat, worked at the European Centre for Medium-Range Weather Forecasts, appointed to Deputy Director in 1991.

84 OUR BOARD MEMBERS 85 AFRICAN RISK CAPACITY LIMITED MANAGEMENT TEAM

#### GENDER DIVERSITY AND AVERAGE AGE



#### KNOWLEDGE, SKILLS AND EXPERIENCE



AFRICAN

DEVELOPMENT



FINANCE







INVESTMENT BANKING



METEOROLOGY











CORPORATE FINANCE

MANAGEMENT

3

Number of executive committee members with expertise and experience in each area.

#### **BOARD AND COMMITTEE MEETING ATTENDANCE**

#### **NUMBER OF MEETINGS FOR 2022**

Board Finance & Investment Committee Audit & Risk Committee Underwriting and Reinsurance Committee Governance Committee

#### **BOARD**

The Board met four times in FY2022

Name	Meetings attended
Abdoulie Janneh, Chairperson	3/3
Delphine Traoré Maïdou	3/3
Dr Jennifer Blanke	3/3
Jürgen Meisch	3/3
Ladé Araba	3/3
Michel Jarraud	3/3
Phillip Pettersen	3/3
Sarata Koné Thiam	3/3

#### **BOARD SUB-COMMITTEES**

The Governance Committee met twice in FY2022

Name	Meetings attended
Abdoulie Janneh, Chairperson	2/2
Jennifer Blanke	1/2
Ladé Araba	1/2

#### **AUDIT AND RISK COMMITTEE**

The committee met twice in FY2022

Name	Meetings attended
Phillip Pettersen, Chairperson	2/2
Jennifer Blanke	2/2
Sarata Koné Thiam	2/2

#### FINANCE & INVESTMENT COMMITTEE

The committee met three times in FY2022

Name	Meetings attended
Jürgen Meisch, Chairperson	3/3
Ladé Araba	2/3
Delphine Traoré Maïdou	3/3

#### **UNDERWRITING & REINSURANCE COMMITTEE**

The committee met three times in FY2022

Name	Meetings attended
Delphine Traoré Maïdou, Chairperson	3/3
Abdoulie Janneh	3/3
Phillip Pettersen	3/3

# AFRICAN RISK CAPACITY LIMITED **MANAGEMENT TEAM**



**LESLEY NDLOVU** CHIEF EXECUTIVE OFFICER



MALVERN CHIRUME CHIEF UNDERWRITING **OFFICER** 



**ANGE CHITATE** CHIEF OPERATING **OFFICER** 



**ANAÏS SYMENOUH** ASSOCIATE LEGAL COUNSEL



**DAVID MASLO** HEAD OF BUSINESS DEVELOPMENT



**FORBIN ATABONG** NJOYA FINANCE MANAGER



**TIM NIELANDER** SENIOR LEGAL ADVISER



LORRAINE NJUE HEAD OF ACTUARIAL



**WESLEY CHITSIKE** ACTUARIAL ANALYST



**GLORIA WOMITSO** SENIOR TECHNICAL UNDERWRITING ANALYST



**JACKLINE MUTHENGI** PRODUCT AND PRICING **MANAGER** 



**NICOLE MUTEBA** PROGRAMME MANAGER



MARIE HÉLÈNE **SOMALA KANGA** GRADUATE INTERN



CASE STUDY:

PILOT PROJECTS

88 CASE STUDY: PILOT PROJECTS 89









#### CÔTE D'IVOIRE RICE PROJECT

Q2 saw ARC and its partners launching a pilot project in Côte d'Ivoire that targeted rice farmers. Rice is a staple food in the country, with consumption estimated at 70 kg per capita per year. Farmers cultivate the crop across 10 basins in the country, but the impact of climate change in recent years has caused an increase in drought periods, resulting in substandard and low yields.

The rice value chain offers both income-generating potential and job creation, and the pilot project was initiated considering the critical need to protect this sector and the income of producers from the impact of climate change.

The Côte d'Ivoire Ministry of the Environment and Sustainable Development (MINEDD), the United Nations Development Programme (UNDP) in Côte d'Ivoire, and ARC co-led the project within the context of the country's climate change adaptation plan. The business development team of ARC Ltd. was responsible for establishing the framework for piloting the parametric insurance. The goal was to establish a solid operational framework that could be replicated across additional agricultural value chains such as cotton, maize, and cacao.

Run in collaboration with the FUSCOP RIZ CI "COOP-CA" (a federation of rice producers and their board of directors), the pilot project forms part of the broader search for sustainable climate change solutions for agriculture. The programme is partly financed through grants from the Swiss Agency for Development and Cooperation and the InsuResilience Solutions Fund. The pilot project was run in 2022

# Q2 COUNTRY FEEDBACK ON FLOOD RISK AND OUTBREAKS AND EPIDEMICS

Countries participating in piloting our additional products (Flood Risk and Outbreaks and Epidemics) shared their insights and feedback at our Members' and Donor Partners' retreat in July in Lilongwe, Malawi (see page 74). Representatives from Malawi, Togo, and Uganda gave presentations in which they highlighted some of the lessons learnt while stressing the importance of local technical context to ensure accurate modelling and the need for local endorsement of the new products.

The countries also reiterated the critical importance of rapid funding to ensure an early response, not only to save lives but also because swift containment reduces the use of disaster management resources and prevents Our intended pilot in Ethiopia seeks to cover input investments for 700 000 farmers from 2023, with the goal of covering 6.5 million farmers by 2028.

the escalation of disasters into catastrophes. Moreover, Malawi, Togo, and Uganda reaffirmed their ongoing support in helping us to develop these additional and much-needed insurance products.

Overview of the pilot programmes:



Malawi Flood risk

Malawi was already covered by the drought risk insurance; however, the country is also vulnerable to floods. This led to the country stepping up to pilot the flood-risk product. Malawi is currently assisting ARC Ltd. by providing historical data and patterns so that the risk model is applicable to the in-country context.



Togo Flood risk

Togo first participated in the flood risk pilot in 2019 and was among the first countries to ratify the ARC Treaty. Since then, Togo has participated in four pools. Some challenges arose during the pilot, mainly regarding the understanding of the causes and the impact of floods, and this resulted in certain adjustments to the process.



Uganda Outbreaks and epidemics

The country has seen an increase in pandemics and outbreaks in the past decade due to more cross-border travel. It, therefore, supported the outbreaks and epidemics pilot, providing data on Ebola, Marburg virus disease, Lassa fever, and meningitis – all of which can spread quickly and have a high mortality rate. Uganda is also supporting the development of epidemic risk-management and risk-profiling tools in addition to an epidemic preparedness index. The epidemic risk model will determine the frequency and severity of outbreaks and epidemics and estimate the probability of losses. In

this way, the insurance policy cost and payout can be determined.

#### **Q4 PILOT PROJECTS**

This quarter was exceptionally busy with several pilot projects being launched. October saw the ARC working with the United Nations Office for the Coordination of Humanitarian Affairs (OCHA) on an innovation to combine anticipatory action with insurance. This required a modification of ARC's existing product to disburse payouts immediately after the sowing window instead of at the end of the agricultural season. The payout figure is determined according to the level of failed sowing and the predicted impact at the end of the season. Preempting the impact sooner reduces costs and population vulnerability.

This pioneering anticipatory insurance was piloted in Malawi and Zambia and significant progress has been made, proving that anticipatory insurance works.

November centred on COP27 – Africa's COP – with a highlight being the launch of the Global Shield Against Climate Risks. This long-awaited initiative by the G7 and the V20 is set to transform the landscape of disaster risk financing by making insurance more accessible, affordable, and available to the most vulnerable. It will provide pre-arranged finance that can be disbursed rapidly in the event of a peril. ARC will be working with Senegal and Ghana to test the Global Shield and whether improvements or changes are required before it is rolled out to other African countries.

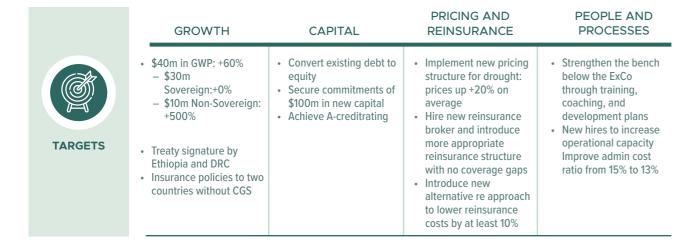
In Q4, we also made great strides in Ethiopia regarding agricultural risk insurance. Our intended pilot in Ethiopia seeks to cover input investments for 700 000 farmers from 2023, with the goal of covering 6.5 million farmers by 2028.

Together with Pula Advisors GmbH, an agricultural insurance and technology company, and the Ethiopian Agricultural Transformation Agency (ATI), we engaged with the Ministry of Agriculture regarding our treaty. In 2023, ATI will be presenting the ARC Treaty to the cabinet ministers, and we believe this should result in a signature.

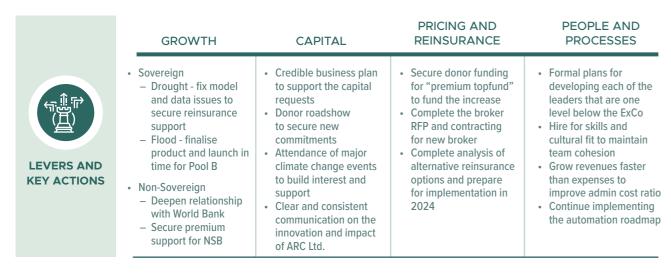
#### 2023 PRIORITIES

# RELENTLESS EXECUTION ON CLEAR PRIORITIES

2023 Priorities: Proving the case for ARC Ltd.



2023 Priorities: Proving the case for ARC Ltd.





ARC Ltd.
(Incorporated in Bermuda)

# AUDITED FINANCIAL STATEMENTS

For the year ended 31 December 2022

(Expressed in US dollars)

"By focusing on growth and strengthening our capital base, we are poised to expand our reach, enhance resilience, and better serve the needs of the communities we aim to protect." - Lesley Ndlovu, CEO



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## INDEPENDENT AUDITOR'S REPORT

To the Members of ARC Ltd..

#### **OUR OPINION**

In our opinion, the financial statements present fairly, in all material respects, the financial position of ARC Ltd. (the Company) as at December 31, 2022, and its financial performance and its cash flows for the year then ended in accordance with International Financial Reporting Standards.

#### What we have audited

The Company's financial statements comprise:

- the statement of financial position as at December 31, 2022;
- the statement of income and comprehensive income for the year then ended;
- the statement of changes in equity for the year then ended;
- the statement of cash flows for the year then ended; and
- the notes to the financial statements, which include significant accounting policies and other explanatory information.

#### **BASIS FOR OPINION**

We conducted our audit in accordance with International Standards on Auditing (ISAs). Our responsibilities under those standards are further described in the *Auditor's responsibilities for the audit of the financial statements* section of our report.

We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our opinion.

#### Independence

We are independent of the Company in accordance with the International Code of Ethics for Professional Accountants (including International Independence Standards) issued by the International Ethics Standards Board for Accountants (IESBA Code) and the ethical requirements of the Chartered Professional Accountants of Bermuda Rules of Professional Conduct (CPA Bermuda Rules) that are relevant to our audit of the financial statements in Bermuda. We have fulfilled our other ethical responsibilities in accordance with the IESBA Code and the ethical requirements of the CPA Bermuda Rules.

# RESPONSIBILITIES OF MANAGEMENT AND THOSE CHARGED WITH GOVERNANCE FOR THE FINANCIAL STATEMENTS

Management is responsible for the preparation and fair presentation of the financial statements in accordance with International Financial Reporting Standards, and for such internal control as management determines is necessary to enable the preparation of financial statements that are free from material misstatement, whether due to fraud or error.

In preparing the financial statements, management is responsible for assessing the Company's ability to continue as a going concern, disclosing, as applicable, matters related to going concern and using the going concern basis of accounting unless management either intends to liquidate the Company or to cease operations, or has no realistic alternative but to do so.

Those charged with governance are responsible for overseeing the Company's financial reporting process.

#### AUDITOR'S RESPONSIBILITIES FOR THE AUDIT OF THE FINANCIAL STATEMENTS

Our objectives are to obtain reasonable assurance about whether the financial statements as a whole are free from material misstatement, whether due to fraud or error, and to issue an auditor's report that includes our opinion. Reasonable assurance is a high level of assurance, but is not a guarantee that an audit conducted in accordance with ISAs will always detect a material misstatement when it exists.

Misstatements can arise from fraud or error and are considered material if, individually or in the aggregate, they could reasonably be expected to influence the economic decisions of users taken on the basis of these financial statements.

As part of an audit in accordance with ISAs, we exercise professional judgment and maintain professional scepticism throughout the audit. We also:

- Identify and assess the risks of material misstatement of the financial statements, whether due to fraud or error, design
  and perform audit procedures responsive to those risks, and obtain audit evidence that is sufficient and appropriate
  to provide a basis for our opinion. The risk of not detecting a material misstatement resulting from fraud is higher than
  for one resulting from error, as fraud may involve collusion, forgery, intentional omissions, misrepresentations, or the
  override of internal control.
- Obtain an understanding of internal control relevant to the audit in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the Company's internal control.
- Evaluate the appropriateness of accounting policies used and the reasonableness of accounting estimates and related disclosures made by management.
- Conclude on the appropriateness of management's use of the going concern basis of accounting and, based on the
  audit evidence obtained, whether a material uncertainty exists related to events or conditions that may cast significant
  doubt on the Company's ability to continue as a going concern. If we conclude that a material uncertainty exists, we
  are required to draw attention in our auditor's report to the related disclosures in the financial statements or, if such
  disclosures are inadequate, to modify our opinion. Our conclusions are based on the audit evidence obtained up to
  the date of our auditor's report. However, future events or conditions may cause the Company to cease to continue
  as a going concern.
- Evaluate the overall presentation, structure and content of the financial statements, including the disclosures, and whether the financial statements represent the underlying transactions and events in a manner that achieves fair presentation

We communicate with those charged with governance regarding, among other matters, the planned scope and timing of the audit and significant audit findings, including any significant deficiencies in internal control that we identify during our audit.

PrumstehomeCoopes Ltd.

Chartered Professional Accountants
Hamilton Bermuda

April 5, 2023

#### STATEMENT OF FINANCIAL PERFORMANCE

FOR THE YEAR ENDED 31 DECEMBER 2022

Figures in USD	NOTES	2022	2021
ASSETS			
Fixed assets	5	203,818	178,981
Prepaid expenses		225,843	354,544
Other receivable	9, 13	372,727	-
Reinsurance assets	8	5,285,598	23,074,999
Insurance receivables		7,251,729	9,065,728
Deferred policy acquisition costs	20	72,285	106,782
Accrued investment income		376,202	390,521
Investment in Pula Advisors GmbH	7	315,675	2,000,000
Marketable investments	6	30,325,049	65,884,977
Cash and cash equivalents	10	44,665,971	44,150,939
Total assets		89,094,897	145,207,471
LIABILITIES			
Class C Members' Returnable Capital	11	67,848,325	69,917,563
Unearned premium liabilities	12	9,196,352	8,860,521
Claims liabilities	13	20,224,803	30,238,578
Reinsurance premiums payable		3,991,010	7,731,315
Deferred commission income		357,678	613,380
Deferred income - other		488,216	-
Investment payables	6	-	14,999,730
Accounts payable and accrued liabilities		2,418,410	746,874
Total liabilities		104,524,794	133,107,961
MEMBERS' EQUITY			
Reserve fund		250,000	250,000
Retained loss		(32,290,995)	(7,021,673)
Accumulated other comprehensive income:			
Class C Members' equity grant	11	16,611,098	18,871,183
Total Members' Equity		(15,429,897)	12,099,510
Total Liabilities and Members' Equity		89,094,897	145,207,471

#### APPROVED BY THE BOARD OF DIRECTORS

DIRECTOR

DIRECTOR

#### STATEMENT OF CHANGES IN EQUITY

FOR THE YEAR ENDED 31 DECEMBER 2022

Figures in USD	NOTES	2022	2021
RESERVE FUND			
Balance, beginning of the year		250,000	250,000
Balance, end of the year		250,000	250,000
RETAINED EARNINGS			
Balance, beginning of the year		(7,021,673)	(1,759,663)
Net (loss)/income for the year		(25,269,322)	(5,262,010)
Balance, end of the year		(32,290,995)	(7,021,673)
OTHER COMPREHENSIVE INCOME			
Balance, beginning of the year		18,871,183	20,276,232
Changes during year:			
Grant – Department for International Development	11	(1,499,886)	(659,756)
Grant – The Climate Adaption Platform PCC with respect to ARC Ltd.'s	11	(760,199)	(745,293)
investment company, KfW/BMZ			
Balance, end of the year		16,611,098	18,871,183
Total members' equity		(15,429,897)	12,099,510

#### STATEMENT OF INCOME AND COMPREHENSIVE INCOME

FOR THE YEAR ENDED 31 DECEMBER 2022

Figures in USD NC	OTES	2022	2021
UNDERWRITING INCOME			
Gross premiums written	12	23,121,554	30,825,155
Change in unearned premiums		(335,831)	(1,034,775)
Gross earned premiums		22,785,723	29,790,380
Reinsurers' share of insurance premiums (note 12)	12	(10,393,082)	(18,779,770)
Reinsurers' share of change in unearned premiums		(904,125)	944,849
Reinsurers' share of gross earned premiums		(11,297,207)	(17,834,921)
Net premiums		11,488,516	11,955,459
Commission income		830,065	2,227,973
Change in unearned commission		255,702	(184,528)
Net earned commission		1,085,767	2,043,445
Policy acquisition costs		(57,715)	(161,548)
Change in deferred acquisition costs		(34,497)	72,125
Net policy acquisition costs		(92,212)	(89,423)
UNDERWRITING EXPENSES			
Claims	13	(29,220,062)	(18,296,531)
Net underwriting expense		(29,220,062)	(18,296,531)
Net underwriting loss		(16,737,991)	(4,387,050)
General and administrative expenses	17	(3,973,174)	(4,466,650)
Once-off and start-up costs	17	(490,583)	(348,372)
Reimbursements from Special Trust	15	-	140,000
Net investment (loss)/income	16	(2,751,394)	11,482,119
Other income		384,511	_
Unrealized loss on other investments		(4,968,242)	(5,823,363)
Unrealized gain on foreign exchange		4,302,640	145,116
Realized loss on foreign exchange		(1,035,089)	(2,003,810)
Net loss for the year		(25,269,322)	(5,262,010)
Write down of Equity grant from Class C Members (Note 11)		(2,260,085)	(1,405,049)
Total comprehensive loss for the year		(27,529,407)	(6,667,059)

### STATEMENT OF CASH FLOWS

FOR THE YEAR ENDED 31 DECEMBER 2022

Figures in USD	2022	2021
CASH FLOWS FROM OPERATING ACTIVITIES		
Net loss for the year	(25,269,322)	(5,262,010)
Adjustments for:		
Depreciation	16,905	15,499
Realized loss/(gain) on sale of investments	5,460,689	(6,499,478)
Realized gain on forwards and derivatives	(1,514,789)	(3,780,353)
Realized loss on foreign exchange	10,261	2,003,810
Unrealized loss on investments	4,968,242	5,823,363
Unrealized gain on forex on investments	(1,891,816)	-
Amortization expense	171,069	294,802
Interest and dividend income	(1,458,375)	(1,619,432)
Unrealized forex movement on FCDO capital contribution	(3,415,323)	(148,243)
Changes in assets and liabilities		
Prepaid expenses	128,701	(178,400)
Other receivable	(372,727)	-
Reinsurance assets	17,789,401	(17,521,407)
Insurance receivables	1,813,999	(6,060,412)
Deferred policy acquisition costs	34,497	(72,125)
Unearned premium liabilities	335,831	1,034,775
Claims liabilities	(10,013,775)	29,085,381
Reinsurance premiums payable	(3,740,305)	2,213,086
Deferred income	232,514	184,528
Accounts payable and accrued liabilities	1,671,536	(449,483)
Net cash used in operating activities	(15,042,787)	(936,099)
CASH FLOWS FROM INVESTING ACTIVITIES		
Interest received	1,472,694	1,539,006
Investment payables	(14,999,730)	13,999,730
Purchase of marketable investments	(15,243,585)	(91,422,215)
Proceeds from sales of marketable investments	40,784,172	63,984,043
Proceeds from maturities of marketable investments	3,586,010	31,352,755
Purchase of fixed assets	(41,742)	(168,129)
Net cash provided by investing activities	15,557,819	19,285,190
Increase in cash and cash equivalents	515,032	18,349,091
Cash and cash equivalents – Beginning of year	44,150,939	25,801,848
Cash and cash equivalents – End of year	44,665,971	44,150,939

# **NOTES** TO FINANCIAL STATEMENTS

# 1. THE COMPANY AND ITS ACTIVITIES

ARC Ltd. ("the Company") was incorporated under the laws of Bermuda on November 27, 2013 and is registered as a Class 2 insurer under The Insurance Act 1978, amendments thereto and related regulations ("The Act"). It is managed in Hamilton, Bermuda by Marsh Management Services (Bermuda) Ltd. and has its place of business in Bermuda. The Company's registered address is Power House, 7 Par-la-Ville Road, Hamilton, Bermuda.

ARC Ltd. was established under the remit of the African Risk Capacity Agency ("ARC Agency"), which was established as a Specialised Agency by the African Union (AU). The Company is part of the African Risk Capacity (ARC) initiative of the AU, an initiative designed to improve current responses to drought food security emergencies and other natural catastrophes. The aim of ARC is to improve the timeliness of responses and build capacity within AU Member States to manage drought and other catastrophe risks by directly linking funds to defined contingency plans. ARC is an African continent-wide, index-based weather risk insurance pool and early response mechanism, which offers an African solution to one of the continent's most pressing challenges. There is a Memorandum of Understanding and Cooperation between ARC Agency and ARC Ltd.

ARC Ltd. is a mutual insurance company that provides drought, flood and tropical cyclone insurance cover to participating African countries, which are specified as Class A Members of the Company, upon participation. Under the Bye-Laws of the Company, Class A Members are those ARC Agency Member States holding a Certificate of Good Standing from the ARC Agency and which have purchased a current policy. The Bye-Laws also define the other class members of the Company: Class B Members are those who provide capital to the Company without expectation of re-payment, Class C Members are those that provide capital with a maximum fixed term of twenty years with no interest but expectation of the capital being returned ("Returnable Capital") and Class D Members are those who provide capital with an expectation of investment return.

The average number of employees of the Company during the period was twelve (2021: eleven). The current Members of this mutual insurance company consist of nine Class A Members and two Class C Members. There are no Class B or D members during the period end, or at the date of approval of these financial statements. During the period, there were also one additional participant in ARC Replica Insurance Program namely, the United Nations World Food Programme. The replica partner holds insurance policies not as Class A Members per the Company Bye-laws, but acquires insurance policies for the benefit of African countries some of which are current Class A members.

The Class A Members participating in the drought insurance risk pool in the current financial period are Madagascar, Malawi, Mauritania, Tchad, The Gambia, Togo, Zambia, Zimbabwe and Niger, each having taken out at least one drought insurance policy. There were two (2) tropical cyclone policies issued to Madagascar and Comoros as at the date of approval of these financial statements. The Class A Members participating in the insurance risk pool for the same period in the prior year were Mauritania, Togo, The Gambia, Niger, Zambia, Malawi, Zimbabwe and Madagascar.

The Class C Members are donor entities:

- the UK's Foreign, Commonwealth and Development Office (FCDO) which was formerly known as the Department for International Development ("DFID") before the merger with UK's Foreign and Commonwealth Office on 1 September 2020, and
- KfW, a German state-owned investment and development bank who has been committed to improving economic, social and environmental living condition across the globe.

Effective September 28, 2020, the Climate Adaptation Platform PCC transferred its rights and obligations, in particular, its interest and membership in the Company to KfW through an amendment to the original Class C Membership and Commitment agreement. The amendment agreement effectively changed the Class C Member from, KfW acting through the PCC to KfW acting directly as a Class C member. Up to and until the execution of the amendment agreement, the Climate Adaptation Platform PCC was a KfW-funded capital investor and Member in ARC Ltd.

The policies written provide drought risk coverage to the respective African country. The level of payout to the countries is based on a risk modelling calculation engine called Africa RiskView ("ARV"), developed and used specifically for this purpose. ARV utilises variable rainfall data, in addition to other fixed data, to determine a drought response cost, on a parametric basis.

The Company has specific coverage limits for each of the participating countries and replica partners as follows:

COUNTRY / REPLICA PARTNER COVERAGE		GE LIMIT	
Figures in USD	2022/23	2021/22	
DROUGHT POLICIES			
Mauritania – Agriculture	3.8m	3.1m	
Mauritania – Pastoral	2.3m	4.0m	
Senegal	N/A	25.0m	
The Gambia	2.7m	2.5m	
Mali	15.7m	15.0m	
Togo- North	2.5m	3.0m	
Togo -South	2.1m	2.5m	
Cote D'Ivoire -North	N/A	4.3m	
Cote D'Ivoire – Centre	N/A	9.1m	
Niger - Crop	4.6m	7.0m	
Niger – Rangeland	1.4m	N/A	
Sudan – Crop	N/A	4.2m	
Sudan – Rangeland	N/A	3.0m	
Chad	3.3m	N/A	
Madagascar	2.4m	2.5m	
Zimbabwe	1.7m	13.1m	
Zambia	7.0m	5.3m	
Malawi	14.7m	15.9m	
Senegal Replica/Save the Children Fund	N/A	11.1m	
Somalia Replica/Save the Children Fund – Crop	3.3m	N/A	
Somalia Replica/Save the Children Fund – Rangeland	1.5m	N/A	
The Gambia / World Food Programme	2.7m	2.1m	
Burkina Faso / World Food Programme	7.2m	3.0m	
Mali / World Food Programme	15.7m	7.4m	
Mauritania / World Food Programme – Crop	2.0m	2.1m	
Mauritania / World Food Programme – Rangeland	2.3m	2.7m	
Zimbabwe / World Food Programme	11.3m	7.8m	
Madagascar / World Food Programme	2.4m	N/A	
Zimbabwe / Start Network	5.6m	13.1m	
TROPICAL CYCLONE POLICY			
Madagascar	10.8m	\$11.6m	
Comoros	10.5m	N/A	

#### **NOTES** TO FINANCIAL STATEMENTS

#### 1. The Company and its activities (continued)

In November 18, 2022, the Company registered as a Segregated Account Company under the Segregated Accounts Companies Act 2000, as amended (SAC Act) to facilitate the entering into a new line of business, namely the Outbreaks and Epidemics Insurance Program (O&E Program). The first pilot program managed through the Outbreaks and Epidemics Segregated Account (O&E cell) is for the benefit of the Government of Senegal and is fully reinsured.

In respect of the 2021/22 and 2022/23 policy years, the Company ARC obtained Stop Loss Reinsurance contract, but 50% Quota Share Treaty Reinsurance coverage was not placed during the 2022/23 policy year. Under the Stop Loss reinsurance, the Company retains risk up to the greater of 110% of Gross Net Retained Premium or \$34,499,129 (2021: \$12,375,000). Above this retention, the Company has Stop Loss reinsurance coverage up to a limit of \$81,543,396 (2021: \$54,375,000). The reinsurance agreement allows for re-alignment of attachments and limits of the reinsurance programme should the underlying portfolio change. The company retained \$3,000,000 (2021: \$1,998,371) of the total underwritten exposure for the tropical cyclone policy and purchased reinsurance cover for the next \$20,999,062 (2021: \$9,691,629).

In addition, the Company also implemented its inclusive growth strategy encompassing the non-sovereign business which focusses on developing micro and meso insurance programs within the Company's Class A member states. Six policies were issued under the non-sovereign and the perils written are similar to those currently insured by the Company i.e. drought, tropical cyclone and flooding. There is no reinsurance coverage for the non-sovereign business.

The Company has written its first outbreak and epidemics insurance pilot program for O&E cell with 100% Quota Share Treaty Reinsurance coverage and with only one participating country - Senegal. The program is fully funded through grants received from Swiss Agency for Development and Cooperation (SDC). The grants received by the Company are presented in the statement of financial position as deferred income. This deferred income will be earned as expenses are incurred. See note 22 for the breakdown of the cell.

#### 2. BASIS OF PREPARATION

These audited financial statements of the Company are prepared in accordance with International Financial Reporting Standards ("IFRS"), which comprise standards and interpretations approved by the International Accounting Standards Board, and International Accounting Standards and Standing Interpretations Committee interpretations approved by the International Accounting Standards Committee that remain in effect. They have been prepared under the historical cost convention as modified by the revaluation of financial assets and financial liabilities.

The preparation of financial statements in accordance with IFRS requires the use of certain critical accounting estimates. It also requires management to exercise its judgment in the process of applying the Company's accounting policies. The areas involving a higher degree of judgment or complexity or areas where assumptions are significant to the financial statements are disclosed in Note 4. The financial statements have been prepared for the individual company only. The Company presents its Statement of Financial Position broadly in order of liquidity.

 Standards, amendments and interpretations to existing standards, expected to apply to the Company, that are not yet effective and have not been early adopted by the Company

IFRS 17 "Insurance Contracts" effective for years beginning on or after January 1, 2023 replaces the existing transitional arrangements of IFRS 4 and for the first time establishes a single common framework for the recognition, measurement and disclosure of insurance contracts and investment contracts with discretionary participation features. The measurement model of IFRS 17 requires entities to measure groups of insurance contracts based on estimates of discounted future cash flows with an explicit risk adjustment for non-financial risks ("fulfilment cash flows") as well as a contractual service margin, representing the expected (i. e. unearned) profit for the provision of insurance coverage in the future.

Furthermore, the standard fundamentally changes the presentation in the Statement of Income and introduces the new concept of insurance revenue instead of the

existing disclosure of gross written premium. Insurance revenue is reported when it is earned by recognizing in each period the changes in the liability for providing coverage for which the insurance entity receives compensation as well as the part of the premiums that covers acquisition costs. Receipts and payments relating to savings components are not recognized as revenue or as profit or loss in the Statement of Income. Insurance finance income and expenses result from discounting effects and financial risks. The Company will assess the impact of IFRS 17.

IFRS 9 "Financial Instruments", effective January 1, 2018 replaces the existing IAS 39 "Financial Instruments: Recognition and Measurement". The standard contains requirements governing classification and measurement, impairment based on the new expected credit loss impairment approach and general hedge accounting. The new classification requirements result in more financial instruments being measured at fair value through profit or loss.

In September 2016, the IASB published "Applying IFRS 9 Financial Instruments with IFRS 4 Insurance Contracts. Under the deferral approach provided for in the amendments, entities whose predominant activity is issuing insurance contracts within the scope of IFRS 4 are granted an optional temporary exemption from recognizing their financial instruments in accordance with IFRS 9 until IFRS 17 comes into force. The Company reviewed the application requirements based on the financial statements as at December 31, 2015 with a positive outcome and decided to make use of the deferral approach. Since the review of the application requirements, there has been no change in business activity that would have necessitated a reevaluation of the predominant activity.

The effective date of IFRS 9 has been extended further to 1 January 2023 in order to align with the effective date of IFRS 17. IFRS 9 shall only be adopted by the Company when IFRS 17 is so adopted.

In addition to the accounting principles described above, the IASB has issued the following standards, interpretations and amendments to existing standards.

The application of these new standards does not have any significant implications for the Company's net assets, financial position or result of operations:

- Annual Improvements to IFRS Standards 2018 2020 Cycle -Effective for years beginning on or after January 1, 2022
- Phase 2 amendments to IFRS 9, IAS 39 and IFRS 7 for IBOR reform -effective for year beginning on or after January 1, 2021

# 3. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

Outlined below are the significant accounting policies adopted by the Company:

#### (a) Cash and cash equivalents

The Company considers all time deposits and highly liquid instruments with an original maturity of ninety days or less as cash equivalents (note 10).

#### (b) Financial instruments

Financial assets and financial liabilities are recognised on the Statement of Financial Position when the Company becomes a party to the contractual provisions of the financial instruments. All financial instruments are required to be measured at fair value on initial recognition. Measurement in subsequent years is dependent upon the classification of the financial instrument as amortised cost, fair value through Other Comprehensive Income, fair value through profit or loss, loans and receivables, or other financial liabilities.

The Class C Members' contributions, which are recognised in financial liabilities, have been initially recognised at fair value. This financial commitment to the Class C Members has been subsequently measured at the amount initially recognised plus any cumulative amortization in accordance with IAS 18. As disclosed in note 11, the fair value of the Class C contributions has been calculated using discounted cash flow analysis.

#### **NOTES** TO FINANCIAL STATEMENTS

# 3. Summary of significant accounting policies (continued)

All of the Company's investments in equities, fixed maturities and investments in funds are classified as fair value through profit or loss and are carried at fair value as at the Statement of Financial Position date. The fair value of investments in fixed maturities is based on quoted market prices, either of the security itself where it is actively traded, or of similar instruments traded in active markets. For the investments in funds, the units of account that are valued by the Company are its interest in these funds and not the underlying holdings of such funds. Fair value of investments in funds is based on their reported net asset value.

Unrealized gains and losses on investments are reflected within the Statement of Income and Comprehensive income.

Investment income is stated net of investment management, custody and portfolio reporting fees. Interest income is recognized on the accrual basis and includes the amortization of premium or discount on fixed interest securities purchased at amounts different from their par value.

Gains and losses on investments are included in income when realized. Investments are recorded on a trade date basis and the cost of securities sold is determined on the first-in, first-out basis.

IFRS 7, "Financial instruments – Disclosures" (amended), requires enhanced disclosures about fair value measurement and liquidity risk. This requires disclosure of fair value measurements by level of the following fair value measurement hierarchy:

- Quoted prices (unadjusted) in active markets for identical assets or liabilities (Level 1);
- Inputs other than quoted prices included within Level 1 that are observable for the asset or liability, either directly (that is, as prices) or indirectly (that is, derived from prices) (Level 2);
- Inputs for the asset or liability that are not based on observable market data (that is, unobservable inputs) (Level 3).

The cash and cash equivalents and marketable investments consist of a combination of level 1 and 2 assets. The investment in Pula Advisors GmbH is classified as a level 3 asset. The Class C Members' returnable capital is a level 2 liability and there are no level 1 or level 3 liabilities.

#### (c) Impairment of financial assets

The Company determines that financial assets are impaired when there has been a significant or prolonged decline in the fair value below its cost. This determination of what is significant or prolonged requires judgment. In making this judgment, the Company evaluates among other factors, the normal volatility in market price, the financial health of the investee, industry and sector performance, changes in technology, and operational and financing cash flow. Impairment may be appropriate when there is evidence of deterioration in the financial health of the investee, industry and sector performance, changes in technology, and financing and operational cash flows. If the investments are determined to be impaired, a loss is considered realized and charged to income in that year.

Fair value through profit or loss debt securities and receivables are considered impaired when there is objective evidence of impairment as a result of a loss event that has an impact on the estimated future cash flows of the financial asset that can be reliably estimated.

#### (d) Insurance contracts

The Company enters into insurance contracts that transfer significant insurance risk. Once the policyholder has provided a signed policy and insurance premium invoice, the Company then recognizes the underlying premium amounts. The insurance policies written provide that the contract can be deemed void, and the Company shall have no obligation to the policyholders, or the coverage can be reduced, should the policyholder not pay the underlying premium stated in the policy contract within an agreed timeframe. Further to this, should the policyholder's premium payment be less than the amount in the contract, the Company may, at its discretion, reduce the coverage or offset such a shortfall against any claim payout for that policyholder.

The Company has entered into reinsurance contracts and cedes insurance risk in the normal course of business. These contracts reinsure the underlying drought-related loss portfolio consisting of all participating countries as listed in Note 1 above. Amounts recoverable from reinsurers are estimated in a manner consistent with the outstanding claims liabilities or settled claims associated with the reinsurer's policies and are in accordance with the related reinsurance contract.

Reinsurance assets are reviewed for impairment at each reporting date, or more frequently, when an indication of impairment arises during the reporting year. Impairment occurs when there is objective evidence as a result of an event that occurred after initial recognition of the reinsurance asset that the Company may not receive all outstanding amounts due under the terms of the contract and the event has an impact that can be measured reliably. Any impairment losses are recorded in the Statement of Income. Gains or losses on buying reinsurance are recognised in the Statement of Income immediately at the date of purchase and are not amortised. Ceded reinsurance arrangements do not relieve the Company from its obligations from policyholders. Reinsurance assets or liabilities are derecognised when the contractual rights are extinguished or expire or when the contract is transferred to another party.

#### Recognition and measurement

#### i) Gross premiums written and unearned premiums

The Company records premiums at the policy inception date, on an accrual basis and earns premium income over the term of the risk year on a pro-rata basis. The risk year for each respective policyholder is the defined growing season in that particular country, noting that one country may have and be covered by more than one growing season, in which case separate policies are issued and premiums collected for each growing season. The portion of the premiums related to the unexpired portion of the risk years at the end of the financial year is reflected in unearned premiums.

Adjustments to premiums are taken into income in the year in which they are determined.

#### ii) Policy acquisition costs

Acquisition costs are comprised of agents' commissions, premium taxes and other expenses that relate directly to the acquisition of premiums. These costs are deferred and amortised over the earning pattern of the premiums to the extent that they are considered to be recoverable from unearned premiums, after considering the related anticipated claims and expenses and investment income.

# iii) Reinsurance premiums ceded and deferred reinsurance premiums

The Company recognises premiums ceded at the policy inception date and expenses them consistently with the underlying premiums written. The portion of the premium ceded related to the unexpired portion of the risk years at the end of the financial year is reflected in deferred reinsurance premiums.

# iv) Reinsurance and reinsurance balances recoverable

The Company reflects reinsurance balances in the Statement of Financial Position on a gross basis to indicate the extent of credit risk related to reinsurance. Expected reinsurance recoveries on unpaid claims and claims expenses are recognised as assets in the Company's Statement of Financial Position, where applicable. As at year end, there are no provisions for doubtful reinsurance balances receivable.

#### v) Commission income

Commission income consists of ceding commission, reinsurance taxes and other income that relate directly to the ceding of premiums. Commission received is deferred and recognised as revenue over the year during which the reinsurance contract is in place.

#### vi) Claims liabilities and claims expenses

Provision for claim payouts to policyholders is made in accordance with the Company's reserving policy. The reserving policy states that the risk year covered for each policy is the underlying growing seasons, identified within each policy. Within each growing season, the only variable data impacting on whether a claim payout is required, and the level of that payout is the rainfall data, which is maintained within the risk modelling calculation engine ARV used by the Company.

#### **NOTES** TO FINANCIAL STATEMENTS

# 3. Summary of significant accounting policies (continued)

The rainfall data is recorded into ARV on a dekadal (a dekad being a year of days 1-10, 11-20 and 21-month-end for each month of a year, a year thus comprising 36 dekads) basis, using data from the National Oceanic and Atmospheric Administration ("NOAA") of the US Government. A range of possible outcomes are generated within ARV after each new dekad rainfall amount is added as the growing season progresses. The insurance policies provide the remedy of using a mutually agreed alternative data set to determine claim payouts in the case of NOAA data failure or if the NOAA data has been deemed unfit. The average of the final response cost value distribution is used as the estimated claim payout, calculated at the end of the third and final dekad for each calendar month. The accuracy of the respective estimated claim payouts is only reasonably ascertained after the 'planting window' for a given growing season has closed. The planting window is the year, within each of the respective growing seasons, that farmers sow their crops. It is a critical year of time that has a significant impact on the harvest at the end of each growing season. For those policyholders that have reached the end of the planting window by the year end, reserves will be calculated as above and there is the possibility of identifying a guaranteed minimum claim liability at that time. However, initially, estimation and recording of the claims liabilities is calculated on a monthly basis using the expected loss ratios on the contracts. The directors and management believe that the claims liability amount thus calculated and recorded is adequate. Claims are charged to the Statement of Income and Comprehensive Income as incurred.

#### (e) Foreign currencies:

#### i) Functional and presentation currency

Items included in the financial statements are measured using the currency of the primary economic environment in which the entity operates (the "functional currency"). Accordingly, the financial statements are presented in United States ("US") Dollars.

#### ii) Transactions and balances

Foreign currency transactions are translated into the Company's functional currency using the exchange rates prevailing at the dates of the transactions. Foreign exchange gains and losses resulting from the settlement of such transactions and from the translation at year-end exchange rates of monetary assets and liabilities denominated in foreign currencies are recognised in the Statement of Income. The Returnable Capital from PCC / KfW is denominated in US Dollars, however the DFID Returnable Capital is denominated in a foreign currency, Great Britain Pounds (GBP). Therefore, in accordance with IAS 21, this foreign currency monetary item has been translated at the year end using the closing rate.

#### (f) Investment income

Investment income is comprised of interest and dividend income, which is accrued to the date of the Statement of Financial Position.

#### (g) Other income

Other income is comprised of grants/funding received or collectible from entities which does not give rise to debt or equity since it has not been received under any shareholder or participant agreement.

# 4. CRITICAL ACCOUNTING ESTIMATES AND JUDGMENTS

The preparation of financial statements required management to use judgment in applying its accounting policies and estimates and assumptions about the future. Estimates and judgments are continuously evaluated and are based on historical experience and other factors, including expectations about future events that are believed to be reasonable under the circumstances. The following discusses the most significant accounting judgments and estimates that the company has made in the preparation of the financial statements:

#### a. Claims liabilities

The claims liabilities are calculated in accordance with the accounting policy as described in Note 3 (d). This is considered to be a critical accounting estimate, given that there is judgment involved in the reserving policy established and utilised by the Company. This judgment is based on the expertise and experience of management and with consideration of the specific data available and data parameters utilised by the risk modelling calculation engine ARV.

#### b. Fair value

The fair value of financial instruments held by the Company approximates carrying value due to its liquid and short-term nature. The fair value of financial instruments that are actively traded in organised financial markets is determined by reference to quoted market bid prices for assets and offer prices for liabilities, at the close of business on the Statement of Financial Position date. If quoted market prices are not available, reference is also made to broker or dealer quotations.

For financial instruments where there is not an active market, the fair value is determined by using valuation

techniques. Such techniques include using recent arm's length transactions, reference to the current market value of another instrument which is substantially the same and/ or discounted cash flow analysis. For discounted cash flow techniques, estimated future cash flows are based on management's best estimates and the discount rate used is a market related rate for a similar instrument.

Class C Members' Returnable Capital is recognised in financial liabilities. These debt contributions from the two current Class C Members are interest free loans, based on the characteristics described in the 'Class C Membership and Capital Contribution Agreement' (CCA) and the Company Bye-Laws. In accordance with IAS 32, these contributions are more in the nature of debt rather than equity and thus have been recognised in financial liabilities. These zero-interest rate loans have been provided by the two donor entities. DFID and PCC / KfW, with the requirement that in 20 years or earlier, in accordance with the executed CCA, these loans will be repaid at initial par value. These loans were initially acquired at fair value. These initial fair values of these financial liabilities have been determined through discounted cash flow analysis, using a discount rate of 2%. This 2% discount rate is based on the interest rate plus service charge applied to 20-year loans (25-year maturity but with 5 year grace year) made by the International Development Association ("IDA") under 'Blend' terms effective July 1, 2016. IDA is the part of the World Bank Group which provides development finance to the poorer countries of the world.

In addition, the GBP denominated DFID loan has been revalued for reporting purposes using the closing rate, as described in note 3.

Short term financial assets comprise cash and cash equivalents, marketable investments and accrued investment income. The carrying value of these is a reasonable estimate of their fair value as determined by independent third party financial institutions.

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# **NOTES** TO FINANCIAL STATEMENTS

#### 5. FIXED ASSETS

Figures in USD	2022	2021
Opening balance	178,981	26,351
Cost of additions	41,742	168,129
Depreciation charge	(16,905)	(15,499)
Net book value	203,818	178,981

The net book value consists of computers and computer equipment of \$14,301 (2021: \$18,828), software of \$187,695 (2021: \$154,572) and office furniture of \$1,822 (2021: \$5,581).

#### 6. MARKETABLE INVESTMENTS

Figures in USD	COST	FAIR VALUE
2022		
Asset-backed bonds	5,115,191	4,700,927
Commercial mortgage bonds	3,960,202	3,801,276
Corporate bonds	17,278,827	15,974,897
Equities	200,000	193,947
Mutual funds	4,494,235	3,698,903
US and International government bonds	2,229,730	1,955,099
	33,278,185	30,325,049
2021		
Asset-backed bonds	7,664,179	7,666,089
Commercial mortgage bonds	4,708,109	4,821,190
Corporate bonds	47,638,991	47,915,013
Equities	465,805	481,990
Mutual funds	-	-
US and International government bonds	5,113,803	5,000,695
	65,590,887	65,884,977

#### 6. MARKETABLE INVESTMENTS (CONTINUED)

			UNREALIZED	UNREALIZED	
Figures in USD	COST	AMORTIZATION	GAIN	LOSS	FAIR VALUE
DECEMBER 31, 2022					
Asset-backed bonds	5,115,191	(140,131)	19,658	(293,791)	4,700,927
Commercial mortgage bonds	3,960,202	33,098	51,439	(243,463)	3,801,276
Corporate bonds	17,278,827	(91,564)	223,250	(1,435,616)	15,974,897
Equities	200,000	-	-	(6,053)	193,947
Mutual funds	4,494,235	-	-	(795,332)	3,698,903
US and International government bonds	2,229,730	(75,255)	7,330	(206,706)	1,955,099
	33,278,185	(273,852)	301,677	(2,980,961)	30,325,049
DECEMBER 31, 2021					
Asset-backed bonds	7,664,179	(106,146)	128,571	(20,515)	7,666,089
Commercial mortgage bonds	4,708,109	(6,776)	127,104	(7,247)	4,821,190
Corporate bonds	47,638,991	(651,985)	1,382,822	(454,815)	47,915,013
Equities	465,805	-	16,185	-	481,990
Mutual funds	-	-	-	-	-
US and International government bonds	5,113,803	(63,905)	24,206	(73,409)	5,000,695
	5,113,803	(63,905)	24,206	(73,409)	5,000,695
	65,590,887	(828,812)	1,678,888	(555,986)	65,884,977

The carrying value of debt securities by contractual maturity is shown below:

Figures in USD	2022	2021
Due within 1 year	3,110,977	22,550,488
Due within 1 to 5 years	12,860,264	31,548,323
Due over 5 years	10,460,958	11,304,176
Net book value	26,432,199	65,402,987

Credit ratings for bonds held by the Company as at December 31, 2022 range from AAA to CCC+ (2021: AAA to CCC+) as set out by Standard & Poor's.

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#### **NOTES** TO FINANCIAL STATEMENTS

#### 6. MARKETABLE INVESTMENTS (CONTINUED)

The following table presents the analysis of the Company's investments by level of input as required by IFRS 7:

Figures in USD	LEVEL 1	LEVEL 2	LEVEL 3
DECEMBER 31, 2022			
Fair value through profit or loss investments:			
Asset-backed bonds	-	4,700,927	4,700,927
Commercial mortgage bonds	-	3,801,276	3,801,276
Corporate bonds	-	15,974,897	15,974,897
Equities	193,947	-	193,947
Mutual funds	3,698,903	-	3,698,903
Government bonds	-	1,955,099	1,955,099
	3,892,850	26,432,199	20 225 040
	3,032,030	20,432,199	30,325,049
DECEMBER 31, 2021	3,032,030	20,432,133	30,325,049
DECEMBER 31, 2021  Fair value through profit or loss investments:	3,632,636	20,432,133	30,325,049
·	-	7,666,089	7,666,089
Fair value through profit or loss investments:	-		
Fair value through profit or loss investments:  Asset-backed bonds	-	7,666,089	7,666,089
Fair value through profit or loss investments:  Asset-backed bonds  Commercial mortgage bonds	- - - 481,990	7,666,089 4,821,190	7,666,089 4,821,190
Fair value through profit or loss investments:  Asset-backed bonds  Commercial mortgage bonds  Corporate bonds	- -	7,666,089 4,821,190	7,666,089 4,821,190 47,915,013

The Company held futures with a notional value of \$8,942,573 (2021: \$23,711,217), which had a fair value of \$nil (2021: \$nil). The Company did not hold any currency forward buys and sells, swaps and options as at December 31, 2022.

As at December 31, 2022 investment payables amounted to \$nil (2021: \$14,999,730) related to unsettled investment purchases.

#### 7. INVESTMENT IN PULA ADVISORS GMBH

In December 2020, the Company invested in 6.98% of the common shares and 16.67% of Series A preferred shares of Pula Advisors AG, a Swiss limited liability company engaged in the core business of providing consulting services and project management in the field of sustainable development. The directors of the Company do not consider that ARC Ltd is able to exercise significant influence over Pula Advisors AG due to the level of shareholding in the company. The purchase consideration was \$2,000,000. Management have assessed the fair value of the investment to be \$315,675 as at December 31, 2022 (2021:2,000,000). Reduction on the fair value was the result on the assessment made based on the report on the financial result of the Pula Advisors operation.

#### 8. INSURANCE RECEIVABLES

Figures in USD	2022	2021
Receivables from Class A Members	9,702,513	12,521,472
Receivables from non-sovereign business	566,230	311,270
Less: Provision for doubtful debts	(3,017,014)	(3,767,014)
	7,251,729	9,065,728

The provision for doubtful debts consists of \$2,573,180 and \$443,834 which were provided for Niger and Burkina Faso, respectively (2021: \$2,573,180, \$443,834 and \$750,000 for Niger, Burkina Faso and Sudan, respectively).

#### 9. REINSURANCE ASSETS

Figures in USD	2022	2021
Reinsurance share of unearned premiums / deferred reinsurance premiums	4,501,766	5,405,891
Reinsurance claims recoverable	783,832	17,669,108
	5,285,598	23,074,999

The provision for doubtful debts consists of \$2,573,180 and \$443,834 which were provided for Niger and Burkina Faso, respectively (2021: \$2,573,180, \$443,834 and \$750,000 for Niger, Burkina Faso and Sudan, respectively).

#### 10. CASH AND CASH EQUIVALENTS

The Company considers all time deposits and highly liquid instruments with an original maturity of ninety days or less as cash equivalents.

Figures in USD	2022	2021
Cash at bank with Bank of Butterfield	21,825,032	1,201,947
Cash at bank with First National Bank	12,794	4,033
Cash at bank with HSBC Bermuda	117,103	-
Marketable investments:		
Cash and cash equivalents with BNY Mellon	19,110,291	40,170,229
Cash and cash equivalents with investment brokers	3,600,751	2,774,730
Cash and cash equivalents	44,665,971	44,150,939

The range of interest rates earned during the year was between 0% and 9% (2021: 0% and 10%). Cash is held in Bermuda with Bank of Butterfield and HSBC, which were rated BBB+ (2021: BBB+) and A- (2021: A), respectively at the year end. Cash is held in South Africa with First National Bank, a division of FirstRand which was rated BB- (2021: BB-) at the year end. Cash and cash equivalents are held in the United Kingdom with one custodian, Bank of New York Mellon, which was rated AA- (2021: AA-) at the year end.

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#### 10. CASH AND CASH EQUIVALENTS (CONTINUED)

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In addition, cash and cash equivalents of \$86,842 (2021: \$2,774,730) are held in restricted margin accounts with Goldman Sachs in the United States, which was rated A-1 (2021: A-1) at the year end. There are securities held as collateral in the amount of \$690,000 (2021: \$858,000). This collateral is required by Goldman Sachs for particular trades. Accordingly, management considers there to be limited credit risk associated with cash and cash equivalent balances.

#### 11. CLASS C MEMBERS' RETURNABLE CAPITAL

The two Class C Members contributed Returnable Capital with a maximum fixed term of 20 years to the Company. These contributions were made on March 17, 2014 from PCC / KfW (USD 48,405,000) and DFID (GBP 30,000,000) with a maturity date of March 17, 2034 under the CCA. The CCA provides that this Capital will be paid and returned in the afore-stated currencies and may be withdrawn early by the relevant Member, or returned early by the Company to such Member, in accordance with the relevant clause of the CCA and the Company's Bye-Laws. The Class C Member Capital Commitment is returnable or may be withdrawn subject to the Company complying with its solvency margin, liquidity ratio, and all requirements of the Insurance Act and satisfying the obligations of the policyholders. The two Class C Members have equivalent interests in the Company, having both subscribed to one interest each, as per the CCA.

Figures in USD	DFID GBP	DFID USD	PCC/KFW USD	TOTAL USD
Initial fair value of capital commitment	30,000,000	49,929,600	48,405,000	98,334,600
Reserve fund - statutory capital requirement		(125,000)	(125,000)	(250,000)
Total value of capital commitment		49,804,600	48,280,000	98,084,600
Equity grant		(16,203,410)	(15,704,823)	(31,908,233)
Accretion		6,390,109	6,194,985	12,585,094
Net movement on equity grant		(9,813,301)	(9,509,838)	(19,323,139)
Net value of loan		39,991,299	38,770,162	78,761,461
Foreign exchange movement		(10,913,136)	-	(10,913,136)
Fair value of loan December 31, 2022		29,078,163	38,770,162	67,848,325
Fair value of loan December 31, 2021		31,907,596	38,009,967	69,917,563
Net movement on loan for 2022		(2,829,433)	760,195	(2,069,238)
Net movement on equity grant		9,813,301	9,509,838	19,323,139
Foreign exchange movement		(2,712,037)	(4)	(2,712,041)
Fair value of equity grant December 31, 2022		7,101,264	9,509,834	16,611,098
Fair value of grant December 31, 2021		8,601,150	10,270,033	18,871,183
Net movement on grant for 2022		(1,499,886)	(760,199)	(2,260,085)

#### 11. CLASS C MEMBERS' RETURNABLE CAPITAL (CONTINUED)

The foreign exchange amounts shown in the above table totaling \$13,625,173 which is for the year March 17, 2014 to December 31, 2022, (March 17, 2014 to December 31, 2021: \$9,295,854) are netted off against the foreign exchange movements for the current year (up to October 2020) and prior years on the GBP denominated marketable investments and cash and cash equivalents in the Statement of Income. In the prior years, the initial GBP capital commitment was hedged for foreign exchange purposes with the GBP assets included in marketable investments and cash and cash equivalents. The GBP investments portfolio was liquidated in October 2020 and all marketable investments are held in one USD investments portfolio. In respect of the equity grant accretion totaling \$12,585,094 (2021:\$11,040,758), this is netted off against the Class C loan write up in the Statement of Income. The amounts equate and there is a nil impact on the Statement of Income.

The subsequent fair value of the capital commitments has been calculated using discounted cash flow analysis. The interest rate ascertained from recent arm's length transactions which are substantially the same as these Class C loans is 2% (2020: 2%). This interest rate was used to calculate the fair value of these loan commitments at the period end. In relation to the FCDO Capital Commitment, the foreign exchange rate used on initial measurement was the spot exchange rate of GBP to USD on March 17, 2014 (GBP 1: USD 1.66432). On subsequent measurement at year end, the spot exchange rate on December 31, 2022 was used (GBP 1: USD 1.210). In relation to the accretion of FCDO loan, an average rate over the period from initial receipt of the loan to the period end was used (GBP1: USD 1.35860).

The Class C Members have terms of redemption for all or part of the returnable capital provided to the Company, which are established under the Company Bye-Laws and contractually confirmed in the 'Return of Funds' clause in the CCA. A Class C Member ceases to be a Member of the Company on the date that its capital is completely withdrawn from the Company and returned to that Class C Member, under Bye-Law 4.4.3.

Bye-Law 5 states: "Class C Member Capital is returnable or may be withdrawn subject to the Company complying with its solvency margin, liquidity ratio, and all requirements of the Insurance Act and satisfying its obligations to its

Policy-holders provided that the Company shall use its best endeavours promptly to (and procure that any necessary third party shall) execute and deliver all such documents and perform such acts as may be required for the purpose of such compliance, as follows:

- Each Class C Member has the right to have its initial capital returned at the end of the term in accordance with its Capital Commitment Agreement;
- Each Class C Member will have its initial Capital returned prior to the end of the term set forth in its Capital Commitment Agreement, with seventy (70) Business Days prior written notice, if two-thirds of the Class A Members vote to return the Capital to such Member prior to the end of such term:
- If the Conference of the Parties, decides to discontinue the Company in Bermuda and continue the Company in a jurisdiction outside of Bermuda, each Class C Member will have the right to withdraw the entire amount of its initial Capital prior to the date of continuation. For the avoidance of doubt, the Company will only be discontinued once the initial Capital provided by the Class C Member that has requested the withdrawal of its Capital has been fully repaid:
- If the Company is deemed Financially Unsustainable each Class C Member will have the right to withdraw the entire amount of its Capital as it appears in the Capital C Account upon giving written notice to the Company. If the Company is deemed Financially Unsustainable, no further Policy will be issued;
- If there is a Legal Violation which cannot be cured in twenty-two (22) Business Days, each Class C Member will have the right to withdraw the entire amount of its Capital as it appears in the Capital C Account upon giving written notice of its intent to withdraw its Capital to the Company. If a Class C Member indicates that it will withdraw its Capital because of a Legal Violation, the Company will not issue Policies until the respective Class C Member has been repaid. The Company shall repay the Class C Member as soon as legally possible; or
- If a Class A Member is given a new Certificate of Good Standing (or holds a Policy under an existing Certificate of Good Standing) and a Class C Member

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#### **NOTES** TO FINANCIAL STATEMENTS

#### 11. CLASS C MEMBERS' RETURNABLE CAPITAL (CONTINUED)

objects, acting reasonably, to such Class A Member's participation in the Company, such Class C Member may provide the Company with a 155 Business Day written notice of its intent to withdraw its Capital and may subsequently withdraw the entire amount of its Capital as it appears in the Capital C Account at the end of such Class A Member's paid Policy term. If the Class C Member gives written notice to the Company that it will withdraw its Capital as it appears in the Capital C Account in accordance with this Bye-Law 5.6, no further Policies will be issued until the Capital has been repaid to such Class C Member. The Company shall repay the Class C Member as soon as legally possible.

The Members, acting reasonably, may remove a Class B Member or Class C Member in accordance with this Bye-Law 5.7. Before a Class B Member or Class C Member is removed, the Members must consult with the relevant Class B Member or Class C Member and allow that Member to cure the issue giving rise to its potential removal, within seventy (70) Business Days of written notice of such issue being given to that Member by the other Members. The removal of a Class B Member or Class C Member requires a two-thirds affirmative vote of the Class A Members and two-thirds vote of the Class B Members and Class C Members voting together (excluding the Class B Member or Class C Member whose membership is under consideration). If the Members vote to remove a Class B Member or C Member from the Company membership, the relevant Class B Member will have the entire amount of its then-current Capital returned to it and the relevant Class C Member will have its initial Capital returned to it, within seventy (70) Business Days of the date of such vote."

At the date of approval of these financial statements, none of these criteria have been met that would trigger a redemption.

#### 12. UNEARNED PREMIUM LIABILITIES

Figures in USD	2022	2021
Gross		
Opening balance	8,860,521	7,825,746
Premiums written	23,121,554	30,825,155
Premiums earned	(22,785,723)	(29,790,380)
	9,196,352	8,860,521
Reinsurers' share		
Opening balance	(5,405,891)	(4,461,042)
Reinsurance premiums written	(10,393,082)	(18,779,770)
Reinsurance premiums earned	11,297,207	17,834,921
	4,501,766	(5,405,891)
Net of reinsurance		
Opening balance	3,454,630	3,364,704
Net premiums written	12,728,472	12,045,385
Net premiums earned	(11,488,516)	(11,955,459)
	4,694,586	3,454,630

The unearned premium liabilities are all due within one year after the year end.

#### 13. CLAIMS LIABILITIES

Figures in USD	2022	2021
•		
Opening balance – gross	30,238,578	1,153,197
Less: Opening reinsurance recoverable	17,669,108	-
Opening balance – net	12,569,470	1,153,197
Claims incurred current year	27,478,508	18,862,725
Claims incurred prior year	1,741,554	(566,194)
	29,220,062	18,296,531
Claims paid current year	(8,056,409)	11,375,853
Claims paid prior year	(14,292,152)	(587,003)
	(22,348,561)	10,788,850
Closing balance – gross	20,224,803	30,238,578
Less: Closing reinsurance recoverable	(783,832)	(17,669,108)
Closing balance – net	19,440,971	12,569,470

The claims liabilities are all due within one year after the year end. The claims incurred of \$29,220,062 (2021: \$18,296,531) represents the total estimated incurred claims to the year end, which has been determined by the reserving model used by the Company.

Claims development: At the end of the year	20,224,803	30,238,578

Any claim payouts are made shortly after the end of the underlying risk years for each respective policyholder. The risk years, as explained in Note 3 (d), are the growing seasons for each participating country. Practically, this means that within four weeks of the growing season ending, any relevant claim payout shall be made, subject to conditions around Financial Implementation Plan ("FIP") and other required documentation being in order. Claims paid for in the current period net of recoveries of \$22,348,561 (2021: \$7,747,145) represent claim payouts to Mali (\$22,592,378), Madagascar (\$10,714,206), Mauritania (\$1,715,131) and Mauritania replica policy (\$1,143,823), Burkina Faso (\$1,189,649), Malawi (\$14,249,461), Cote D'Ivoire (\$647,162), Zambia (\$5,377,892), Niger (\$2,148,025) and three (7) claim payouts under the non-sovereign line of business (2021: claim payout to Mali replica policy of \$7,136,192 and six (6) claim payments under the non-sovereign line of business). The gross claims liabilities of \$20,224,803 (2021: \$30,238,578) due at the end of the year are in respect of ten (10) drought claims (\$19,652,003), two (2) tropical cyclone claim (\$454,545) and non-sovereign business (\$118,254) (2021: 9 drought claims (\$29,825,478), Madagascar tropical cyclone claim (\$302,783) and non-sovereign business (\$110,317).

#### 14. RESERVE FUND

In accordance with the Company's Memorandum of Association, the reserve fund consists of \$250,000 of capital contribution, which was funded in equal amounts by DFID and PCC / KfW.

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#### **NOTES** TO FINANCIAL STATEMENTS

#### 15. TRUST FUNDS

A trust was established on July 17, 2015 under an agreement between KfW and Appleby Trust (Mauritius) Limited (now Estera (Mauritius) Limited), as trustee of this 'ARC TA Facility Purpose Trust'. This trust fund, which is unsecured, amounts to €1,395,000. On application to the trustee and under the terms of a Financing Agreement and a Separate Agreement, the Company has the right to reimbursement of certain costs, from this trust account, subject to certain conditions. During the year ended December 31, 2022, there has there has been no pending reimbursement request to this Trust (2021: \$140,000).

A Separate Agreement (to a Grant Agreement) between ARC Ltd and the aforementioned trustee was also signed on October 20, 2020 for subsidization of ARC Ltd insurance premiums for African member states and the total grant amounts to €11,000,000. On application to the trustee, the Company has the right to submit a disbursement request for premium subsidization after qualified African countries sign an insurance contract, and if applicable, pay their portion of the premium. During the year ended December 31, 2022, premium subsidy grant disbursements received by the Company amounted to \$nil (2021: \$4,654,061).

A 'Premium Support Facility Trust' ("PSF Trust") was established on November 23, 2021 with Appleby Global Trust Services (Bermuda) Ltd acting as trustee. The intended purpose of the PSF Trust is to receive trust funds from Donors pursuant to Grant Agreements entered into by the Company and Donors, intended to provide financing support for risk transfer programs. Subject to the eligibility requirements, on application to the trustee, the Company may receive distributions as premium-subsidized co-payments for ARC Member States insurance or other risk transfer transaction premiums. During the year ended December 31, 2022, premium subsidy grant disbursements received by the Company amounted to \$1,091,182.

#### 16. INVESTMENT INCOME

Figures in USD	2022	2021
Interest and dividend income	1,458,375	1,619,432
Amortization of bonds	(171,069)	(294,802)
Realized (loss)/gain on investments	(5,460,689)	6,499,478
Realized gain / (loss) on derivatives	1,514,789	3,780,353
Gross investment income	(2,658,594)	11,604,461
Less: Investment managers, custody and portfolio fees	(92,800)	(122,342)
Net investment income	(2,751,394)	11,482,119

Interest rates on investments ranged from 0% to 8.63% (2021: 0% to 10%) during the year.

#### 17. EXPENSES AND REIMBURSEMENTS

Figures in USD	2022	2021
Member costs	154,974	204,143
Board costs	285,600	247,644
Corporate secretarial and regulatory fees	26,701	16,124
Legal fees	104,522	117,377
Insurance	158,849	126,665
Bank charges	24,405	19,919
External audit	101,417	92,520
Internal audit	60,000	20,800
Actuarial and loss reserve specialist fees	4,328	14,500
Insurance manager's fees	280,000	280,000
Executive management and administration	3,116,333	2,310,677
Reinsurance broker fees	202,097	200,469
Communications	187,043	50,313
Depreciation	16,905	15,499
Provision / (Reversal) of provision for doubtful debts	(750,000)	750,000
Total general and administration expenses	3,973,174	4,466,650

The reversal of provision for doubtful debts of \$750,000 is a result of subsequent recovery of the insurance receivable during the year which has already been written off in prior year.

One-off costs:		
Consultancy	490,583	348,372
Total once-off costs	490,583	348,372
Reimbursements from Trust:		
General and administration	-	(140,000)
Total reimbursements from Trust	-	(140,000)

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#### **NOTES** TO FINANCIAL STATEMENTS

#### 18. RELATED PARTY TRANSACTIONS

The Company provides insurance coverage to Class A Members, as described in note 1. The premiums and related transactions with these Class A Members are thus related party transactions. In addition, as described in note 10 above, the two Class C Members provided Returnable Capital to the Company. These financial liabilities are also related party transactions, given that ARC Ltd. (formerly African Risk Capacity Insurance Company Limited) is a mutual company.

Remuneration during the period in respect of the Board of Directors is in the form of an annual fixed Honorarium of \$20,000 (2021: \$20,000) for Board Chair, \$18,000 (2021: \$18,000) for Board Committee Chair, \$15,000 (2021: \$15,000) per Director and \$10,000 (2021: \$10,000) for the Board Advisor.

There were seven Directors on the Board and one Advisor to the Board at the beginning and end of the year. The total Honorarium paid during the year was \$133,000 (2021: \$111,000). The total amount of travel and subsistence expenses reimbursed to Directors, or to entities who have paid on behalf of respective Directors, for the year was \$42,719 (2021: \$14,470).

Effective August 2020, the Company entered into an agreement with GP3 Institute Trust, a non-profit which provides Legal Advisory and Governance Support Services for public private corporation initiatives within the United Nations Sustainable Development Goals framework. The Company's Legal Secretary service is provided by the GP3 Institute Trust. The Company provides grant funding to GP3 Institute in recognition of the legal and governance services provided to the Company. The amount of \$nil (2021: \$10,217) representing grant funding due to GP3 Institute is included in accounts payable and accrued liabilities at the period end. GP3 Institute is not considered a related party as ARC Ltd.'s Legal Secretary is an independent contractor of GP3 Institute.

#### 19. TAXATION

Under current Bermuda law, the Company is not required to pay any taxes in Bermuda on either income or capital gains. The Company has received an undertaking from the Bermuda government exempting it from all local income, withholding and capital gains taxes until March 31, 2035. At present time no such taxes are levied in Bermuda.

#### 20. CAPITAL RISK MANAGEMENT AND STATUTORY FINANCIAL DATA

#### (a) Bermuda

ARC Ltd. is a mutual insurance Company, registered as a Class 2 Insurer under the Bermuda Insurance Act 1978 and Related Regulations ("the Act"). In accordance with the Act, statutory capital and surplus at the year-end was \$52,120,302 (2021: \$81,555,747) and the amount required to be maintained by the Company was \$1,944,097 (2021: \$1,804,539). The Company has met the minimum solvency margin requirement at the year end. In addition, a minimum liquidity ratio must be maintained whereby relevant assets, as defined by the Act, must exceed 75% of relevant liabilities. The ratio was met at the year end.

Under the Act, the Company is required to prepare Statutory Financial Statements. The Bermuda Statutory accounting regulations allow the recognition of Class C Member Capital as Statutory Capital, as opposed to debt financial liabilities or equity grant under the IFRS. The Members' equity is comprised of the reserve fund, retained earnings and Class C equity grant. The Company's objectives when managing 'capital' are to comply with the minimum capital and surplus requirements of the Act and to safeguard the Company's ability to continue as a going concern.

In disclosure note 11, there is reference to "Financially Unsustainable", which is a term taken directly from the Company's Bye-Laws. Financially unsustainable is defined in the Bye-Laws as a reduction of capital which endangers the Company's capacity to maintain its claim-paying capacity in a financially sustainable manner as measured by the ECR ratio. The ECR ratio is the Enhanced Capital Requirement under Bermuda Insurance regulations. Should the statutory capital of the Company decrease to a level below 150% of the ECR, then this would be deemed "financially unsustainable". At no point to the date of approval of these financial statements has the Company been Financially Unsustainable, based on the above definition.

The difference between the Company's statutory capital and surplus and Members' equity as per these financial statements is as shown in the below table.

Figures in USD	2022	2021
Statutory capital and surplus	52,120,302	81,555,747
Adjust for: Non admitted items for Statutory purposes		
Prepaid expenses	225,843	354,544
Deferred policy acquisition costs	72,285	106,782
Adjust for: Class C Members' returnable capital		
DFID – Initial contribution treated as equity capital	(49.929.600)	(49,929,600)
Less: DFID initial contribution treated as equity grant	7,101,264	8,601,150
PCC / KfW – Initial contribution treated as equity capital	(48,405,000)	(48,405,000)
Less: PCC / KfW initial contribution treated as equity grant	9,509,834	10,270,033
Forex revaluation of GBP capital contribution	13,625,175	9,295,854
Reserve fund – Initial contribution designated as share capital	250,000	250,000
Members' equity	(15,429,897)	12,099,510

#### (b) Participating African Countries

ARC Ltd has been granted approval for issuance of the Insurance Policies recognised in these Financial Statements in each of the participating Class A Member countries via a written letter of exemption from national insurance laws and regulations.

#### **NOTES** TO FINANCIAL STATEMENTS

#### 21. MANAGEMENT OF INSURANCE AND FINANCIAL RISK

The Company is exposed to a range of risks through its financial assets, financial liabilities and insurance liabilities. This section summarises these risks and the way the Company manages them.

#### a. Insurance risk

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The risk under an insurance contract is the risk that an insured event will occur, including the uncertainty of the amount of any resulting claim. The principal risk the Company faces under such contracts is that provisions for claims liabilities are estimates which are subject to variability, and the variability could be material in the near term. The variability arises because the amount of rainfall, which impacts on the ultimate settlement of claims, has not yet been fully determined as it is a future event. Provision for claims liabilities are based on all relevant information available to the Company. Methods of estimation are used which the Company believes produce reasonable results given current information.

Factors that aggravate insurance risk include lack of risk diversification in terms of type and amount of risk, geographical location and type of industry covered. The Company only insures the drought risks of participating African member states; therefore, there is a concentration of insurance risk within the industry sector and broadly within the territories the Company serves.

The variability of risks is improved by the use of reinsurance arrangements. Similar to other insurance companies, in order to minimise financial exposure arising from large claims (from, for example, correlated drought events affecting multiple insured countries), the Company, in the normal course of business, will enter into agreements with other parties for reinsurance purposes.

To minimise its exposure to significant losses from reinsurer insolvencies, the Company evaluates the financial condition of its reinsurers and monitors concentrations of credit risk arising from similar geographic regions, activities or economic characteristics of the reinsurers.

Furthermore, the financial strength and managerial and technical expertise as well as historical performance, wherever applicable, are thoroughly reviewed by the Company. Reinsurance ceded contracts do not relieve the Company from its obligations to policyholders and as a result the Company remains liable for the portion of outstanding claims reinsured to the extent that the reinsurer fails to meet the obligations under the reinsurance agreements.

Amounts recoverable from reinsurers are estimated in a manner consistent with the assumptions used for ascertaining the underlying policy benefits and are presented in the Statement of Financial Position as reinsurance assets.

#### b. Financial risk

#### i. Market risk

#### Currency risk

Currency risk is the risk that the value of a financial instrument will fluctuate due to changes in foreign currency exchange rates. Management assesses that, there is minimal risk of significant losses due to exchange rate fluctuations, based on the fact that the GBP denominated financial liability and grant equity are hedged by the GBP denominated marketable investments. All premium and risk exposures are denominated in USD.

#### Interest rate risk

Interest rate risk is the risk that the fair value or future cash flows of a financial instrument will fluctuate due to changes in market interest rates. The Company currently funds its insurance liabilities with a portfolio of cash accounts and fixed term deposits. Short-term insurance liabilities are not directly sensitive to the level of market interest rates as they are undiscounted and contractually non- interest bearing. The Company manages interest rate risk by matching the cash flows profile of assets and liabilities.

#### ii. Credit risk

Credit risk is the risk that one party to a financial instrument will fail to discharge an obligation and cause the other party to incur a financial loss. For all classes of financial assets held by the Company (including accrued investment income and cash and cash equivalents), other than those relating to reinsurance contracts as described in note 3 (d) above, the maximum credit risk exposure to the Company is the carrying value as disclosed in the financial statements at the date of the Statement of Financial Position. The Company seeks to limit its credit risk with respect to customers by setting credit limits for individual customers and monitoring outstanding receivables. The Company does not hold any collateral in relation to its credit risk. The reinsurers all have a rating of at least A- (2021: A-).

#### iii. Liquidity risk

Liquidity risk is the risk that the Company will encounter difficulty in obtaining funds to meet its commitments associated with financial liabilities. Prudent liquidity risk management implies maintaining sufficient cash and deposits and the availability of funding through an adequate amount of committed credit facilities. The Company's cash and cash equivalents have a maturity

profile that ensures that it is able to meet liabilities arising from claims received. The Company shall also mitigate future liquidity risks by holding highly liquid financial assets which may be sold quickly in response to needs for liquidity. The Company holds derivatives, whose maturities are disclosed in Note 6.

#### iv. Prepayment risk

At December 31, 2022, the Company held \$3,801,276 (2021: \$4,821,190) of its fixed income portfolio in commercial mortgage bonds. The assets are exposed to prepayment risk, which occurs when holders of underlying loans increased the frequency with which they prepay the outstanding principal before the maturity date and/or refinance at a lower interest rate cost. The adverse impact of prepayment is more evident in a declining interest rate environment. As a result, the Company will be exposed to reinvestment risk, as cash flows received by the Company will be accelerated and will be reinvested at the prevailing interest rates

#### v. Price risk

At December 31, 2022, the Company's marketable investments were subject to general market and price risk. The impact of movements in pricing are set out below:

Figures in USD	CARRYING VALUE	cost	EFFECT OF 0.5% INCREASE IN INTEREST RATES
AS AT DECEMBER 31, 2022:			
Fair value through profit or loss investments:			
Asset-backed bonds	4,700,927	5,115,191	(2,600)
Commercial mortgage bonds	3,801,276	3,960,202	-
Corporate bonds	15,974,897	17,278,827	(158,600)
Equities	193,947	200,000	-
Mutual funds	3,698,903	4,494,235	-
Government bonds	1,955,099	2,229,730	(47,600)
AS AT DECEMBER 31, 2022	30,325,049	33,278,185	(208,800)
As at December 31, 2021	65,884,977	65,590,887	(838,292)

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# **NOTES** TO FINANCIAL STATEMENTS

#### 22. SEGREGATED ACCOUNT

In November 18, 2022, the Company received approval to be registered as a segregated accounts company under the Segregated Accounts Companies Act 2000, as amended (SAC Act). The Company introduced the Outbreaks and Epidemics Insurance Program (O&E Program), which was written through the Company's Outbreaks and Epidemics Segregated Account.

Figures in USD	GENERAL CELL	O&E CELL	CONSOLIDATED
ASSETS			
Fixed assets	203,818	-	203,818
Prepaid expenses	225,843	-	225,843
Other receivable	372,727	-	372,727
Reinsurance assets	4,801,134	484,464	5,285,598
Insurance receivables	7,251,729	-	7,251,729
Deferred policy acquisition costs	72,285	-	72,285
Accrued investment income	376,202	-	376,202
Marketable investments	30,325,049	-	30,325,049
Investment in Pula Advisors GmbH	315,675	-	315,675
Cash and cash equivalents	43,657,841	1,008,130	44,665,971
Total Assets	87,602,303	1,492,594	89,094,897
LIABILITIES			
Class C Members' Returnable Capital	67,848,325	-	67,848,325
Unearned premium liabilities	8,711,888	484,464	9,196,352
Claims liabilities	20,224,803	-	20,224,803
Reinsurance premiums payable	3,528,104	462,906	3,991,010
Deferred commission income	314,561	43,117	357,678
Deferred income - other	-	488,216	488,216
Accounts payable and accrued liabilities	2,406,626	11,784	2,418,410
Total Liabilities	103,034,307	1,490,487	104,524,794
MEMBERS' EQUITY			
Reserve fund	250,000	-	250,000
Retained earnings	(32,293,102)	2,107	(32,290,995)
Accumulated other comprehensive income:			
Class C Members' equity grant	16,611,098	-	16,611,098
Total Members' Equity	(15,432,004)	2,107	(15,429,897)
Total Liabilities and Members' Equity	87,602,303	1,492,594	89,094,897

Figures in USD	GENERAL CELL	O&E CELL	CONSOLIDATED
UNDERWRITING INCOME			
Gross premiums written	22,613,424	508,130	23,121,554
Change in unearned premiums	148,633	(484,464)	(335,831)
Gross earned premiums	22,762,057	23,666	22,785,723
Reinsurers' share of insurance premiums	(9,884,952)	(508,130)	(10,393,082)
Reinsurers' share of change in unearned premiums	(1,388,589)	484,464	(904,125)
Reinsurers' share of gross earned premiums	(11,273,541)	(23,666)	(11,297,207)
Net premiums	11,488,516	-	11,488,516
Commission income	784,841	45,224	830,065
Change in unearned commission	298,819	(43,117)	255,702
Net earned commission	1,083,660	2,107	1,085,767
Policy acquisition costs	(57,715)	-	(57,715)
Change in deferred acquisition costs	(34,497)	-	(34,497)
Net policy acquisition costs	(92,212)	-	(92,212)
UNDERWRITING EXPENSES			
Claims	(29,220,062)	-	(29,220,062)
Net underwriting expense	(29,220,062)	-	(29,220,062)
Net underwriting (loss) / income	(16,737,991)	2,107	(16,737,991)
General and administrative expenses	(3,588,663)	(384,511)	(3,973,174)
Once-off and start-up costs	(490,583)	-	(490,583)
Net investment (loss)/income	(2,751,395)	-	(2,751,395)
Other income	-	384,511	384,511
Unrealized loss on other investments	(4,968,242)		(4,968,242)
Unrealized gain on foreign exchange	3,277,813		3,277,813
Realized loss on foreign exchange	(10,261)		(10,261)
Net (loss)/income for the year	(25,271,429)	2,107	(25,269,322)
Write down of Equity grant from Class C Members	(2,260,085)		(2,260,085)
Total comprehensive (loss)/income for the year	(27,531,514)	2,107	(27,529,407)

# **NOTES** TO FINANCIAL STATEMENTS

#### 23. SUBSEQUENT EVENTS

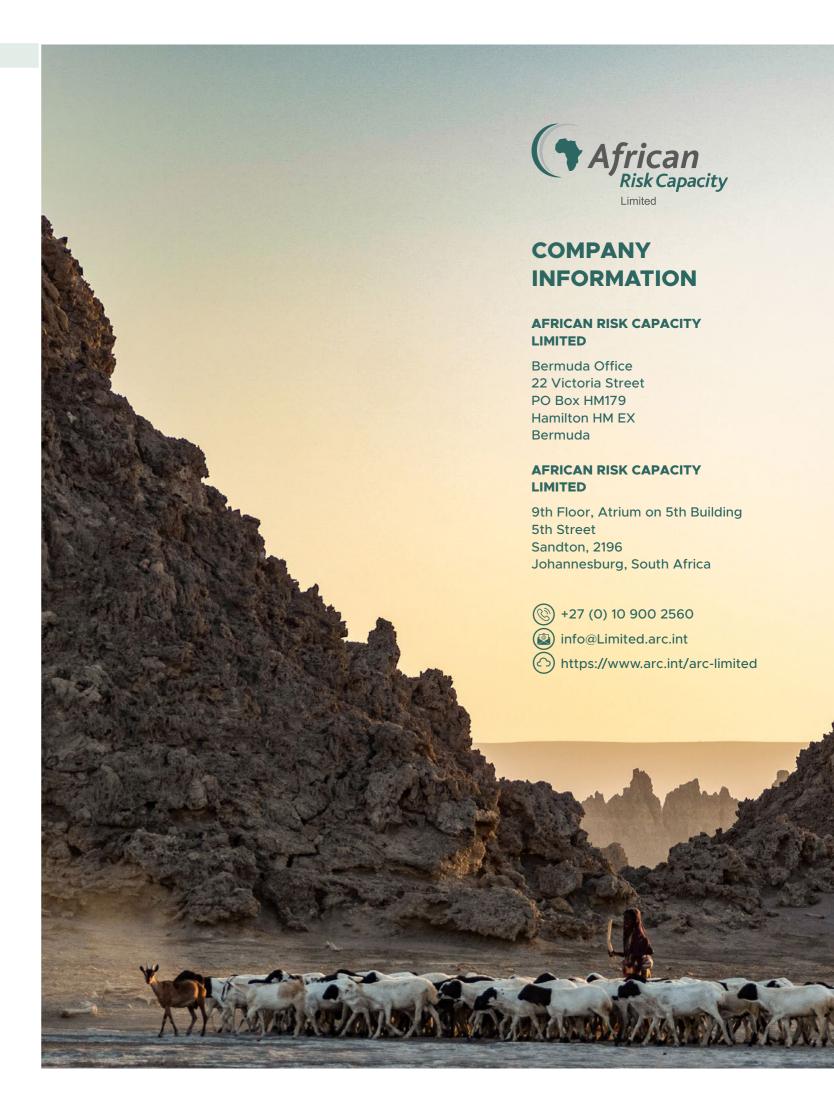
In February 2023, the Madagascar sovereign and Replica policy were triggered due to tropical cyclone Freddy. Potential payout from these policies were estimated to be \$1,203,909 and \$300,977 respectively. At the year-end of 2022, the policies have total reserved of \$293,742 and have an unearned premium reserve total of \$603,448.

#### 24. APPROVAL OF THE FINANCIAL STATEMENTS

These financial statements were approved by the Board of Directors in July 2023. Management does not have the power to change or amend the financials after the date of approval by the Board of Directors.

# **NOTES**

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