



SAVING  
LIVES  
CHANGING  
LIVES

## Sovereign Climate Risk Financing and Insurance

Protecting vulnerable people and communities with pre-arranged funding for rapid responses

The climate crisis is no longer a glimpse into the future but the daily reality for communities around the world. Climate shocks - such as drought, heatwaves, storms and floods - are increasingly putting lives and livelihoods at risk, eroding development and driving food crises around the world. Over the last 50 years, there has been a five-fold increase in the number of weather-related disasters<sup>1</sup>, which disproportionately impact the vulnerable and food insecure parts of the world. In 2020, climate extremes have displaced 30 million people within borders - around three times more than conflict.

Each year, governments and the humanitarian sector spend billions to prepare for, respond to, and help people recover from increasingly destructive climate disasters. Humanitarian responses are typically mobilized only after an extreme weather event has resulted in catastrophic damages and losses for the most vulnerable and food-insecure people. For slow-onset events such as droughts, assistance reaches people often months after crops have failed and livestock are lost, and when many households have already resorted to negative coping strategies such as selling critical assets or taking children out of school.

While governments have made significant progress in managing growing climate risks and building resilience through allocating more domestic resources to disaster management, only 137 million people in developing countries were covered by climate risk insurance in 2020. If this critical gap in financial protection is not filled, high-risk countries will continue to need international support until they can increase their financial resilience against natural

hazards and manage their own risk. As part of the [InsuResilience Vision 2025](#), G7 countries have committed to protecting 500 million poor and vulnerable people from climate and disaster shocks by 2025 with pre-arranged finance and insurance mechanisms. A scale-up of climate and disaster risk finance and insurance solutions is urgently needed to enable governments and the humanitarian sector to strengthen safety nets for the most vulnerable and provide more timely financing and assistance to populations at risk.

### SOVEREIGN RISK FINANCE AND INSURANCE

Market-based disaster risk financing solutions, such as macro insurance policies purchased by governments to cover disaster losses, can enable faster, more cost-effective and predictable responses to climate and disaster shocks. WFP is a leader in promoting sovereign insurance products that can offer rapid finance to affected communities in the event of major disaster. By connecting climate and disaster risk financing instruments with social protection systems at regional or local levels, these schemes can better reach and target the needs of vulnerable people in response to climate shocks.

### AFRICA RISK CAPACITY AND ARC REPLICA PLUS

The African Union's **African Risk Capacity (ARC)** is a ground-breaking risk pooling platform that provides financial tools and infrastructure to help African Union

<sup>1</sup>WMO. [The Atlas of Mortality and Economic Losses from Weather, Climate and Water Extremes \(1970-2019\)](#)

<sup>2</sup>InsuResilience Global Partnership. [Annual Report 2020](#).

Member States manage climate-related disaster risk. ARC aims to improve Member State's responses to impending natural hazards by reducing the time needed for assistance to reach those affected through predictable, early and local response. ARC Ltd. offers sovereign insurance products to vulnerable African countries that are prone to extreme climate risks such as drought (for agriculture or livestock) or tropical cyclones. This allows for countries to manage climate risk as a group, pooling risk through policies covering diverse climate risks across the continent. The insurance premiums are paid by countries through national budget processes, and payouts fund responses through pre-approved contingency plans.

**ARC Replica** is an innovative tool designed to improve the effectiveness of emergency response after climate disasters and provide risk financing that improves African governments' management of climate risks. ARC Replica Coverage is an insurance product offered by ARC Ltd to WFP and the Start Network to complement and/or enhance the insurance policies purchased by ARC Member States. With ARC's Replica Coverage, Replica Partners can match the insurance coverage of eligible ARC Member States (Replicated Countries) by purchasing a 'Replica Policy' – or, in cases where the government does not purchase insurance protection for a given season, decide to secure insurance protection independently.

The Replica policy is a parametric insurance contract which incorporates the same [Africa Risk View \(ARV\)](#) thresholds and triggers as the government's ARC insurance policy, developed and customized by national technical working groups together with WFP. Contingency plans are developed and endorsed in close consultation with the Replica counterpart government, outlining the government's as well as WFP's complementary response measures in case insurance pay-outs are triggered by a large-scale climate shock.

Through ARC Replica, WFP has supported the governments of Burkina Faso, The Gambia, Mali, Mauritania and Zimbabwe with macro-level risk transfer instruments, while the Start Network has been matching coverage for Senegal. In 2019, the growing season failed due to drought in Mauritania, Senegal and Zimbabwe. Consequently, both WFP's and Start Network's ARC Replica drought risk insurance policies provided payouts in early 2020. This enabled WFP to assist 4,000 people with cash transfers in Mauritania, and 40,000 people with in-kind food assistance in Zimbabwe ahead of the traditional lean season response. Start Network received US\$10.6 million alongside the US\$12.5 million payout for the Senegalese government, providing food and cash assistance for over 350,000 vulnerable people. This injection of cash and food earlier than normal has helped people to maintain their assets and keep families fed.

**ARC Replica Plus** represents a continued evolution of the ARC Replica model, considering the necessity of a contingency funding mechanism (such as an index- or forecast-based contingency fund) in years when climate shocks affect people below the threshold of insurance payouts. This integrated model combines insurance protection for less frequent, more catastrophic risks (with minimum return periods<sup>3</sup> of once in every four years) with complementary risk financing instruments that trigger at more frequent but lower severity hazard levels. These

## Climate and Disaster Risk Reduction Programmes Unit (PRO-C)

### World Food Programme

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small-scale, localised shocks can cumulatively constrain national development, causing hardship and suffering to the most vulnerable individuals and households, who are susceptible to being pushed from chronic hunger into an acute food crisis. This blend of insurance and contingency financing represents an opportunity to test and refine triggers and sequences for the release of pre-positioned finance from the public and private sectors, to efficiently combine different financial instruments for different levels of risk, and to analyze the cost/benefit ratio of different combinations of risk financing instruments.

## SCALING UP CLIMATE AND DISASTER RISK FINANCE

Based on the lessons learnt from the ARC Replica experience in Africa, WFP is exploring how to transfer sovereign risk financing to two additional regions with existing sovereign risk pools. In Latin America and the Caribbean, WFP is developing mechanisms for risk finance to be transferred to social protection beneficiaries through existing insurance products offered in the region. This can help social protection systems to become more shock-responsive and ensure more rapid and targeted responses for vulnerable populations in the event of a tropical cyclone or excess rainfall.

WFP's ARC Replica Plus and macro-insurance programmes are an opportunity for donors and partners to invest in innovative climate risk financing mechanisms that transform the current humanitarian financing model, which is often caught in repetitive loops of under-funded crisis response, to a model that is based on forward-looking risk management and enables the sequencing of public and private sector financing for quicker and more predictable action. This will promote the commitment of the G7 and other countries to the goals of the InsuResilience Global Partnership Vision 2025, as well as the Crisis Lookout Coalition to transform how risks and disaster responses are managed and funded. To operationalize and scale up this approach in Africa and other regions, additional partnerships and resources will be required to expand climate risk insurance coverage, build institutional capacity for risk financing, and develop evidence-based guidance for government partners.

### WFP ARC REPLICA COVERAGE 2019-2021

	PREMIUMS PAID	MAXIMUM COVERAGE	NUMBER OF PEOPLE PROTECTED
<b>WFP ARC REPLICA TOTALS FOR BURKINA FASO, THE GAMBIA, MALI, MAURITANIA AND ZIMBABWE*</b>	<b>US\$14.3M</b>	<b>US\$89.6M</b>	<b>2.9M PEOPLE</b>
	Paid by WFP to purchase drought risk insurance policies.	The sum insured for WFP through ARC Replica policies.	The number of people protected from drought shocks.

\*Zimbabwe's 2021/2022 policy was not signed at time of publication and is not included in these figures.

<sup>3</sup> Return periods refer to the frequency that the insured event occurs.