



Strengthening the Resilience of African Vulnerable Populations against Natural and Health Disasters



Author: Hans Ramm is a trained banker and holds degrees in economics and political science, as well as a post-university certificate in development cooperation. After working with the United Nations and in the private sector managing development projects in Asia and Central Europe, Hans joined the Swiss Agency for Development and Cooperation (SDC) in 2008, where he is currently Senior Policy Adviser on responsible agricultural finance with the Global Programme Food Security. Contact: hans.ramm@eda.admin.ch

Accelerating climate change is hitting Africa hard, with increasingly more food insecure populations losing their livelihoods in areas hit by adverse weather events. SDC's Global Programme Food Security (GPFS) co-funds the **African Risk Capacity** (ARC) since 2012. ARC is a disaster-risk management pool and early response mechanism that was established by the African Union (AU) Member States against natural disasters like drought, flood, tropical cyclones, and extreme weather events, and more recently disease outbreaks with epidemic potential.

ARC's goal

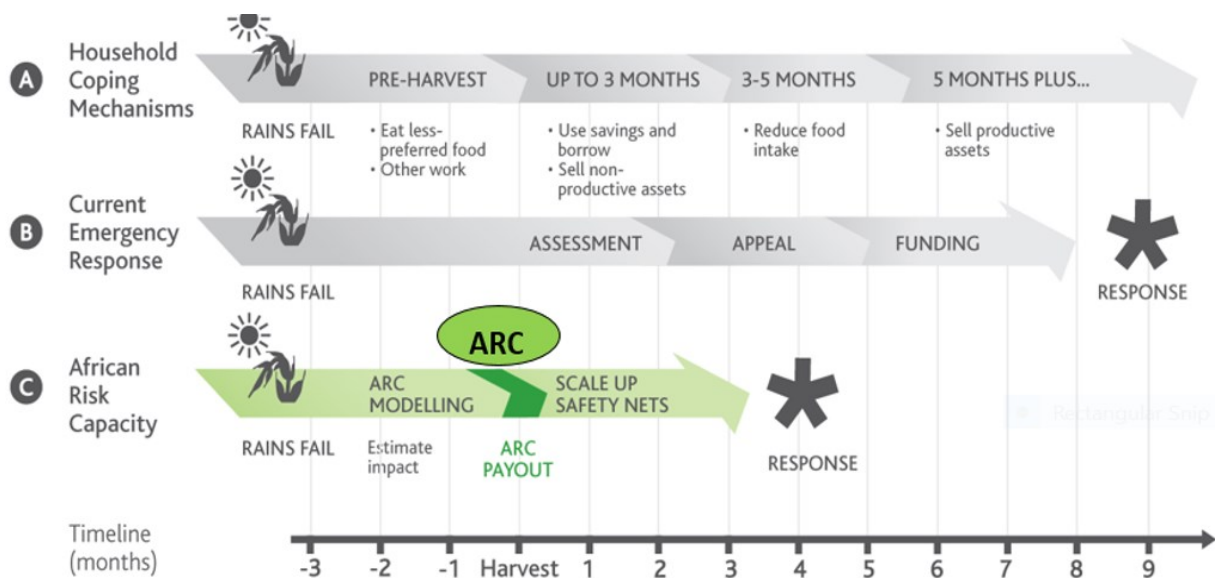
ARC is an effective humanitarian mechanism that enables ex-ante relief contingency plans funded through insurance pay-outs immediately after a calamity strikes. As such, it provides *timely and targeted* responses to protect the lives and the livelihoods of vulnerable populations.

In the event of a drought, households are more likely to resort to selling their remaining productive asset as a coping mechanism if aid is slow to arrive in affected areas (see Figure, A, B). This is precisely where ARC comes in. With the ex-ante plans to scale up government and/or humanitarian safety nets, emergency response can be deployed 5 months earlier (of even less) compared to the usual response timelines (see Figure, C).

Digital money transfer channels expand the scope for speedier and more effective disaster relief delivery. In a cost-benefit analysis commissioned by ARC to examine the assess risk pooling as an early response mechanism to severe drought in sub-Saharan Africa, researchers from the University of Oxford and the International Food Policy Research Institute (IFPRI) estimated that **for every US\$ 1 spent through ARC, US\$ 3 to US\$ 4.40 can be saved in post-disaster response costs.**



Emergency cash hand-outs © ARC



Source: Clarke/Hill, Cost-Benefit Analysis of the African Risk Capacity Facility.

ARC's value proposition

A: household coping mechanisms without any outside support.

B: a 'usual' drought emergency response is deployed 9 months after the 'failed' harvest, after analysis, appeal, funding, and aid delivery.

C: ARC's ex-ante response mechanism. Both drought and household vulnerability are modelled prior to a drought event. The 'failed' harvest then triggers immediately the pay-out of the parametric insurance.

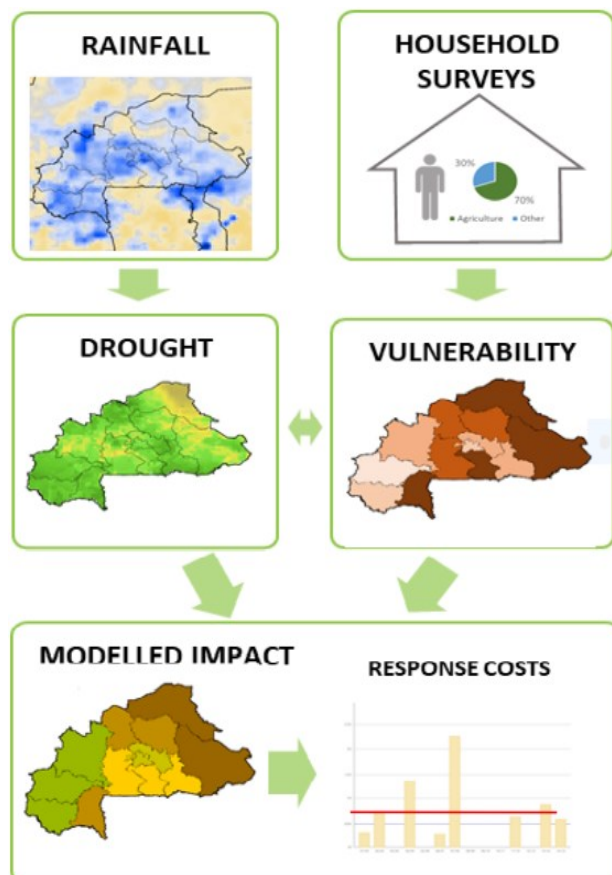
ARC's risk management and risk transfer approach

ARC's approach is unique for the African continent and without alternative. It relies on four key components:

- 1) **Customised early warning:** risk modelling to help quantify disaster risks and to monitor disaster impact.

Risk modelling

ARC's drought risk modelling combines weather data with household vulnerability. Rainfall is the key food security determinant as crop production is pre-dominantly rain-fed. Crop water requirements are estimated from the time of sowing until crop maturity. The vulnerability profile is derived from national household surveys and World Food Programme's Comprehensive Food Security & Vulnerability Analysis surveys. The drought model estimates the number of people affected based on the vulnerability profile and the drought severity.



- 2) **Contingency planning:** based on the risk modelling, ex-ante contingency plans are prepared to identify what kind of relief aid will be delivered and to what types of vulnerable households in disaster affected areas. Plans encompass food aid, cash transfers, school feeding, seed banks, sales of subsidized livestock feed, and nutrition operations (i.e. screening, awareness-building, distribution of infant flours, and management of acute malnutrition as recently in Senegal) as defined by governments and/or their humanitarian partners. In fact, ARC's pay-outs are used to beef up under-funded social safety nets when hit by natural disasters.
- 3) **Parametric insurance:** ARC pays out AU countries and/or humanitarian actors as insurance policy-holders to fund pre-approved contingency plans to respond rapidly and predictably to selected disasters. The execution of contingency plans is closely monitored and audited to ensure that affected vulnerable people are reached.
- 4) **Risk pooling & risk transfer:** The ARC insurance is a cooperative insurer with AU countries as members. By pooling its members' capital, ARC offers cost-efficient insurance premiums. It transfers most of the risks to the global reinsurance market. There is no more affordable risk transfer solutions possible. However, AU countries need to establish standards for disaster risk assessment, early warning, and response set by ARC as a pre-condition for participation under ARC's insurance solutions.

Key achievements

By the end of 2020, ARC's insurance pool indirectly covered 20 million vulnerable people, and 12 AU countries qualified and participated to the programme. Cumulatively, the total insurance coverage amounted to US\$ 720 million in insurance coverage, or 72 million vulnerable people with US\$ 65 pay-outs. **It is still a long way to expand coverage from 20 to 700 million vulnerable people in Africa!**

Selected evidence on outcomes at vulnerable household level

- 40% of respondents did not leave their rural homes in **Mauritania** because the pay-out was delivered quickly.
- In 2017, **Malawi** used US\$ 8.1 million pay-out to support over 800'000 Malawians by scaling-up cash transfers and replenish its strategic grain reserves.
- In 2019, **Senegal** used the pay-out for flour and cash distributions to 223'818 households followed up by nutritional awareness raising. A beneficiary survey revealed:
 - 99%: helped meet monthly requirements/avert suffering
 - 90%: helped prevent sale of livestock
 - 78%: helped prevent kids out of school
 - 77%: helped prevent migration for work
- In 2020, **Zimbabwe** used a US\$1.4m pay-out to make mobile cash disbursements to 155'000 households in 4 districts.

How can African Cooperation Offices partner with ARC as part of their humanitarian country or regional programmes?

- Support partner countries and WFP in developing humanitarian contingency plans to protect vulnerable populations against natural disasters and to fund ARC Replica insurance policies as a funding mechanism for these contingency plans.
- Help partner countries to purchase ARC insurance policies through premium subsidies.
- Fund capacity-building of the technical working groups in the partner countries in charge of the ARC disaster risk management responsibilities required for participating under the risk pool of ARC.
- Contribute to awareness building of risk transfer solutions among national policy-makers.



ARC is a Specialized Agency of the African Union established to help African governments improve their capacities to better plan, prepare, and respond to extreme weather events and natural disasters.

Through collaborations and innovative finance, ARC enables countries to strengthen their disaster risk management systems and access rapid and predictable financing when disaster strikes to protect the food security and livelihoods of their vulnerable populations.

For more information: <https://www.africanriskcapacity.org/>