

Independent Evaluation of the African Risk Capacity

Impact Assessment Phase 1
Final Report

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Preface

This report has been guided by the Evaluation Steering Group (ESG) and prepared as part of the Independent Evaluation of the African Risk Capacity (ARC), commissioned by the UK Foreign, Commonwealth and Development Office (FCDO) and undertaken by Oxford Policy Management (OPM). The project manager is Shamim Zakaria.

The lead authors of the report are Patrick Ward, Dr Zuzana Hrdlickova (Workstream Lead, Improved Country-Level Preparedness), Emily Montier (Workstream Lead, Deploying Payouts to Reduce the Impact of Climate Disasters), Kritika Singh, and Shamim Zakaria. The report also benefitted from extensive contributions to design and data collection from Jesse McConnell.

Additional contributors to the report include Julian King, Smriti Pun, Shaswat Acharya, Ashika Sharma, Gianna Randriatsimalona, Patrick Laby, Robertson Khataza, Kumbukani Mhango, Dorica Singini, Mohammed Lemine Selmane, Isselmou El Abed, and Mohamed Ismail.

Patrick Ward is the principal contact for this study (patrick.ward@opml.co.uk). The client contact at FCDO is Andrew Wilson (andrew.wilson1@fcdo.gov.uk).

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Executive summary

Introduction

The **African Risk Capacity (ARC)** was established by the **African Union (AU)** in 2012 ‘to help African governments improve their capacities to better plan, prepare, and respond to extreme weather events and natural disasters’. The ARC Group comprises two entities.

ARC Agency, a Specialised Agency of the AU, is tasked with building capacity in member countries to plan for and respond to climate disasters, including risk modelling through Africa RiskView (ARV) and Tropical Cyclone Explorer (TCE), and to help raise awareness of ARC among AU member states and the broader public. The ARC Insurance Company Limited (**ARC Ltd**) is a financial affiliate delivering risk transfer services – particularly insurance.

Oxford Policy Management (OPM) was commissioned by the **UK’s Foreign, Commonwealth and Development Office (FCDO)** to conduct an **independent evaluation of ARC** over the period 2015–2026. The evaluation is being conducted as a number of discrete studies. In 2021, an Evaluation Steering Group (ESG) was re-established, and it was agreed that work done under this contract would reflect the priorities of all stakeholders represented on the ESG. **This report presents findings from the ARC impact assessment, conducted in 2023/24.**

Overview and context

The operating environment for ARC has continued to evolve since ARC launched its first policy in 2014. Overall, the same challenges that affected international support for drought in 2014 remain similar – despite early warning systems in place, international funding to mitigate and respond to drought continues to be slow. This places communities at risk, considering that the frequency and intensity of disasters relating to natural hazards are already high and are increasing, driven primarily by climate change, population growth, and urbanisation. Climate-related disasters affect tens of millions of people every year in Africa, and mitigation and response efforts are insufficient to address the challenge.

Interest in strengthening disaster risk financing (DRF) mechanisms, including through risk transfer, has grown substantially, both globally and in Africa, albeit from a very low base. When ARC was founded, DRF was not well understood in Africa. This has started to change, with a general increase in understanding of, and engagement with, DRF in Africa, driven primarily by ARC and the World Bank. Initiatives from the African Development Bank’s (AfDB) Africa Disaster Risk Financing (ADRFi) programme and, more recently, the Global Shield Against Climate Risks have added to the momentum for change. However, DRF is not yet institutionalised in most countries, and this produces a challenging context within which ARC is working to increase demand.

ARC has experienced major changes in its strategy, leadership, and governance since it was established. The ARC Treaty – i.e. the legal agreement that establishes ARC and governs country membership – has come into force, with potential implications for ARC’s growth, staffing, and location. **ARC’s portfolio has also grown**, with new products (rangeland drought, tropical cyclones, and outbreaks and epidemics), insurance for floods under development, and ARC Replica, which provides insurance for non-government actors, having been introduced. The introduction of premium subsidies has contributed to a **significant growth of the risk pool**. In the 2021/22 pool (Pool 8), there were 29 policies

across 14 countries, 11 of which are ARC Replica and four supported by ADRiFi. In addition, ARC Ltd is increasingly providing ‘non-sovereign’ risk transfer outside the formal ARC or ARC Replica policy process, for example to the United Nations (UN) Office for the Coordination of Humanitarian Affairs (OCHA) or through the World Bank.

The evidence landscape also continues to evolve, but ARC remains unique, as a sovereign climate and disaster risk finance and insurance (CDRFI) instrument, in its contribution to date to the evidence landscape.

ARC’s theory of change (ToC)

ARC has changed substantially since the original ToC was developed in 2016 and, in a previous phase of the evaluation, the team worked with ARC to update the overall ToC through a consultative process. This states that ARC’s goal is that member countries and their partners provide timely and targeted responses to protect the lives and livelihoods of vulnerable populations against disasters, thereby improving resilience. This is framed by ARC’s three strategic objectives.

A more detailed ‘working’ sub-ToC for ARC’s intended effects at the country level was developed for use in this impact assessment. It is arranged around three ‘pathways’: engagement, disaster risk management (DRM) planning and assistance, and innovative financing. Strategic engagement occurs around a country’s DRM and DRF policies, needs, and ARC’s offering in these areas. ARC’s technical support and tools are offered to member states, including training and support for DRM and contingency planning, following which member states should have a finalised and approved Contingency Plan¹ (CP), relevant technical working groups (TWGs), and a customised ARV in place. This ensures that coordination processes and preparedness measures are in place in case a payout is triggered. ARC’s support helps member states customise risk models and set up insurance policies that can then form part of a wider financial preparedness strategy. Member states and ARC may also develop a complementary policy with a replica (non-government) partner.

Following a drought or a cyclone, a payout will be notified and a Final Implementation Plan (FIP) is developed, building on a pre-existing Operational Plan (OP). This is intended to ensure that timely assistance is delivered to vulnerable households. The impact expected is a reduction of negative coping mechanisms, enabling households to maintain their welfare and economic assets and development gains to persist through such crises.

Evaluation approach

The **objective** of this impact assessment is to assess the contribution made by ARC’s work, through its assistance to member countries, to reducing the impact of climate disasters on vulnerable households. It focuses on countries that have had a payout from ARC in the period 2020–2023. A total of 19 payouts during this period were received by 11 countries from east, west and southern Africa. These include payouts for drought (crop and rangeland) and cyclones. Payouts to partners are also included. Data was collected from documentary sources for all countries that have received an ARC payout since 2020. A sub-sample of three countries was selected to provide cases for more in-depth study with primary data collection. These three countries were Madagascar, Malawi, and Mauritania, which differed

¹ For ARC, contingency plans (CPs) refer to both the operations plan and a Final Implementation Plan (FIP) that has to be submitted by the government when a payout is imminent.

in payouts, region, and agro-ecological conditions. A largely qualitative approach was used to collect data and analyse data.

The following **EQs** were answered:

- **EQ1:** To what extent and how have ARC's capacity-building work and oversight processes improved national preparedness, both financial and operational, and planning of assistance?
- **EQ2:** What factors influence the effectiveness of ARC's capacity-development work?
- **EQ3:** To what extent and how has ARC contributed to reducing the impact of droughts and cyclones on vulnerable households in its member states?
- **EQ4:** What have been the main factors explaining the extent of this contribution?
- **EQ5:** To what extent does ARC's country-level ToC hold?

Evidence sources include document review, quantitative secondary data, and, in the case study countries, qualitative primary data collected through key informant interviews (KIIs) and focus group discussions (FGDs). In addition, the assessment used explicit quality criteria and standards (rubrics) to evaluate the strengths and weaknesses of DRM systems and of the distribution of assistance, as presented in key documents, as well as 'on the ground' in case study countries. These rubrics were developed with ARC, country government representatives, and other key stakeholders through workshops. The quality of evidence was generally high.

The **primary audiences** of the assessment are the core stakeholders, which include the ARC Group, ARC's donor partners, member countries, the AU, the AfDB, and other members of the ESG, in addition to other ARC stakeholders and the wider DRF and DRM community. The evaluation was overseen by the ESG and adheres to **recognised evaluation quality and ethics standards**.

The evaluation examined the extent to which ARC's ToC is holding at the country level. It was not a performance evaluation of ARC Agency and ARC Limited *per se*. The findings therefore report on progress and challenges in some areas that are under the direct responsibility of member states, rather than the ARC itself, since they are an integral part of delivering to ARC's overall goal. It is recognised that member states themselves also face challenges and competing priorities. Recommendations are made for both ARC and member states.

Findings: Improved country-level preparedness (EQ1 and EQ2)

The overall strengths of country DRM systems were assessed against a rubric defining general quality criteria and standards, developed together with key stakeholders and sector experts. In the 11 sampled countries, based on a review of CPs, the evaluation found that ARC member states have on average fairly strong DRM systems, with DRM legislation and authority structures largely in place, embedding early warning systems, and good financial management plans for disbursement and distribution of funds in response to disasters. They also have good risk assessments, capacity to identify needs and profile beneficiaries, and capable response delivery mechanisms. However, countries often lack formal learning mechanisms, where tracking is unsystematic and lessons from disaster responses are not integrated into future planning. They have weak or basic DRF policies and strategies, and most do not have social registry data or the data is outdated.

ARC's capacity-building work and oversight processes

All three case study countries had, to varying degrees, DRM policies and mechanisms in place before joining ARC, and all three have seen improvements to their capacity to deliver assistance after joining ARC, supported through the capacity-building efforts of various partners, including ARC. ARC has worked with member countries to improve specific aspects of their DRM, and the extent of understanding and meeting countries' needs is varied. The majority of capacity strengthening focuses on enhancing two elements, which help countries access ARC services. These are: 1) helping countries to understand and customise the risk model; and 2) contingency planning.²

Engagement with ARC is catalysing the adoption of some level of financial and operational preparedness ahead of extreme weather events. ARC insurance increases financial preparedness, although the value of payouts is often a modest fraction of total need. ARC has made contributions to improvements in countries' DRM systems, especially on a technical level – improving technical capacities in specialist areas – and in the promotion of coordination and comprehensive planning processes by setting up TWGs and drawing up OPs. TWGs play a significant role in facilitating coordination in each country. While ARC is somewhat integrated into government structures to harmonise activities and enable coordination with existing government systems, the degree of awareness about ARC activities outside of the ministries, departments, and agencies (MDAs) that coordinate ARC varies. Despite membership of the TWGs by a range of non-government partners, broader coordination between ARC and other actors is often quite limited.

ARC uses the ARV model for drought and TCE for cyclones. Case study countries revealed challenges with ARV customisation and the level of confidence in the model.

Positive changes in the capacity to deliver assistance were found in all three case study countries, especially in the areas of legal frameworks and responsible institutions. Alongside ARC's activities, numerous efforts have been taken by a variety of actors in the target countries, including the World Bank, the UN agencies, the Red Cross Movement, international non-governmental organisations (INGOs), NGOS, and bilateral government agencies to improve DRM systems. ARC's work is one of several forces contributing toward developments in improving the capacity for assistance delivery.

Countries also have wider capacity-building needs (e.g. broader adoption of financial preparedness, wider strengthening of response delivery systems, and monitoring and evaluation (M&E)), which go beyond ARC's usual support. ARC has not generally strengthened wider DRF systems but has sometimes encouraged broader national discussions about financing strategies for disasters.

Factors influencing the effectiveness of ARC's capacity-development work

Aspects of ARC's approach – such as the establishment of national TWGs and capacity building through technical training – have proven useful in developing in-country capacity. The breadth of membership of the TWGs is a particular strength. However, the frequency of capacity building varies substantially from country to country. While ARV has been useful in some cases, attitudes are mixed and there are significant concerns about its performance.

² ARC also works to raise awareness among policymakers and the media.

Various contextual factors affect ARC's capacity building. Positive factors include favourable political will, pre-existing national frameworks and systems, proximity of ARC to implementing departments, and the prestigious status of ARC. Factors hindering ARC's capacity building include government staff turnover, lack of clarity on training of new members of TWGs, a dependence on short-term in-country training models, and limited mechanisms for flow-down of training to district and community levels by the government.

Replica partners, in the case study countries specifically the World Food Programme (WFP), have provided capacity building on DRM and support with logistics and mobilisation of funds. These activities are part of their mandate, and it is unclear how much Replica membership itself boosted their existing capacity-building activities.

Findings: Deploying payouts to reduce the impact of climate disasters (EQ3 and EQ4)

The evaluation assessed the quality of the CPs for all sampled payouts and, for the case study countries, the implementation of the plans and the effect of the assistance at household level. They were assessed against a rubric defining quality criteria and standards for timely assistance, which was defined together with key stakeholders and sector experts. This took into account the growing evidence base for early action and the emerging focus on 'windows of opportunity' for timely assistance within a seasonal livelihoods calendar and/or crisis timelines.

Overall, assessing intentions as expressed by the plans, **the CPs scored moderately well.** This suggests that, at the point of payout, most responses were set up to deliver 'improved assistance' in line with good practice. The majority of FIPs **scored highly on timeliness**, evidenced by their intention to implement an intervention ahead of the relevant lean season and/or the 'traditional' period of response to peak humanitarian needs. However, **in over a third of FIPs it was already clear at the moment of submission of the FIP that the ARC payment was not going to achieve the intended catalytic effect** (e.g. where timelines had slipped into 'normal' response planning). The FIP documents are generally successful in presenting a clear 'line of sight' between the choice of activities and mitigating or reducing crisis impacts, but in many cases presented evidence that the ARC finance was insufficient compared to overall response needs to achieve the desired impact. FIPs lacked detail on targeting and gender dimensions, which contributed to the lower scores in those areas. Nonetheless, the FIPs were found to be reflective of dynamic and changing situations and remain an important tool for ARC and member states to carefully plan and document their intentions on how the payout will be implemented.

ARC payouts have a key performance indicator (KPI) to be made in less than 30 days from when a payout is triggered. For the 16 drought payouts analysed, **the average (median) period from the end of season to ARC payment was 116 days**, which reduced to 68 days when countries that experienced basis risk events were removed from the analysis. Two cyclone payouts took 25 days and 71 days; one remains outstanding. **Only two payouts were within 30 days of the end of the season.** Small delays seem to be apparent across the full process, but two key areas emerged as the sources of the greatest delays: 'basis risk situations' (the technical term used to refer to mismatches between the model and losses experienced on the ground) and lengthy FIP approval processes. Once Board approval was reached, payouts were largely made by ARC Ltd within their KPI target of 10 business days.

Findings from the case study countries were consistent with previous evaluations, indicating that ARC financing is typically early compared to other financing, but **that payouts are not**

systematically resulting in faster assistance. Among the five ARC payouts reviewed, only one response was faster than the ‘traditional’ response timing in comparable crises. Reasons were related to delays incurred by ‘negotiated’ payments, the length of planning processes (e.g. time spent updating and approving FIPs), the capacity of government systems to implement a rapid and robust response (releasing finance to implementing bodies, long procurement processes, etc.), and ARC funds being absorbed into ‘normal’ annual assistance programming.

Countries implemented the menu of activities defined in their plans with no changes in the choice of activities. However, the **implementation of responses was generally later than planned** (ranging from one month later to delays of more than 1.5 years). In addition, in two out five responses **the targeting process was contested at local level and was implemented differently to the specified plans**. One change in activities was considered positive due to changes in market conditions requiring a switch from cash to in-kind maize distribution, underlining the importance of a degree of flexibility.

At community level, the **type of assistance provided was generally perceived to be appropriate to the needs but in all the government responses it was considered to be insufficient in quantity and/or duration**. While ARC-financed support is intended only to cover immediate needs and dovetail with a subsequent, traditional humanitarian response, the latter did not always take place. In addition, three out of four of the responses reviewed were reported at community level to be late; while still useful, they did not arrive at the moment at which they could have provided most value to communities (e.g. before food had run out). Two of the case study countries used social registries for targeting, which offered potential for speed benefits, but both suffered from problems with accuracy due to being out of date.

In three out of four responses **the aid was delivered too late to prevent negative coping strategies**, which were reported by communities to be already fully underway by the time the aid arrived. This included not just reduced food consumption or taking loans but also the coping strategies most damaging to long-term resilience such as selling of assets, including livestock or household goods. In one case (Mauritania Replica), where the aid arrived earlier than the lean season period, it was reported by beneficiaries to be just in time to prevent negative coping. For all responses, it is important to note that communities nonetheless reported that the ARC-funded **assistance provided much needed relief, supporting them to meet urgent needs and allowing them to maintain food consumption for the limited duration of the intervention**. Larger households found rations to be insufficient but otherwise no significant variations were identified between households. In two out of the three countries gender and social equity considerations were built into the targeting criteria. In FGDs conducted with men and women separately, feedback received was that women were benefitting equally to men.

Factors explaining the extent of this contribution

All of the responses reviewed **integrated ARC funds into a wider response**, rather than treating them as a standalone project. Shock-responsive social protection is a delivery channel with significant potential to improve the delivery of assistance, **but the anticipated speed benefits were not generally realised in the examples studied for this evaluation**. In cases where ARC funds were fully absorbed into business-as-usual lean season assistance, it was hard to identify any effects of ARC on improving assistance. In WFP Replica cases where the ARC assistance was separate but bolted onto existing programming (extra months of assistance before or after), it offered a good shock-

responsive approach that leveraged ongoing programming but was reportedly difficult to manage. Pre-financing of assistance (later paid back by ARC funds) emerged as an important component in speeding up the delivery of assistance.

Social registries offer significant potential benefits in timing and efficiency by speeding up targeting rather than conducting community-based house-to-house registrations, but only when they are kept up to date. The choice of cash versus food was widely commented on by government stakeholders and community respondents, with findings suggesting benefits in deploying a more flexible approach that can adjust modality depending on variables such as market prices, access to markets, and individual vulnerabilities such as disability. ARC's model, which assumes that ARC funds will be used first, while other sources of funds are mobilised to cover the remainder of the season, is challenged in situations where no other funds materialise and funds are therefore spread too thinly to achieve desired impacts at household level.

Findings: Progress against country-level ToC (EQ5)

We assessed the country-level ToC against the evidence collected, reviewing how much progress has been made at each stage. We found that the most positive progress happened in the steps *before shock*, that is as inputs and outputs, and intermediate outcomes.

In terms of engagement, positive progress was made with member states developing and agreeing CPs and purchasing ARC insurance policies, the establishment of a framework for Replica collaboration, and member states integrating contingency planning into their DRM policies and processes. Positive progress has been achieved in the provision by ARC and uptake by countries of support to DRM and contingency planning. As a result, there has been some progress in terms of improvements to member states' overall coordination processes and preparedness to implement CPs. Considering innovative financing, positive progress was made on the provision of innovative insurance products by ARC Ltd, with insurance contracts being put in place.

More limited progress has been made *after shock* on the outcomes and impact level, with payouts from ARC generally not being timely and problematic targeting and timeliness of the support delivered by the recipient governments. As a result, vulnerable households were not in general able to substantially reduce negative coping strategies and maintain their assets.

Conclusions, lessons, and recommendations

Conclusions

ARC has made a significant contribution to developing country preparedness, particularly in two specific areas: coordination and response planning. ARC insurance policies increase financial preparedness, although they are typically a modest fraction of total need. However, there are gaps in other areas of country government capabilities that are essential for ARC's objectives to be met, including rapid targeting and delivery of assistance, M&E, and the integration of ARC's support with wider financial preparedness. Other in-country partners sometimes complement ARC's support.

Most responses were not faster than the 'traditional' response in comparable crises. There were delays in the process from trigger to payment due to both government and ARC processes, as well as in the actual delivery of assistance. As a result, the assistance

provided allowed for urgent needs to be met but most of the responses were too late to deliver the expected benefits in preventing negative coping strategies. One of the case study payouts was successfully used to provide assistance in advance of the usual lean season support, demonstrating that it is possible for ARC support to work as intended.

Cyclones are different from droughts. In Madagascar, ARC support did not enable an effective and timely response by the government, although Replica was more successful. This raises the question of whether current ARC processes are appropriate and whether the objectives of ARC support are clear and relevant.

For the period covered by this evaluation, ARC's reporting and monitoring, evaluation, and learning (MEL) systems have not worked as intended. Despite ARC guidelines indicating that countries utilising payouts should provide monthly progress updates, final reports, and be subject to independent process evaluations, most of the payouts in the sample had no M&E documentation available to allow us to review their implementation.

Interventions were generally intended to be targeted to reflect gender and equity considerations. However, in the case-study countries, targeting did not always follow the plans and reporting was not disaggregated by sex or other vulnerability. Gender differences in the receipt and relevance of the assistance provided were not reported by beneficiary governments.

Recommendations

A number of recommendations are identified for member states, ARC, and other stakeholders. Some of these reinforce or develop recommendations made in the second formative evaluation (FE2), which was completed in 2022. It is recognised that the building and strengthening of government systems, which are a fundamental part of ARC's ToC, often requires substantial time and resources.

Drought response

Member states:

1. **Speed up the response time, from initial identification of drought to assistance reaching beneficiaries.** This evaluation reiterates the recommendation from FE2 for governments to speed up their response from the time of receiving a payout to the assistance reaching beneficiaries. It also recommends that they: ensure that systems for managing funds, for targeting, and for the procurement and distribution of assistance can be activated in advance of the payout arriving; explore mechanisms for making more intentional use of pre-financing; and ensure that there is broad agreement across government of the importance of early action and the urgency required to deliver it.
2. The current evaluation recommends also **reducing the time taken between the identification of a drought and the initial receipt of the ARC payout**, since there are often significant delays at this stage. For member states, this requires ensuring that national systems rapidly implement the steps required by the FIP, for example avoiding a lengthy needs assessment process.
3. Member states should look for ways of **collaborating more closely with country-based organisations**, including ARC Replica partners, whose expertise may help them to increase the efficiency and effectiveness of their support – as recommended in FE2.

4. Member states also need to enhance their **capacity to implement targeting processes, with attention to gender and equity issues** (based on analysis of the differential impacts of crises by gender), **strengthen their M&E systems**, and **better institutionalise** capacities developed through ARC support – as recommended in FE2.
5. Member states should consider where the ARC relationship is ‘housed’ in government **and actively work to socialise ARC across different government departments** to facilitate the wider catalytic effects that ARC can bring.

ARC:

1. **Identify and implement ways to streamline and speed up the process of FIP approval.** This process was found to introduce significant delays to the payout process, reducing ARC’s ability to deliver on its core mandate. ARC must understand the causes of delays and identify how they can be removed. This may potentially require reducing the number of approval processes required, changing the level at which FIPs are approved, or frontloading more of the approvals to the OP stage. ARC guidance and templates should also **provide greater clarity and accountability related to gender and M&E activities**.
2. **Agree a standardised and faster process for dealing with basis risk events.** ARC should identify lessons from experiences to date so that any resolution is timely and transparent.
3. **Help recipient governments improve drought responses.** This evaluation reiterates the FE2 recommendation that ARC Agency help recipient governments improve implementation of their drought response. It also recommends that ARC: support member states to make more use of government pre-financing; help ensure that there is broad agreement across government of the importance of early action; and encourage the identification of windows of opportunity for early action based on a specified seasonal/crisis calendar.
4. This evaluation supports the recommendation made in FE2 that ARC Agency **develop a more strategic, systematic, and cost-effective approach to capacity building**. In addition, this evaluation recommends that ARC should clarify and delineate its mandate and resources available for capacity building and actively coordinate with other partners to provide complementary capacity building.
5. **Improve the drought risk modelling available to member states.** This evaluation supports the recommendation made in FE2 that ARC commission a fundamental **external review of the drought model** to ensure that it is fit for purpose. This evaluation recommends that such a review should also include within scope **the possibility of using alternative indexes or models** in circumstances where ARV is not appropriate.

Cyclones

1. **Clarify the objectives of ARC cyclone insurance** and how far it should address immediate relief requirements, livelihoods recovery, and/or longer-term infrastructure rehabilitation and reconstruction, including with respect to protective infrastructure such as shelters.

2. **Review and revise ARC processes and guidelines** to ensure they are consistent with the objectives agreed under recommendation (1) and reflect the specific challenges of cyclones. This should consider removing the FIP process to speed up the process, 'de-risking' the pre-financing of activities and encourage countries to plan for complex operational challenges and how to make best use of complementary support from different partners.

AU and development partners

1. Encourage ARC, through the Board and other channels, to **address the findings and recommendations in this report**.
2. The AU and development partners should use their influence to **encourage member states to consider and address the recommendations made in this report** and should **provide consistent and coherent support to those that are doing so**. This should help to address both immediate gaps, such as the absence of complementary humanitarian funding, and longer-term systems strengthening.
3. **Consider whether KPIs for ARC around timeliness of assistance should be based on country-level windows of opportunity for early action based on seasonal/crisis calendars**, rather than using a uniform target of 120 days.

Lessons

Lessons emerging from this evaluation for potential 'development insurers' include:

1. The critical role of government capacity and early planning and preparations in implementing an effective and timely response, and in monitoring and reporting on that response.
2. The importance of knowing who is reached by assistance, with what type of assistance, and how soon, in order to better understand development and welfare impacts.
3. The importance of engaging with different components of governments and recognising the challenges in communication and collaboration that often occur between them.
4. The Replica model demonstrates that a valuable role, complementary to government, can be played by non-government actors both in delivery financed through similar insurance products and in capacity development.
5. The need to consider the trade-offs between timeliness and detailed control and risk management in the use of the payouts.

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List of abbreviations

ADRFi	Africa Disaster Risk Financing Initiative of the African Development Bank
AfDB	African Development Bank
ARC	African Risk Capacity
ARV	Africa RiskView
AU	African Union
BNGRC	Bureau National de Gestion des Risques et des Catastrophes (National Risk and Disaster Management Office)
CAT-DDOs	Catastrophe Deferred Drawdown Options
CBA	Cost–benefit analysis
CDRFI	Climate and disaster risk finance and insurance
CP	Contingency plan
CPGU	Cellule de Prévention et d'appui à la Gestion des Urgences (Emergency Management and Prevention Unit)
CSA	Commissariat de Sécurité Alimentaire (Food Safety Commission)
DAC	Development Assistance Committee
DCAN	National Crisis Prevention and Response Dispositive
DFID	UK Department for International Development
DoDMA	Department of Disaster Management Affairs
DRF	Disaster risk financing
DRM	Disaster risk management
EQ	Evaluation question
ESG	Evaluation Steering Group
FCDO	UK Foreign, Commonwealth, and Development Office
FE1	First Formative Evaluation
FE2	Second Formative Evaluation
FGD	Focus Group Discussion
FIP	Final Implementation Plan

GESI	Gender, equity, and social inclusion
GoS	Government of Senegal
IA1	Impact Assessment Phase 1
IFRC	International Federation of Red Cross & Red Crescent Societies
INGO	International non-governmental organisation
IPC	Integrated Food Security Phase Classification
KfW	Kreditanstalt für Wiederaufbau (German Investment and Development Bank)
KII	Key informant interview
KPI	Key performance indicator
M&E	Monitoring and evaluation
MDAs	Ministries, departments, and agencies
MEL	Monitoring, Evaluation and Learning
MoA	Ministry of Agriculture
MoF	Ministry of Finance
MoU	Memorandum of understanding
MVAC	Malawi Vulnerability Assessment Committee
NGO	Non-governmental organisation
NOAA	National Oceanic and Atmospheric Administration
OECD	Organisation for Economic Co-operation and Development
OP	Operational Plan
OPM	Oxford Policy Management
RAG	Red, amber, green
SCTP	Social Cash Transfer Programme
SIP	Senegal Impact Assessment Pilot
TCE	Tropical Cyclone Explorer
ToC	Theory of Change
TWG	Technical Working Group
UBR	Unified Beneficiary Registry

UN	United Nations
UNICEF	United Nations Children's Fund
USAID	United States Agency for International Development
V20	The Vulnerable 20 Group of Finance Ministers
WFP	World Food Programme

1 Introduction

1.1 Overview of ARC

ARC was established by the AU in 2012 as an effort to respond to recurrent drought-related food insecurity in Africa. Droughts across the continent, growing awareness of climate-related risks to African countries, and the success of the Caribbean regional risk pool prompted African countries, WFP experts, and development partners to develop an African-owned regional risk pool. ARC is the only sovereign insurance pool in Africa, and the first in the world that links payouts to pre-approved CPs.

ARC aims to enable countries to *'strengthen their disaster risk management (DRM) systems and access rapid and predictable financing when disaster strikes to protect the food security and livelihoods of their vulnerable populations'* (ARC, n.d.).

ARC comprises ARC Agency, a Specialised Agency of the AU, and ARC Ltd, a financial affiliate that delivers risk transfer services. ARC Agency is tasked with building capacity in member countries to plan for and respond to climate disasters, including risk modelling through ARV, ARC's proprietary software application, and to help raise awareness among AU member states and the broader public of ARC's mission and goals.

A more detailed description of ARC and its work is given in Section 2.

1.2 Overview of the ARC evaluation

A range of donors have provided financial support to the ARC Group over the years and are interested in exploring lessons learned from ARC's operations. In particular, DFID – now the FCDO – commissioned a long-term independent evaluation of ARC, running from 2015 to 2026, which is being implemented by OPM.

The overall evaluation contract was designed to have two major components: a formative evaluation stage and an impact assessment stage. The design at inception identified key objectives as follows:

- The formative evaluations would consider ARC's effectiveness and performance and feed lessons into the management of the ARC programme.
- The impact assessments would assess the value of contingency planning and early responses in minimising the impact of (and accelerating recovery from) extreme weather. They would consider where, when, why, and how ARC is or is not effective, with the aim of contributing to the global evidence base.
- The evaluations would also provide accountability to the UK taxpayer for the FCDO's (then DFID's) investment in ARC.

Rather than responding exclusively to the original terms of reference – which are now outdated – FCDO, ARC, and a core donor group have agreed that OPM's work should provide a joint and coherent set of evaluations, which more comprehensively reflect current priorities. This avoids potential duplication and inefficiencies if other donor evaluations were to be undertaken separately. This is guided by the ESG, which includes key stakeholders of ARC. The ESG helps to ensure the evaluations' relevance and utility to ARC and its stakeholders.

The inception report and first formative evaluation (FE1) were completed in 2016 and 2017, respectively. FE2 was due to take place in 2019 but was delayed due to major changes occurring within ARC. It was completed in 2022. A pilot impact assessment of a 2019 payout to Senegal (both sovereign and Replica) was undertaken in 2020/21 (the 'Senegal Impact Assessment Pilot'). IA1 runs between 2023 and 2024. A final evaluation will be completed by the end of 2026.

1.3 IA1

IA1 employed a theory-based approach to contribution assessment. The rationale for this is laid out in the ARC Inception Report and includes the fact that the success of ARC's programme depends on a number of potentially non-linear and interrelated factors operating at different levels, and also that ARC insurance is not intended to cover the full risk of a drought disaster, which poses challenges when trying to evaluate ARC's contribution to success.³

The IA1 evaluation used a theory-based, mixed-methods approach to collect and analyse data to test one part of ARC's ToC and address the EQs. A detailed sub-ToC describing ARC's intended pathways of impact at the country level has been developed. The IA1 tested this using evidence triangulated from a variety of sources, building on the evidence base from previous evaluations. It gathered and tested evidence of ARC's contribution, through its assistance to member countries, to reducing the impact of climate disasters on vulnerable households.

IA1 focused on ARC member countries that have had a payout from ARC in the period 2020–2023, including Replica⁴ payouts. This included drought (crop and rangeland) and cyclones. Data was collected from documentary sources for all countries that received an ARC payout since 2020. A sub-sample of three countries was selected as cases for more in-depth study with primary data collection. These are Mauritania, Madagascar, and Malawi.

The EQs were agreed with the ESG and are listed below, with related Organisation for Economic Co-operation and Development (OECD) Development Assistance Committee (DAC) evaluation criteria identified in parentheses:

1. To what extent and how have ARC's capacity-building work and oversight processes improved national preparedness, both financial and operational, and planning of assistance? (*effectiveness, relevance, coherence*)
2. What factors influence the effectiveness of ARC's capacity-development work? (*effectiveness, relevance, sustainability*)
3. To what extent and how has ARC contributed to reducing the impact of droughts and cyclones on vulnerable households in its member states? (*effectiveness, relevance*)
4. What have been the main factors explaining the extent of this contribution? (*effectiveness, relevance, sustainability*)
5. To what extent does ARC's country-level ToC hold?

³ For more details on the evaluation's theory-based premise, see the inception report (OPM, 2017). Note that the original design envisaged a contribution analysis, but the scope of work does not permit a full process of iterative testing.

⁴ This is a financial mechanism that allows UN agencies and other humanitarian actors to take insurance that matches country government insurance policies.

These questions were divided into three workstreams: Workstream 1 – Improved country-level preparedness; Workstream 2 – Deploying payouts to reduce the impact of climate disasters; and Workstream 3 – Synthesis of findings around the ToC.

1.4 Report structure

This first section of the report introduces the ARC evaluation and the IA1 report structure. The remainder of this report is structured as follows: Section 2 provides an overview of ARC and its ToC. Section 3 describes the approach and methods for the evaluation.

The findings of the IA1 are presented in Section 4, covering all three workstreams. Section 5 presents the conclusions, lessons, and recommendations from the evaluation.

Additional information is provided in annexes. Annex A provides a detailed outline of methods, including a summary of the sample, data collection, and analysis. Annex B includes the evaluation matrix and rubrics. **Error! Reference source not found.** provides additional material not used in the main text (the payouts considered for Sample A and a summary of payment times). Annex D presents the list of key informants.

2 Background and description of ARC

This section provides an overview of ARC, a description of the evolution of ARC, and a country-level ToC for ARC's work.

2.1 Overview of ARC

ARC was established in 2012 as a to help AU member states improve their capacities to better plan for, prepare, and respond to extreme weather events and climate-driven disasters. Its objective is to assist member states in reducing the risk of loss and damage caused by extreme weather events and natural disasters affecting Africa's populations by providing targeted responses to disasters in a timely, cost-effective, objective, and transparent manner. ARC has also been involved in developing innovative finance mechanisms to enable country-led rapid responses to disease outbreaks and epidemics. These mechanisms are designed to prevent the further spread of such catastrophes and reduce over-reliance on external donor support. ARC Replica – a parallel scheme to extend the coverage of ARC through humanitarian organisations – began in 2018 with funding from Kreditanstalt für Wiederaufbau (KfW). ARC provides an African solution to some of the world's most pressing challenges of climate-induced disasters, as well as outbreaks and epidemics, by partially transferring the burden of such risks away from individual governments to private insurance markets.

ARC Group comprises two entities: ARC Agency and ARC Limited. ARC Agency, a Specialised Agency of the African Union (AU), is the capacity building, educational, and advocacy arm of ARC. It provides extensive capacity building for countries on the elements of early warning, risk modelling (particularly ARV)⁵, contingency planning, DRM, and DRF. ARC Limited is a sovereign-level mutual insurance company that provides coverage to member states and other parties.

ARC should, through a pooled insurance model, offer African countries competitive pricing for relevant insurance products. At the national level, it should improve the ability of governments to better anticipate, plan, and respond to disaster risk by strengthening capacities, awareness, and action around DRM. Finally, at the local level, vulnerable households should be more resilient to disasters through the receipt of timely support.

2.2 Evolution of ARC

There has been substantial change to ARC Group since the early formative evaluations. These changes are both internal to ARC and relate to developments in the wider DRF context, and include the following:

ARC's strategy has undergone several changes. The 2016–2020 Strategic Framework was replaced by the 2020–2024 Strategy, which was then refreshed in November 2020 (ARC, 2016; ARC, 2019; ARC, 2020). While the strategic objectives of these documents remain

⁵ ARV is ARC's proprietary software application which combines historical rainfall data with vulnerability data to estimate drought-related response costs and define triggers for the parametric insurance.

similar,⁶ there are changes to the vision, mission, and goal, which among other things broaden the focus from insurance to '*harmonised resilience solutions*' and reflect the commitment to a '*strengthened, holistic and diversified DRM plan*'. There has been ongoing work to strengthen coordination between Agency and Ltd. There is also a range of innovations introduced – including new insurance products available, a more tailored and strategic approach to country engagement, a strong focus on gender, and new approaches to forecast-based financing and micro- and meso-insurance.

Initiatives and approaches have also changed over the last few years. The rangeland drought and tropical cyclone products have been launched, while there has been considerable investment in the development of the flood product. An outbreak and epidemics product is also live, with separate donors and capital base.

A further major development in the last few years has been the evolution of ARC Replica. Launched in 2018, the aim of ARC Replica is to extend the coverage of ARC to protect more people by enabling humanitarian partners (WFP, the Start Network, and now the UN Refugee Agency) to take out 'matching' insurance policies to sovereign policyholders. Alongside donor premium subsidies, there is increasing interest in Replica on the part of both ARC member states and donors as a tool to amplify government efforts, not only through the increased coverage but also through the technical and operational capacity they bring into the ARC country-level process. In the sample studied, Replica policies were taken out in seven out of the 11 countries. In three countries, the ARC Replica policy is the only ARC policy, as ARC member states were unable to purchase due to financial or other operational constraints. Replica partners can now also select different risk transfer parameters than the government.

In addition, ARC Ltd is increasingly being sought out as an insurance provider for humanitarian partners outside of the Replica collaborative framework, for example through the provision of 'anticipatory insurance' to the UN Office for Coordination of Humanitarian Affairs (Maslo, 2022). This echoes a wider trend in which ARC Ltd insurance is being provided to schemes such as those initiated through the World Bank (such as in Djibouti) or private sector organisations such as Pula⁷ to provide insurance to African farmers. This 'non-sovereign business' sits outside of the core ARC proposition and country engagement (including not just insurance but also capacity building and wider services) and is therefore not covered in the present evaluation.

Another major change is the development of ADRiFi, which initially ran from 2019 to 2023, providing **premium subsidies** and technical support.⁸ Countries already participating include the Gambia, Madagascar, Mauritania, Niger, and Zimbabwe. Moreover, many other countries are engaging with the AfDB on this, particularly fragile and conflict-affected countries. Toward the end of 2023 at least five donors pledged funding to continue their support to ADRiFi.

⁶ The 2020 strategies are as follows:

Strategy I: Innovate – A dynamic approach to research and development;

Strategy II: Strengthen – Strengthen DRM on the continent; and

Strategy III: Grow – Increase scalability and sustainability of ARC operations and insurance coverage.

⁷ Pula is an agricultural insurance and technology company that designs and delivers innovative agricultural insurance and digital products to help smallholder farmers endure yield risks and improve their farming practices.

⁸ ADRiFi is funded partly through the African Development Fund (the concessional loan window of the AfDB) and partly through a multi-donor trust fund.

The new strategy, leadership, organisational structure, and products, as well as significant subsidy for premiums and ARC Replica, have provided opportunities to expand coverage. The increase in the number of **policyholders** has been significant: from around 4–6 in the early years, to 11 countries having policies in 2019/20 and 2020/21. For example, in the 2021/22 pool (Pool 8), there were 29 policies across 14 countries, 11 of which are ARC Replica and four supported by ADRiFi.

2.3 The DRF landscape

These developments at ARC since the evaluation inception report was written can be placed in a broader context of development of the DRF landscape in Africa. These include, for example, the work of the **World Bank**, which continues to engage very strongly in Africa through the ADRiFi initiative, the De-risking, Inclusion and Value Enhancement of Pastoral Economies in the Horn of Africa (DRIVE) project, and the new Regional Emergency Preparedness and Inclusive Recovery Program (REPAIR) initiative. The Bank has worked with ministries of finance to develop DRF strategies in Kenya, Lesotho, and Zimbabwe and to explore contingent financing options in several countries, including implementation of loan instruments ahead of future shocks such as the Catastrophe Deferred Drawdown Options (CAT-DDOs).

A new avenue for coordination is emerging in the form of the Global Shield Against Climate Risks, a joint initiative between the V20⁹ and G7¹⁰ launched in 2022 that will *‘increase protection for poor and vulnerable people by substantially enhancing pre-arranged finance, insurance and social protection mechanisms’* (V20, n.d.). The Global Shield aims to bring together previously separate climate finance and DRF programmes under one umbrella, to channel better coordinated and harmonised support, finance, and products to climate-vulnerable countries. The Shield has selected a number of ‘Pathfinder’ countries, including Ghana and Senegal in Africa.

The evidence landscape continues to evolve, including two key reports: an evidence gap assessment published by the Centre for Disaster Protection in 2021 and a strategic evidence roadmap for CDRFI produced under the InsuResilience Global Partnership (Hill *et al.*, 2021; InsuResilience Global Partnership and Munich Climate Insurance Initiative, 2021). These reports flagged important and pressing gaps, particularly in evidencing impact at country level. ARC remains unique as a sovereign CDRFI instrument in its contribution to date to the evidence landscape, which will be furthered through the present evaluation.

2.4 ToC

A ‘working’ sub-ToC for ARC’s intended effects at the country level was developed for use in this evaluation, providing more detail at this level than ARC’s overall ToC. It is arranged around three pathways: Engagement; DRM planning and assistance; and Innovative financing. These pathways are the main areas in which ARC engages with member states to promote its goals of protecting the resilience of vulnerable populations by enhancing planning for climate-related crises. A diagrammatic representation of the sub-ToC can be found in Figure 1.

⁹ The Vulnerable 20 Group of Finance Ministers.

¹⁰ Group of Seven.

The ToC is divided into ‘aspects’, based on these three pathways (A, B, C) and the stage along the causal pathways that they occur (1, 2, 3, 4) toward achieving the intended impact. This enables us to reference which aspect of the ToC relates to specific EQs (see Annex B). Assumptions underlying the causality within the ToC are provided in parallel to the pathways, and are numbered for ease of reference.

The following narrative provides a basic description of the ToC, arranged according to the three pathways:

- **Engagement**

The first stage of ARC’s engagement with a country, this pathway is fundamental to establishing the relationship between ARC and the country. Strategic engagement occurs around a country’s DRM and DRF policies, needs, and ARC’s offering in these areas (A1). Once a number of aspects of the insurance policy have been agreed, and a CP completed, member states may purchase the ARC insurance policy (A2), from which point they are able to integrate contingency planning into their wider DRM policies and processes (A2). If there is interest from the member state, ARC can facilitate a partnership framework with a replica partner (subject to funding availability) in the form of a tri-partite memorandum of understanding (MoU) between the member state, ARC, and the partner (WFP or Start Network).

- **DRM¹¹ planning and assistance**

ARC’s technical support and tools are offered to member states engaged with ARC (B1). This begins with the offer of training on its tools (such as the early warning system) and support for DRM and contingency planning (B1), following which ARC expects member states to have a finalised and approved CP, TWGs, and a customised ARV in place, among other things (B2). Where a Replica MoU is in place, ARC also facilitates the inclusion of the humanitarian partner in order to support the process and purchase matching ‘replica’ policies.

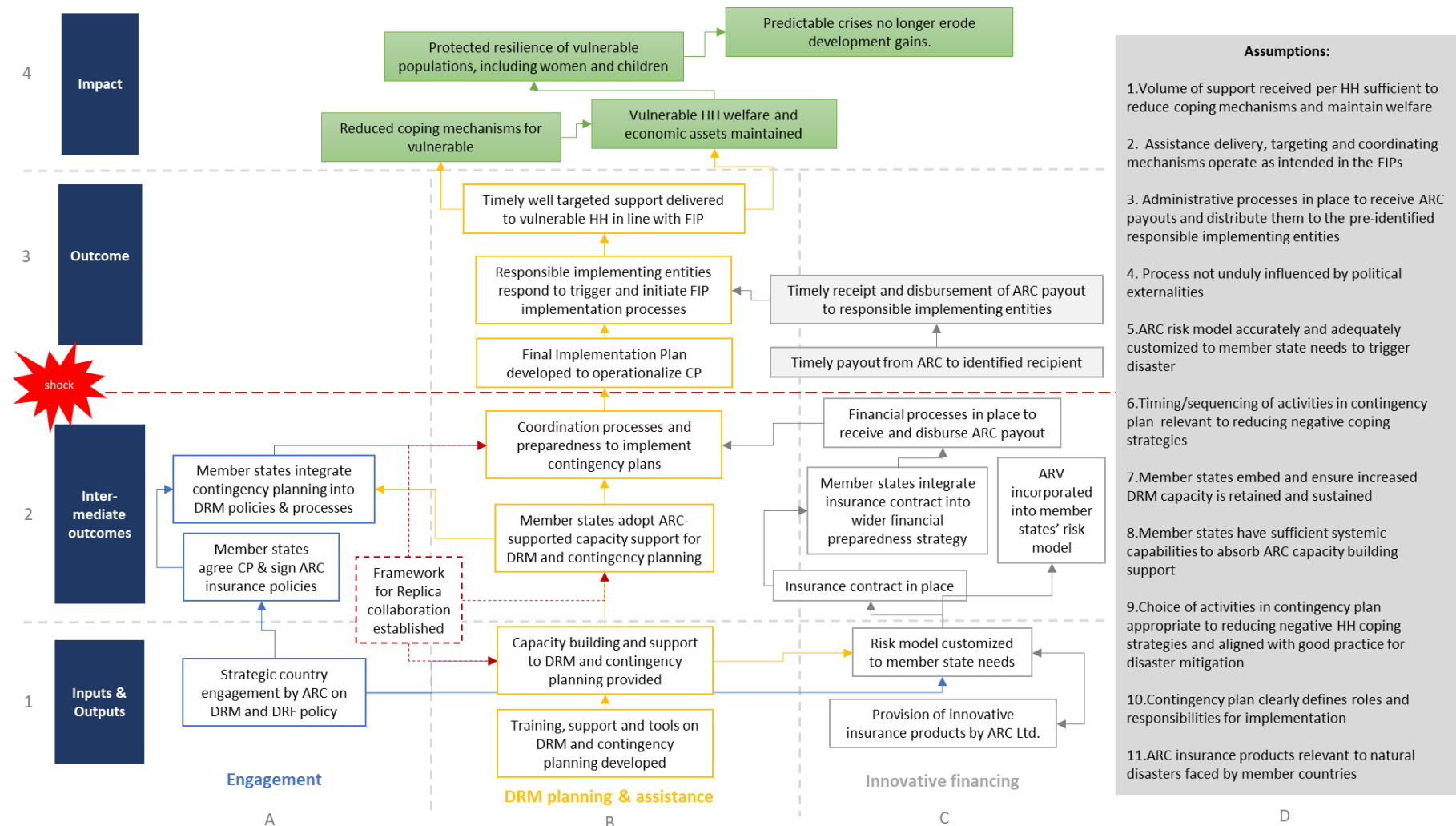
An assumption is that member countries have a minimal level of systemic capability for DRM planning, upon which they are able to grow their capacity through ARC’s support. This further assumes that member countries will endeavour to embed capacity and ensure increased DRM capacity is retained and sustained.

Based on the processes set forth in the CP, member countries plan coordination processes and establish preparedness measures to implement CPs in the case that a payout is triggered (B2). This assumes the CPs clearly define roles and responsibilities for implementation, and that the choice of activities in the CP are appropriate to reducing negative coping strategies and are aligned with good practice for disaster mitigation.¹²

¹¹ The term ‘DRM’ has been adopted as the target of ARC capacity support instead of ‘emergency response’. This is to reflect the objective of the ARC mechanism, i.e. to support countries to implement early assistance to mitigate crisis impacts, which is typically different in its timing, the capacities it requires, and the types of actions that are implemented compared to ‘traditional’ emergency response.

¹² As part of ARC’s quality assurance processes, CPs are reviewed by the Technical Review Committee and approved by the Peer Review Mechanism.

Figure 1: ARC country-level sub-ToC



- **Innovative financing**

ARC has developed disaster risk insurance products, including, most notably for this evaluation, drought (crop and rangeland) and cyclone insurance products. ARC also has the ARV and TCE models, which are used as its early warning system to trigger payouts in the case of droughts and cyclones respectively (C1). These products then need to be customised to the specific needs and characteristics of member states (C1). This assumes that ARC's insurance products are relevant to the disasters faced by member countries that wish to purchase its products.

Once ARV is customised, the insurance contract can be finalised and member states (and Replica partners where relevant) can incorporate its provisions into their wider financial preparedness strategy and develop processes to receive and disburse ARC payouts for when a crisis occurs (C2). TCE has a lighter customisation process. Member countries are also able to use the risk model as a tool for early warning (C2).

- **Post-shock**

At this point in the ToC, the pathways converge around the occurrence of a shock (drought or cyclone). At the country level, a FIP is developed to operationalise the CP (B3) at the point where a payout from ARC is triggered in response to the shock (C3), assuming the ARC risk model is accurately and adequately customised to identify country needs and trigger the payout.

Once the recipient(s) (member state and/or Replica partner) receive the payment, the recipient proceeds with timely disbursement of that payment to the implementing entities identified in the FIP (C3), assuming administrative processes are in place to receive ARC payouts and distribute them to the pre-identified responsible implementing entities and that these processes are not unduly influenced by political externalities.

The implementing entities then initiate the implementation processes outlined in the FIP, resulting in timely and well-targeted support delivered to vulnerable households in line with the parameters identified in the FIP (B3), assuming that the assistance delivery, targeting, and coordination mechanisms operate as intended in the FIPs.

The impact expected from such well-targeted and timely assistance is reducing negative coping mechanisms for vulnerable households, enabling them to maintain their welfare and economic assets through the shock. This maintained welfare protects the resilience of vulnerable population groups, including women and children, assuming the volume of support received per household is sufficient to reduce negative coping mechanisms and maintain welfare.

In addition to protecting the resilience of vulnerable groups, this predictability and preparedness for crises also enables development gains to persist through the crises.

3 Evaluation approach

3.1 Objectives, scope, and audience

3.1.1 Objectives and scope

The objective of this impact assessment is to assess the contribution made by ARC's work, through its assistance to member countries, to reducing the impact of climate disasters on vulnerable households.

This assessment focuses on countries that have had a payout from ARC in the period 2020–2023. This includes drought (crop and rangeland) and cyclones. Replica payouts are also included.

3.1.2 Audience

The primary audiences of the assessment are ARC's core stakeholders, which include the ARC Group, ARC's donor partners, member countries, the AU, AfDB, and other members of the ESG, in addition to other ARC stakeholders and the wider DRF and DRM community. Table 1 below provides details of the target audience. A detailed stakeholder and communication plan was developed for this evaluation and is included in the design report (OPM, 2023). It is expected that core stakeholders will engage with the findings through the ESG, ARC's management response, and further dissemination to the Boards and the member states' annual conference of parties. The report and a short, accessible briefing note summarising the findings will reach a broader audience through publication on the OPM and ARC websites and dissemination through relevant channels.

Table 1: Target audience

Audience group	Members
Core evaluation stakeholders	ARC Group (ARC Agency and ARC Ltd) management and Boards
	ARC donors, including FCDO
	Member countries
	AU, AfDB, other members of the ESG
ARC stakeholders	African policymakers and government technicians who are directly involved with ARC and DRM
	Key ARC partners – such as WFP, Start Network, organisations carrying out process evaluations,
	The non-governmental environment that interacts in African countries with governments and ARC around DRM/DRF issues
	Beneficiaries (or potential beneficiaries) of the policies (i.e. citizens)
Wider DRF and risk management community	Donors, international finance institutions, practitioners, policymakers, and academics working on regional risk pools, and across related fields, such as DRM, humanitarian response, social protection, and M&E stakeholders outside Africa

3.2 EQs

The EQs and sub-questions are outlined in Table 2 below. Note that some of the sub-questions were clarified or combined during report writing to improve clarity.

Table 2: EQs and sub-questions¹³

Criteria	EQ	Evaluation sub-questions
Effectiveness (relevance, coherence)	1. To what extent and how have ARC's capacity-building and oversight processes improved financial, operational, and assistance planning at national levels?	1.1: To what extent are country-level DRM systems in place to deliver assistance in crises? ¹⁴
		1.2: Has capacity to deliver assistance improved since ARC began working in-country?
		1.3: To what extent has ARC contributed to any improvements?
		1.4: To what extent has ARC's risk model been effectively customised to country needs? How much has ARC's risk model contributed to early warning systems for drought and cyclones?
		1.5: To what extent does the capacity developed by ARC meet the needs of the overall government (and partner) DRM systems (versus mostly meeting the requirements of ARC)?
		1.6: How well is ARC's work coordinated with existing government systems and with support from other partners?
		1.7: Is engagement with ARC catalysing the adoption of financial and operational preparedness ahead of extreme weather events in member countries?
		1.8: Do governments learn and improve DRM mechanisms based on previous experience and lesson-sharing by ARC?
Effectiveness (relevance)	2. What factors influence the effectiveness of ARC's capacity-development work?	2.1: To what extent do ARC's product(s), approach, and quality of its implementation model influence its effectiveness in terms of supporting in-country capacity development?
		2.2: What has been the role of contextual factors in determining the effectiveness of ARC's capacity building?
		2.3: What has been the contribution of Replica partners to building capacity? And other partners to governments?
Effectiveness (relevance)	3. To what extent and how has ARC contributed to reducing the impact of droughts and cyclones on vulnerable households in its member states?	3.1: What is the evidence on good practice in assisting households to mitigate the effects of drought/cyclones?
		3.2: Do the FIPs provide a good basis for the effective distribution of assistance?
		3.3: How well do the FIPs align with the OPs, and is the rationale clear for any differences?
		3.4: Was the payout released by ARC in a timely manner?
		3.5: Did ARC financing help to mobilise a faster intervention? How was it coordinated/sequenced with other financing?

¹³ The current sub-EQ 3.9 is a combination of original sub-EQ 3.9 (*Did better delivery of assistance contribute to reducing negative household coping mechanisms?*) and 3.10 (*Did better delivery of assistance contribute to maintaining of household assets, and consumption levels? How do these benefits vary with the characteristics of the households?*). This was done to improve clarity in report writing.

¹⁴ Crises here means only droughts and cyclones.

Criteria	EQ	Evaluation sub-questions
		3.6: Was assistance delivered in line with distribution plans, and is the rationale clear for any differences? 3.7: Was the assistance delivered appropriate, timely, and well targeted to the most needy households and individuals? 3.8: Did the capacity developed by ARC contribute to improved assistance delivery? 3.9: To what extent has better delivery of assistance contributed to reducing negative household coping mechanisms, maintaining household assets and consumption levels? How do these benefits vary with the characteristics of the households? 3.10: How do benefits vary between individuals within households, particularly by gender?
Effectiveness (relevance, sustainability)	4. What have been the main factors explaining the extent of this contribution?	4.1: How does the operational delivery channel for payouts impact the contribution of ARC toward more effective delivery of assistance? 4.2: What has been the role of technical design choices in influencing the effectiveness of ARC payouts?
Relevance, Effectiveness	5. To what extent does ARC's country-level ToC hold?	To what extent does the evidence either confirm or challenge the country-level ToC, underlying assumptions, and causal processes for achieving its intended objectives?

3.2.1 Cross-cutting considerations

Gender, equity, and social inclusion (GESI)

Themes of gender and equity were considered in a cross-cutting way in IA1 through the preparation and implementation phases of country responses. ARC has a gender strategy and action plan (2019) as part of its efforts to '*uphold the gender equality principle in all its activities within the Agency as well as with its Member States*'. As such, ARC aims to '*systematically build a gender perspective into its operations and policies*' with the goal to '*transform Disaster Risk Management (DRM) approaches to ensure gender equality for vulnerable women and men in ARC Member States*'. It is often the poorest and most vulnerable who are most badly affected by climatic disasters.

The implementation of the gender strategy was partially reviewed in FE2. IA1 has a narrower focus and assessed the extent to which gender is considered in DRM planning and any variations in the nature or effect of assistance provided along gender lines. It also assessed the extent to which ARC interventions are reaching the most vulnerable and those who were most affected by climate-related shocks. This was carried out via reviews of the OPs and FIPs, as well as primary data collection in FGDs with recipients and non-recipients (male and female). In this way, this element of the evaluation addresses GESI issues.

Context and culture

The extent to which ARC's support is affected by the different contexts and characteristics of individual member states (environmental, political, socio-economic, and cultural) was assessed through primary data collection. This was considered an important dimension to many of the EQs.

3.3 Approach and methodology of the study

There are three workstreams in the assessment, which cover the pre-shock and post-shock elements of the ToC, as well as a synthesis of the findings against the ToC (see Table 3).

Table 3: IA1 workstreams

Workstream	Purpose	Data sources
1. Improved country-level preparedness	To assess the extent to which ARC has contributed to improving member states' national preparedness in financing, operationalising, and planning assistance for climate-related disasters and to determine the factors that influence the effectiveness of ARC's capacity-development work.	ARC programme documents; member state documents; KIIs
2. Deploying payouts to reduce the impacts of climate disasters	To assess the extent to which ARC's capacity building and payouts are contributing to improving the delivery of assistance to vulnerable households in ways that mitigate crisis impacts.	ARC programme documents; member state documents; KIIs; beneficiary interviews
3. Synthesis	To synthesise the findings and evidence against the ToC.	All evidence gathered by workstreams 1 and 2

3.3.1 Workstream 1: Improved country-level preparedness

The objective of the first workstream is to assess the extent to which ARC has contributed to improving member states' national preparedness in financing, operationalising, and planning assistance for climate-related disasters (EQ1) and to determine the factors that influence the effectiveness of ARC's capacity-development work (EQ2).

Capacity building – on risk modelling, contingency planning, and risk transfer – is a critical part of ARC's offering, both to ensure understanding of disaster risk insurance by governments and to support the development of their operational capacity to use ARC and other risk financing tools in support of greater country resilience.

EQ1: To what extent and how have ARC's capacity building and oversight processes improved financial, operational, and assistance planning at national levels?

- The first EQ seeks to establish how ARC's capacity building efforts have improved member countries' capabilities for the financial, operational, and assistance planning ahead of droughts and cyclones.

EQ2: What factors influence the effectiveness of ARC's capacity development work?

- The second EQ seeks to establish which factors such as ARC's offer, context, and/or Replica influence the effectiveness of ARC's capacity-development support.

3.3.2 Workstream 2: Deploying payouts to reduce the impact of climate disasters

The objective of Workstream 2 is to assess the extent to which ARC's capacity building and payouts are contributing to improving the delivery of assistance to vulnerable households in ways that mitigate crisis impacts. A central part of ARC's value proposition (and that of wider DRF instruments) is that it facilitates access to more quickly available funds than could be mobilised through 'traditional' *ex post* financing approaches such as humanitarian appeals. The earlier financing, together with the pre-agreed CPs, is intended to enable more timely responses that can reach households before they resort to negative coping strategies (such as selling assets or reducing food consumption) that can undermine resilience and erode development gains.

EQ3: How and to what extent has ARC contributed to reducing the impact of drought and cyclones on vulnerable households in its member states?

- This question seeks to analyse recent ARC payouts to identify the contribution made by ARC processes and products to improving the timeliness and effectiveness of response, and the effects that this has had on mitigating the effects of crises at the household level.

EQ4: What have been the main factors explaining the extent of this contribution?

- This focuses on identifying key drivers that influence the translation of payouts into impact for affected households. Modes of delivery of assistance and design choices, as well as other factors that affect these, are explored. The analysis seeks to identify positive and negative drivers of impact in the case study countries, while recognising the limited number of cases that can be assessed in this depth.

3.3.3 Workstream 3: Synthesis

The objective of Workstream 3 is to assess the extent to which ARC's country-level ToC holds – bringing to bear and synthesising pre-existing and current evidence to answer the fifth EQ.

EQ5: To what extent does ARC's country-level ToC hold?

The analysis for this EQ is informed by the evaluation design, which is theory-based. This means that the team used the ToC as the key to measuring success: if progress is being made within the components of the ToC and its underlying assumptions are holding, then we can determine positive progress toward achieving ARC's desired impact, or suggest corrective action if not. Evidence was drawn from the other two workstreams.

Conclusions, lessons, and recommendations were developed from these synthesised findings. The focus was on ARC, member states, and Replica partners and how country governments and other partners could more effectively capitalise on ARC support and systems to be more effective at anticipating and responding to drought and other climate-related disasters, as well identifying any other ways that government and Replica partners could strengthen their response. Recommendations are made for member states, ARC, and other partners on developing and maintaining country capacity and disaster response.

The evaluation examined the extent to which ARC's ToC is holding at the country level. It was not a performance evaluation of ARC Agency and ARC Limited *per se*. The findings therefore report on progress and challenges in some areas that are under the direct responsibility of member states, rather than the ARC itself, since they are an integral part of ARC's ToC. It is recognised that member states themselves also face challenges and competing priorities that may affect their ability to deliver in line with the ToC.

For more information on the EQs, please refer to Annex B.

3.3.4 Sampling and data sources

This assessment covered ARC member countries where a drought or cyclone had occurred and a payout was received between 2020 and 2023. This amounted to 11 countries that have collectively had 21 payouts. There was one payout in 2020/21, 11 payouts in 2021/22, and nine payouts in 2022/23. For further details, please refer to Table 19 in **Error!**
Reference source not found..

Sampling for this assessment was carried out at two levels: the country level (to identify a small group of countries where in-depth data collection was conducted) and the respondent level (to identify respondents for primary qualitative data collection). This process is described in this sub-section.

Country sample

To sample the countries, the sample was divided into two groupings:

- Sample A: The full set of 11 countries and 21 payouts under study. They were: Burkina Faso, Cote d'Ivoire, the Gambia, Madagascar, Malawi, Mali, Mauritania, Niger, Somalia, Togo, and Zambia. Evidence was gathered through limited secondary sources and some remote interviews with ARC staff.
- Sample B: A selection of three case study countries in which a much greater depth of evidence was explored for particular payouts.

For the case studies, three countries were purposively sampled from those where a payout was received in 2022 or 2023. These constituted cases for detailed study, drawing on documentary sources, KIIs, and FGDs. Within the constraint of selecting three countries, the intention was to include cases that cover drought insurance (ideally both crop and livestock), one country with cyclone insurance, one with a Replica policy, and one that is considered 'fragile'. These case study countries were Malawi, Madagascar, and Mauritania. The case studies were confirmed after a review against a number of considerations, including timing of the response, access, and security. Out of these three countries, the focus was on the recent drought payouts for Mauritania and Malawi, where the distribution of assistance was ongoing or recently completed for both. The focus in Madagascar was on the cyclone payouts. Replica payouts were received by Mauritania and Madagascar.

Respondent sampling

In addition to document review, the main data collection approach was semi-structured KIIs. These combined some structured data collection with more open questions that allowed more in-depth and nuanced information to be explored. KIIs were undertaken with a wide range of stakeholders and were used to answer all EQs. Since there is considerable overlap in respondent groups for the different EQs, questions from both workstreams were

integrated into a single instrument for use with a specific group of respondents. Table 4 below provides the sampling strategy for respondents in the case study countries (Sample B).

Table 4: Sampling strategy for respondents in case study countries

Data collection methods	Sampling strategy	Respondents
KIIs	Purposive sampling based on role and relevant knowledge.	Representatives from various national-level governments, including members of key ministries involved in DRM (e.g. finance, agriculture, early warning) and political leaders; other in-country stakeholders supporting national DRM capacity, such as UN agencies, INGOs, NGOs, Replica partners, ARC staff, implementers at subnational levels, and community leaders.
FGDs	FGDs were divided into groups based on their experience (recipients / not) and gender. Geographical areas and settlements where assistance was provided were selected. Recipients and non-recipients were identified using distribution lists from the relevant government agencies and Replica partners. In Malawi and Mauritania, the non-recipients were from the same communities because not everyone in the village benefitted from the payout and for logistical reasons. In Madagascar, FGDs were conducted in different villages from recipients.	Recipients and non-recipients.

Table 5 outlines the sample size for data collection in the three case study countries.

Table 5: Samples realised for individual respondents and number of FGDs in case study countries

Data collection method	Malawi	Mauritania	Madagascar
Number of KIIs conducted	31	11	23
Number of FGDs conducted	8	37	13
Total	39	48	36

Note: a larger number of FGDs was conducted in Mauritania in part because community leaders were sometimes engaged in a group rather than as individual interviews.

3.3.5 Data collection and analysis

Primary and secondary qualitative data collection methods were used to collect evidence for this impact assessment.

- **Workstream 1:** KIIs and document reviews were used to provide evidence on the extent to which individual, organisational, and systemic capacity has improved (or not) and the role that ARC has played in those changes, as well as contextual factors that have influenced those changes.
- **Workstream 2:** Document reviews, KIIs, and FGDs were carried out to understand the extent to which both capacity built and ARC payouts have contributed toward improved assistance to vulnerable households, and the impact that this has had on coping strategies, maintenance of economic assets, and welfare.

These methods are outlined in Table 6 below:

Table 6: Data collection methods used

Data collection method	Workstream	Focus
KIIs	1 and 2	<i>Workstream 1:</i> Primary data was collected through interviews with selected representatives from various national-level governments, including members of key ministries involved in DRM (e.g. finance, agriculture, early warning); other in-country stakeholders supporting national DRM capacity, such as UN agencies, INGOs, NGOs, and, where applicable, Replica partners. Any notable data gaps were addressed through interviews with ARC staff. <i>Workstream 2:</i> Primary data was collected from interviews with selected ARC counterparts and clients within key ministries, Replica agencies, and implementers at subnational levels who have been involved in the delivery of assistance. Community leaders and other respondents who are well placed to report on the experiences of the population were also interviewed.
FGDs	2	FGDs with recipient and non-recipient households (men and women) were carried out to gather their insights on the assistance delivered.
Document reviews	1 and 2	For all sample A countries, two key documents were reviewed: the CP and the FIP. ARC process evaluations were also reviewed where available, but there was a limited number available for this period. ¹⁵

Qualitative data processing and analysis

The qualitative data gathered was analysed in three different stages: in the first stage, the research team conducted daily debriefs while in the field, during which the initial findings were discussed; in the second stage, the notes from the field were turned into English transcripts and analysed using NVivo (qualitative data analysis software); and, in the final stage, the entire impact evaluation team combined the findings from both the primary data collection and the document review.

To mitigate the risk of subjectivity and bias while interpreting qualitative data, the evidence was analysed by different researchers. Findings and insights were discussed as a team.

¹⁵ For two of the case study countries (Mauritania and Malawi), some useful quantitative information on recipients was collected by the ARC process evaluations undertaken in parallel to this evaluation.

Also, evidence from different sources was compared for each question to triangulate the data and assess its strengths and weaknesses. Contradictory views from respondents were assessed to establish whether they were anomalous or common.

The use of semi-structured interviews provided an opportunity to identify any unexpected or unintended effects of ARC's work. These were identified, discussed within the team, and reported where relevant.

The analysis was structured by pre- and post-shock elements of the ToC, as reflected in the workstreams. Workstream 3 provides a summary of progress against the country-level ToC using a RAG (red, amber, green) rating system described in the IA1 design document, which is a simplified version of the RAG rating scheme described in FE1, with green indicating positive progress, amber indicating some progress but also challenges, and red indicating little progress and significant challenges.

3.3.6 Rubrics

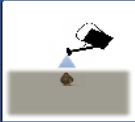



Rubrics are an analytical tool in the form of a matrix of criteria and a description of quality standards that are used to make evaluative reasoning explicit. They provide a framework to bridge the gap between evidence and judgement by making the basis of judgements explicit and transparent.

In this evaluation, rubrics were developed:

- To make judgements on the extent to which country-level **disaster preparedness and response systems are in place to deliver relevant, timely, and effective assistance** in crises (droughts and cyclones) (*for Workstream 1*); and
- To make judgements on the quality of **the delivery of assistance** to vulnerable households (*for Workstream 2*).

The process of development of rubrics was collaborative as workshops were conducted with ARC representatives, external experts, country government and other stakeholders to identify key criteria and what is considered good performance against them. This process is also intended to foster ownership of findings. Figure 2 presents a snapshot of two elements of the rubric developed for Workstream 1 of this study.

Figure 2: Snapshot of rubrics for disaster preparedness and response systems

Dimension	Emerging 	Evolving 	Embedding 	Excelling 
1. Governance				
<ul style="list-style-type: none"> National policies or legislation related to drought or other natural disaster risks (incl DRM strategies) 	Little or no national policy related to natural disaster risk management	Some DRM policies in place but with no strategy nor institutional arrangements in place	Some DRM policies in place with provisional strategy and institutional arrangements in place	Extensive and recent DRM policies in place with clear strategy and institutional arrangements in place, including allocated budget
<ul style="list-style-type: none"> Authority structures to manage disaster response 	No institutional focal point for DRM	Institutional focal point for DRM in place but without sufficient staff and resources	Institutional focal point for DRM in place with staff and resources	As Embedding PLUS: DRM agency (institutional focal point) has actively updated workplan

Here, the column 'Dimension' indicates and defines the aspects of the disaster preparedness and response systems that will be explored in the rubrics and assessment (i.e. the assessment criterion). The subsequent columns provide performance or progress levels for that criterion, from weakest to strongest. The general definitions of these levels are as follows:

- **Excelling:** Meeting or exceeding *all* reasonable expectations/targets, bearing in mind context. There is room for incremental improvements.
- **Embedding:** Generally meeting reasonable expectations/targets, allowing for minor exceptions. There are some improvements needed.
- **Evolving:** Not meeting expectations/targets but fulfilling minimum requirements and showing acceptable progress. Significant improvements needed.
- **Emerging:** Not fulfilling minimum, bottom-line requirements or not showing acceptable progress. Urgent improvements needed.

For each dimension, specific descriptions are given for each level of performance, as can be seen in the example in Figure 2. Complete rubrics for both workstreams are available in Annex B.

The rubrics were used to assess the DRM system capacity for all 11 countries with a payout in the period and to assess the quality of the response planning based on the CPs and FIPs. Each performance level was allocated a score from 1 to 4, with 1 being the lowest level and 4 the highest. Data analysis presents both the distribution and the mean values of these scores.¹⁶

3.4 Ethical approach

The evaluation team ensured that the evaluation adheres to benchmark standards of quality and ethics. For quality standards, we followed the OECD's Quality Standards for Development Evaluation, intended to improve the quality of evaluation processes and products and to facilitate collaboration. The Standards have been established through international consensus and outline the key quality dimensions of each phase of a typical evaluation process (OECD, 2010).

The evaluation team drew on its experience of conducting qualitative fieldwork to ensure these ethical standards were met and sought to further review where appropriate. Our approach ensured informed consent was gained from all participants, anonymity was maintained, and the safety of all participants was ensured throughout the evaluation process, in line with OPM standard practice.¹⁷

¹⁶ Using means provides a convenient and accessible way to present the findings across dimensions, given the large number assessed. However, they depend on assuming an interval scale for the categories, which may not be the case.

¹⁷ Since KIIs were conducted with employees providing information in the course of their work and focus group participants were not considered to be especially vulnerable and were able to meaningfully give informed consent, no formal review was requested from any ethical review boards. Overall permission to undertake data collection was obtained from senior government representatives in each country.

The evaluation complies with ethical standards and adheres to accepted principles of rigour and quality. We followed principles outlined in the American Evaluation Association's *Guiding Principles for Evaluators*, which include:

- **Systematic inquiry:** evaluators conduct systematic, data-based inquiries.
- **Competence:** evaluators provide competent performance to stakeholders.
- **Integrity:** evaluators display honesty and integrity in their own behaviour and attempt to ensure the honesty and integrity of the entire evaluation process.
- **Respect for people:** evaluators honour the dignity, wellbeing, and self-worth of individuals and acknowledge the influence of culture within and across groups.
- **Common good and equity:** evaluators strive to contribute to the common good and advancement of an equitable and just society (American Journal of Evaluation, 2021).

The work was undertaken in line with the ethical principles and standards of FCDO's Ethical Guidance for Research, Evaluation and Monitoring Activities (DFID, 2019) including necessity, context sensitivity, respecting the principle of 'do no harm' and minimising the risk of harm, informed consent, confidentiality, data protection, respectful and equitable participation, and appropriate dissemination. We also look to respond to the five key evaluation principles articulated by the African Evaluation Association – tailored by and for African contexts, needs, and knowledge systems, yet informed by international good practice insights, theories, and practices (African Evaluation Association, 2020). We aimed to do so by not assuming solutions applicable elsewhere are automatically applicable in Africa, by not asking leading questions that are based in contexts outside Africa's experience, and most of all by ensuring we retained open minds toward the evaluand (ARC Group) and its operational context.

The principles of our approach were as follows:

- Informed consent:** This means that potential respondents were given enough information about the research and researchers to ensure that there was no explicit or implicit coercion so that potential respondents could make an informed and free decision on their possible involvement in the fieldwork. Respondents were also always informed that their participation is fully voluntary and that they could withdraw from data collection processes at any time. All information, consent, and assent forms and instruments were translated into an appropriate local language. Specific consent was sought from all participants before recording FGDs or KIs. Informed consent was operationalised through a formal process of recording where possible (e.g. a written consent form was signed off by research participants where appropriate in case study countries).
- Transparency:** Researchers always clearly introduced themselves to all participants and explained, in a way that would be easily understood by all, the purposes of the research and what will be done with the information provided by participants to moderate expectations regarding what participants 'gain' from joining the research. No financial compensation was provided to individual participants.
- Anonymity:** Given that research respondents share considerable amounts of personal information with us, it is our responsibility to ensure that their confidentiality is maintained and personal information is protected. This was operationalised by ensuring that all notes, transcripts, and analysis were anonymised at an appropriate point.
- Ensuring the safety of participants and researchers:** This means that the environment in which research is conducted is physically safe. We sought to achieve

this by ensuring that researchers were familiar with areas in which they are assigned. OPM has contracted a globally recognised external security provider, Spearfish, which conducted a project-specific risk assessment for all case study countries and has comprehensive emergency response arrangements in place that are at the service of staff at any time. Other safeguarding training was applied, including ensuring the respondents were not distressed by questions. Interviewers worked in pairs so there were two people present for all KIIs and FGDs.

- v. **Language:** The consent form and interview guides were translated into local languages, i.e. French and Malagasy spoken in Madagascar, French and local Arabic spoken in Mauritania, and English and Chichewa spoken in Malawi.
- vi. **Data storage:** Data was managed and stored on the project team's SharePoint folder and its access was limited only to the project research team. During the data collection, only the team leader(s), project manager, country leads, qualitative analyst, and country research teams had access to interview notes, recordings, and transcripts. Recordings and transcripts were labelled with a clear set of codes that allowed anonymity to be maintained. Recordings, notes, and transcripts were saved in a password-protected folder and access to this folder was limited to the project manager, country leads, and qualitative analyst only. At every stage of data collection and analysis, safe storage of data was prioritised. If data was recorded on devices during data collection, once it was transferred and backed up it was deleted from other laptops, recording devices, and hard drives. Any repository of recordings and personal data will only be controlled by select personnel such as the team leader and the project manager.

These principles were reflected throughout the evaluation process, including in the tools and question framing, implementation and training guidelines, and throughout the analysis and presentation of the evaluation's findings.

OPM's researchers respect any differences in regard to culture, local behaviours and norms, religious beliefs and practices, sexual orientation, gender roles, disability, age, ethnicity, and other social differences, such as class, when planning studies and communicating findings. Data collection took into account local power dynamics, including ensuring the confidentiality and anonymity of interviews so that respondents did not feel pressured to give particular responses. FGDs were divided by gender and were conducted in the local languages, based on the preferences of the respondents. Data collection teams included both male and female researchers.

As touched on above, qualitative researchers worked in pairs, with one researcher leading the interviews and one taking notes. For the in-person interviews and FGDs that were held, our research teams contacted research participants beforehand to set up interviews based on their availability and convenience. FGDs typically took 70 to 90 minutes and no compensation was offered to participants.

3.5 Governance and stakeholder engagement

The evaluation was guided by the ESG, whose remit is as follows:

- Support the relevance and quality of the key evaluation products – both the terms of reference for evaluation phases and evaluation reports. The ESG will provide guidance and feedback on the EQs to be addressed; the relevance, quality, and impartiality of the evaluation approach; and the evaluator's interpretations of emerging evidence, findings, and key recommendations.

- Support the implementation of the evaluation, including deliberation on its operationalisation.

The ESG includes a diverse range of stakeholders who are collectively able to take a view independent of ARC, as well as representatives of ARC Group itself. It includes a representative from member states holding an insurance policy, the key stakeholder group directly served by ARC.

OPM is responsible for delivering the evaluation and reports contractually to FCDO. All major evaluation products – including design notes and draft final reports – are reviewed by the Evaluation Quality Assurance and Learning Service, FCDO's evaluation quality assurance service.

A detailed stakeholder and communication plan for IA1 was developed and included in the design report, building on the Stakeholder Engagement and Communications Strategy in the overall ARC evaluation inception report. Member countries – particularly policymakers and government technicians who are directly involved with DRM – will be an especially important stakeholder group for communication, in addition to ARC itself, Replica partners, and development partners. A range of communications approaches are outlined in the strategy, including presentation to the ARC member (signatory) countries' annual Conference of Parties.

To ensure rigour in the assessment, multiple stakeholders were engaged for feedback and review during the implementation of the evaluation. There were engagements with country-level government stakeholders for feedback on country-level draft findings of the study, and the draft evaluation report was also shared for comment. The ESG reviewed the design document, preliminary findings, and the draft report. DRM/DRF and evaluation experts external to the team also reviewed the draft report.

3.6 Evidence quality and study limitations

This section describes the quality of evidence and the limitations of the evaluation. Overall, the evaluation team was able to work freely, without interference, and was able to access the main sources of evidence that were required. There were a few limitations but these were generally mitigated by comparing evidence between sources to arrive at our overall findings.

- **Differences in evaluative judgements ('subjectivity'):** There were no differences of opinion among the team in relation to the findings. The country teams presented and discussed draft country-level findings with key stakeholders from each country. There were some areas in which opinions differed such as ratings on rubrics. For example, in Madagascar the TWG scored themselves as excellent (4) in the dimension of 'Authority structures to manage disaster response'. However, the OPM team has scored the same dimension as embedding (3) after taking all considerations into account. Similar differences of opinion were also present with other dimensions, such as cyclone response coordination, early warning systems, risk assessment information and analysis, etc. Some report reviewers, on the other hand, considered that the rubrics should have been more demanding. This is a normal feature of judgement-based rating systems as people may place different emphasis on various considerations (Gargani and King, 2023). Rubrics reduce, but do not eliminate this variation. The teams carefully considered this feedback and triangulated with other information where possible. As an independent evaluation, the findings ultimately reflect the evaluation team's final judgement against the rubrics and EQs. A strength of rubric-based evaluation is that it

makes these judgements traceable and challengeable. The rubrics are presented in Annex B.

- **KIIs:** A wide range of key informants were interviewed in each of the case study countries and care was taken to ensure that different perspectives were sought, to insulate the evaluation from individual bias. Stakeholders were provided with relevant information about the evaluation prior to the interview, in either English, French, Malagasy, or Arabic. The fieldwork teams conducted most of the interviews during a two-week period, but the national consultants were available to conduct additional interviews and collect documentation outside that timeframe if particular individuals happened to be unavailable. Remote interviews were also used when necessary.
- **Different stakeholder groups in KIIs:** Interviews were conducted with a wide range of individuals, some of whom were very closely involved with ARC and were considered by the team to have a possible (if unconscious) bias. To mitigate potential bias from the findings and to enable better triangulation, groups that were likely to be neutral were included in the data collection (e.g. academics, INGOs, NGOs, and donors not involved with ARC).
- **National consultants for country case study data collection:** Members of the fieldwork teams were selected with consideration of cultural and ethical matters. For example, each fieldwork team was bilingual, with half the team members being national consultants, able to converse in some of the local languages if necessary. Team members were vetted for any conflicts of interest prior to sub-contracting.
- **Scope of the assessment:** The assessment of the impact of the receipt of assistance by households was limited to qualitative, post-delivery reports from households and those involved in the assistance programme, as well as secondary data sources.
- **Lack of a counterfactual:** FGD data was collected from beneficiaries and non-beneficiaries, providing some information on how those that received support fared compared with those who did not. However, since these groups may have been different in other respects, this did not provide a true counterfactual. Two possible counterfactual approaches were considered during the evaluation design stage. These were: (a) at country level where a possible qualitative counterfactual could be countries where ARC is not operating; (b) within a country, undertaking a quantitative study using a population that had not received ARC benefits as control. The first of these options was rejected because there were likely to be too many other differences between countries to provide a meaningful counterfactual. The second was not further explored as it would have required substantial additional funding; it may also have faced some practical challenges. As the objective of this study was to assess ARC's contribution in reducing the impact of climate disasters on vulnerable households, a non-experimental, theory-based approach focusing on assessing ARC's contribution was taken instead. To ensure rigour, qualitative evidence was triangulated from a variety of sources.
- **Number of case study countries:** Only three countries were included for primary data collection due to budget limitations. While this is the same number that was included in the original design, it limits the number of instances where a detailed assessment against the ToC can be undertaken.
- **Limited pre-testing:** Due to the number and complexity of evaluation instruments that the team needed to cover over the course of the in-country field work, it was not possible to fully pre-test the interview guides in each country, although instruments were trialled first in one country and learning fed into the other two countries. Instruments were tailored where necessary to each country. Since it was not possible to discuss every topic and question with every interviewee, sometimes the team had to determine prior to, and during the interviews, what topics were most pertinent to the key informant's expertise, and what still needed further validation or triangulation. This process, inherent to the nature of qualitative research, can also leave room for bias or information gaps. However, the team mitigated this limitation by discussing and agreeing on the most

important topics to cover with each interviewee, as well as validating important findings across a number of stakeholders who would have been able to provide an informed perspective.

- **M&E documentation:** For most of the recent payouts, government final implementation reports were not available, meaning the assessment had to rely on OPs/FIPs, and actual implementation was assessed only with reference to the small sample of case study countries (three). There were only three process evaluations of the 19 payouts during the sample period; when available, they were useful and also informed the assessment.¹⁸ M&E is a requirement in ARC guidelines, but this does not seem to have been implemented systematically during the sample period, limiting the data available for a more comprehensive assessment.
- **Evidence on DRM systems:** The assessment of the strength of country DRM systems was based almost entirely on two ARC documents – the OP and FIP. In addition to the limitations to ARC-related documents outlined above, it was found impractical to obtain and review government documents for all Sample A countries. This approach meant that a larger number of countries could be included, but also limited the depth of information available for the assessment, i.e. the team prioritised breadth over depth for Sample A. If more country-level documents had been included, it is possible that some of the ratings would be different, but we believe they provide nevertheless a useful overview of strengths and weaknesses with respect to those areas of most importance to ARC.

¹⁸ Process evaluations are not conducted in the case of Replica payouts, while numbers were constrained by financial limitations and were also hampered in some countries by security constraints.

4 Findings

4.1 Findings: Improved country-level preparedness

Q1. To what extent and how have ARC's capacity-building work and oversight processes improved national preparedness, both financial and operational, and planning of assistance?

Response summary:

As assessed against the rubric and based on documents and interview data, ARC member countries have on average fairly strong DRM systems, with DRM legislation and authority structures largely in place, embedding early warning systems, and good financial management plans for disbursement and distribution of funds in response to disasters. They also have good risk assessments, capacity to identify needs and profile beneficiaries, and capable response delivery mechanisms. However, countries often lack formal learning mechanisms, where tracking is unsystematic and lessons from disaster responses are not integrated into future planning. They have weak or basic DRF policies and strategies, and most do not have social registry data or the data is outdated.

All three case study countries had, to varying degrees, DRM policies and mechanisms in place before joining ARC, and all three have seen improvements to their capacity to deliver assistance after joining ARC, supported through the capacity-building efforts of various partners, including ARC. The actual performance of these systems in converting an ARC payout into assistance is described under Workstream 2 in Section 4.2.

ARC has worked with member countries to improve specific aspects of their DRM, and the extent of understanding and meeting countries' needs is varied. The majority of capacity strengthening focuses on enhancing two elements, which help countries access ARC services. These are: 1) helping countries to understand and customise the risk model; and 2) contingency planning.

Engagement with ARC is catalysing the adoption of some level of financial and operational preparedness ahead of extreme weather events. ARC insurance increases financial preparedness,¹⁹ although the value of payouts is often a modest fraction of total need.

ARC has made contributions to improvements in DRM systems, especially on a technical level – improving technical capacities in specialist areas – and in the promotion of coordination and comprehensive planning processes by setting up TWGs and drawing up OPs. TWGs play a significant role in facilitating coordination in each country. While ARC is somewhat integrated into government structures to harmonise activities and enable coordination with existing government systems, the degree of awareness about ARC activities outside of the MDAs that coordinate ARC varies. While the TWGs have a wide membership (including a range of non-government partners), broader coordination between ARC and other actors, including the UN, INGOs, the International Federation of Red Cross & Red Crescent Societies (IFRC), the World Bank, and bilateral agencies, is often quite

¹⁹ Defined as 'disaster risk financing policies that secure access to disaster financing for governments, before disaster strikes and ensure timely and cost-effective financial resources to support post-disaster recovery and reconstruction activities' (DRF Forum, 2016).

limited. While specific individuals from such institutions may participate in the TWG, ARC was not widely referred to by a broader set of individuals in these organisations.

ARC uses the ARV model for drought and TCE for cyclones. Case study countries revealed challenges with the ARV customisation. The evaluation obtained only very limited information on the TCE model.

Positive changes in the capacity to deliver assistance have been found in all three case study countries, especially in the areas of legal frameworks and responsible institutions. Alongside ARC's activities, numerous efforts have been taken by a variety of actors in the target countries, including the World Bank, UN agencies, the Red Cross Movement, INGOs, NGOs, and bilateral government agencies, to improve DRM systems. ARC is one of several bodies contributing toward developments in improving the capacity for assistance delivery.

KIIs and our review of Sample A countries show that countries also have wider capacity-building needs (e.g. broader scope of financial preparedness, further strengthening of response delivery systems, and M&E) that go beyond ARC's usual support. ARC has not generally strengthened the wider DRF strategies of the government but has sometimes encouraged broader national discussions about financing strategies for disasters.

Evaluation sub-questions and the findings against them are detailed below.

1.1 To what extent are country-level DRM systems in place to deliver assistance in crises?

Based on information provided in OPs and FIPs, ARC member countries were found to have on average fairly strong DRM systems, with DRM legislation and authority structures largely in place, embedding early warning systems, and good financial management plans in place for disbursement and distribution of funds in response to disasters. They also have good risk assessments and a good capacity to identify needs and profile beneficiaries and capable response delivery mechanisms. However, countries often lack formal learning mechanisms, meaning tracking of lessons learnt is unsystematic and not integrated into future planning. They have weak or basic DRF policies and strategies, and most do not have social registry data or the data is outdated. This assessment is based on information provided in OPs and FIPs, which capture information about country DRM systems to a limited extent. A more detailed investigation (qualitative fieldwork) in three case study countries revealed additional information, changing the assessment for those countries to a small extent.

OPM assessed the national preparedness of the **11 payout recipient countries** (Sample A) by reviewing their most recent OPs and FIPs against the rubrics in Annex B.²⁰ The review covered 16 characteristics (sub-criteria) of DRM systems broadly divided into four themes: a) governance; b) management and coordination; c) finances; and d) targeting and delivery capacity. Each was rated on a scale of one to four: 1 – emerging, 2 – evolving, 3 – embedding, and 4 – excellent. Average scores for each of the four overall criteria are given in Table 7, showing the strongest elements to be in governance and the weakest in finance. However, the differences between these scores are not very large.

²⁰ Clear definitions of rubric dimensions can be found in Annex B. Note that the rubrics are, by design, quite high-level and general. Reviewers could not make context-specific judgements for each individual country.

Table 7: Average scores of Sample A countries per dimension

Dimension theme	Average score per theme
Governance	2.9
Management and coordination	2.7
Finances	2.4
Targeting and delivery capacity	2.6

In terms of **governance**, the average score for all 11 countries was **2.9** (Table 8). The scoring rubrics for governance are below in Table 9. Most countries tend to have some or established DRM legislation and authority structures in place. However, it is often unclear whether a specific budget is allocated to implement the DRM policies, and whether workplans are updated. Some authority structures/institutions are understaffed, and focal persons are missing. Moreover, resource allocation is often unclear.

Table 8: Sample A payouts for 11 countries: average scores and numbers of high achievers for dimension of governance

Dimension	Number of countries scoring 3 or 4 (from 11 countries)	Average score per dimension
Governance:		2.9
National policies or legislation related to drought or other natural disaster risks (including DRM strategies)	8	3.0
Authority structures to manage disaster response	6	2.7

Table 9: Rubrics for scoring governance

Dimension	Emerging (1)	Evolving (2)	Embedding (3)	Excelling (4)
National policies or legislation related to drought or other natural disaster risks (including DRM strategies)	Little or no national policy related to natural disaster risk management	Some DRM policies in place but with no strategy nor institutional arrangements in place	Some DRM policies in place with provisional strategy and institutional arrangements in place	Extensive and recent DRM policies in place with clear strategy and institutional arrangements also present, including allocated budget
Authority structures to manage disaster response	No institutional focal point for DRM	Institutional focal point for DRM in place but without sufficient staff and resources	Institutional focal point for DRM in place with staff and resources	As Embedding PLUS: DRM agency (institutional focal point) has actively updated workplan

The area of **management and coordination** had an average score of **2.7** (see Table 10 below;). Countries had strong early warning systems and risk assessment information and analysis. Most countries have some hazard monitoring or early warning systems in place and high-quality risk information and analysis is available. However, it appeared that

countries' formal learning mechanisms were much less developed. They achieved medium results in terms of their cross-government technical mechanisms and contingency planning procedures, including GESI considerations, as the information shared in OPs and FIPs was often not detailed enough to assess the level of their consideration for GESI. Their capabilities were also medium in terms of drought/cyclone response coordination and communication mechanisms between relevant stakeholders, with roles and responsibilities often being clear only on certain levels. M&E also achieved a medium score, as often basic monitoring and reporting of response implementation is in place but no post-response assessments are undertaken. When post-response assessments are undertaken, no mechanisms for learning from previous responses are mentioned.

Table 10: Sample A payouts for 11 countries – average scores and numbers of high achievers for dimension of management and coordination

Dimension	Number of countries scoring 3 or 4 (from 11 countries)	Average score per dimension
Management and coordination:		2.7
Drought/cyclone response coordination and communication mechanisms in place between relevant stakeholders	8	2.7
Early warning systems	8	3.0
Risk assessment information and analysis	7	3.4
Contingency planning procedures, including GESI considerations	5	2.5
Cross-government technical mechanisms	2	2.4
M&E systems in place	6	2.8
Formal learning mechanisms in place	0	1.6

Figure 3: Distribution of ratings by sub-criteria: management and coordination (percent)

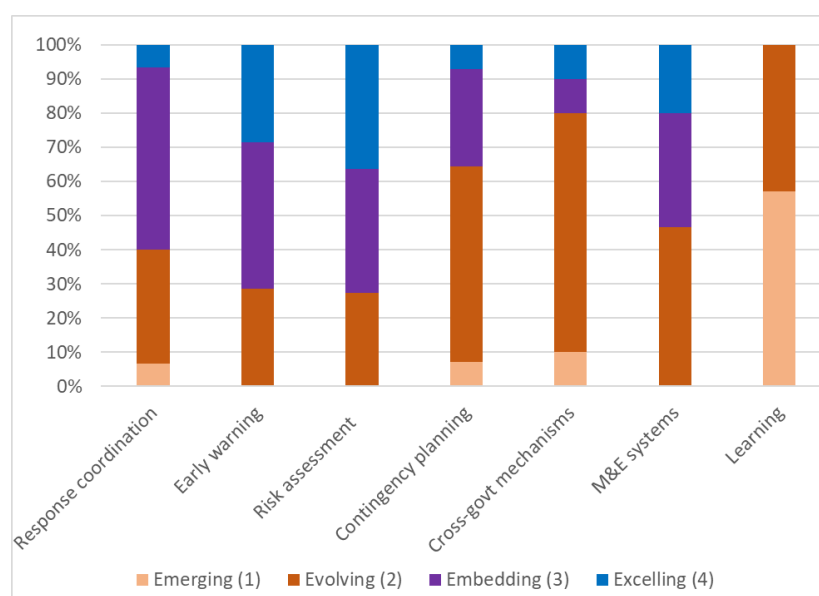


Figure 3 shows the overall distribution of ratings by sub-criteria for management and coordination and illustrates the relatively strong early warning and risk assessment systems and weak learning.

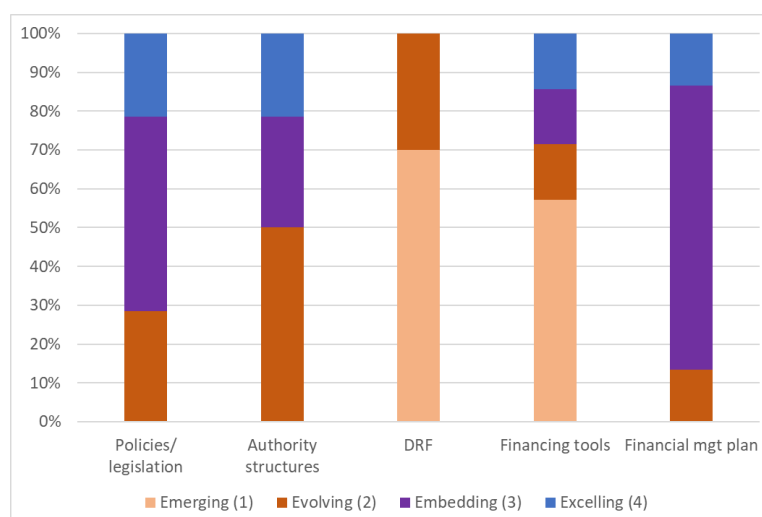
The documents provided limited information about **financing**. Although the **average score** for the financing category was **2.4** (see **Error! Not a valid bookmark self-reference.**), there were big differences in the individual dimensions. While most countries (nine out of 11) had good financial management plans in place for disbursement and distribution of funds in response to disasters, they did not appear to have a DRF policy and strategy in place or financing tools in place to adequately cover disaster risks. However, it is possible that in some cases strategies are in place but are not sufficiently described within ARC's OP and FIP templates.

Table 11: Sample A payouts for 11 countries – average scores and numbers of high achievers for dimension of finances

Dimension	Number of countries scoring 3 or 4 (from 11 countries)	Average score per dimension
Finances:		2.4
DRF policy and strategy in place	0	1.4
Financing tools in place to adequately cover disaster risks	1	1.8
Financial management plans in place for disbursement and distribution of funds in response to disasters	9	2.9

Figure 4 shows the full distribution of the rubric scoring in governance and finance, illustrating the strongest performance in policies and financial management plans and the weakest in overall DRF systems and financing tools.

Figure 4: Distribution of ratings by sub-criteria: governance and finance (percent)



Similarly, **targeting and delivery capacity** across the 11 countries had an average score of **2.6** (see Table 12). However, there were large differences between dimensions. Most countries do not have social registry data. Most carry out needs assessments that identify degrees of need scored but it is unclear how accurate they are and whether they

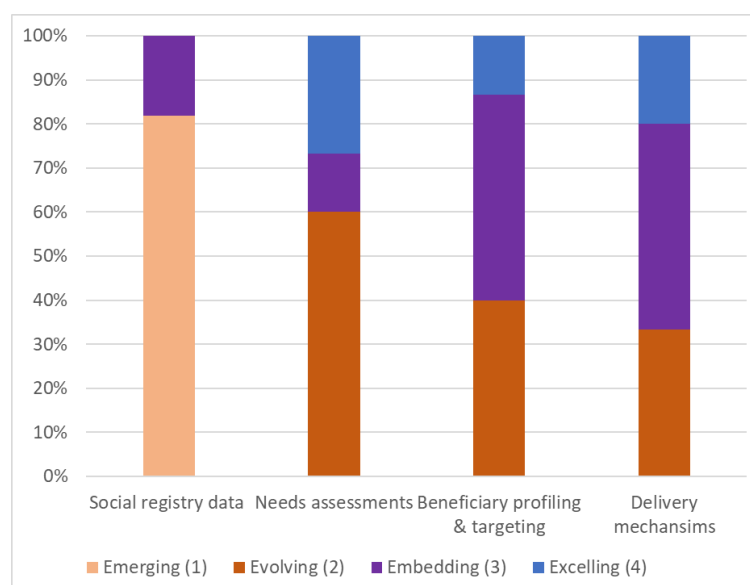
disaggregate the data by relevant dimensions, such as age, gender, and disability. In beneficiary profiling and targeting, documents state the vulnerable will be targeted – but often clear criteria for selection are missing. Most countries have at least some or established mechanisms for disaster response, with varying degrees of coverage and sufficiency of funding.

Table 12: Sample A payouts for 11 countries – average scores and numbers of high achievers for dimension of targeting and delivery capacity

Dimension	Number of countries scoring 3 or 4 (from 11 countries)	Average score per dimension
Targeting and delivery capacity:		2.6
Social registry data	2	1.5
Needs assessments that identify degrees of need	6	2.9
Beneficiary profiling and targeting	8	2.9
Defined and capable response delivery mechanisms	7	2.9

Figure 5 shows the distribution of ratings by sub-criteria in targeting and delivery, illustrating the strength in beneficiary profiling and needs assessment and the weakness in social registry data.

Figure 5: Distribution of ratings by sub-criteria: targeting and delivery (percent)



Looking in more detail at the three **Sample B case study countries** – Madagascar, Malawi, and Mauritania – we found that individual scores for dimensions and themes changed, both upwards and downwards, when our teams were able to collect more contextual and detailed system information in-country. Table 13 provides the comparison of scoring for Sample A and Sample B for the case study countries. Understandably, the OP and FIP templates capture information about the entire DRM systems only to a limited extent, and a number of relevant DRM documents, policies, and mechanisms exist outside the ARC document scope. We provide more detailed analysis for the Madagascar example in **Error! Reference source not found.**

Table 13: Sample A and Sample B comparison

Country	Sample A (document review) score	Sample B (country case study involving field work) score
Madagascar	2.8	2.9
Malawi	3.1	2.9
Mauritania	2.1	2.4

1.2 Has capacity to deliver assistance improved since ARC began working in-country?

Positive changes in the capacity to deliver assistance have been found in all three case study countries, especially in the areas of legal frameworks and responsible institutions. Alongside ARC's activities, numerous efforts have been taken by a variety of actors in the target countries, including the World Bank, UN agencies, the Red Cross Movement, INGOs, NGOs, and bilateral government agencies, including FCDO, the United States Agency for International Development (USAID), and many others, to improve DRM systems. ARC's work is one of several forces contributing toward developments in improving assistance delivery. All three case study countries had some DRM policies and mechanisms in place before joining ARC to varying degrees, and all three have seen improvements to their capacity to deliver assistance after joining ARC, supported through various capacity-building efforts.

The case study countries provided evidence of positive changes in recent years in their capacity to deliver assistance. **Mauritania** joined ARC in 2014 as one of the first countries. Since then, there has been significant progress in developing systems to deliver effective assistance in drought-induced crises, including the establishment of fundamental building blocks such as: the creation of the National Crisis Prevention and Response Dispositive (DCAN) in 2021 by decree of the prime minister; the establishment of national, coordinated food security response planning ('Plan National de Response') under the Commissariat de Securite Alimentaire (CSA) (the Food Safety Commission); a national contingency fund operationalised (Fond National), albeit with limited availability of funding; and an expanded social registry with national coverage to improve targeting.

Malawi also joined ARC among the first states, having received its first ARC payout of US\$ 8.1 million in 2015/16. However, Malawi has not consistently bought ARC policies, stopping purchasing for some years due to a basis risk event. While some policies were in place prior to ARC, such as the Disaster Preparedness Act 1991, new policies have been introduced around the time of joining ARC, including the Disaster Risk Management Policy (2015), Draft Disaster Risk Management Bill (Legislation), the National Climate Change Management Policy (2016), and the Disaster Financing Strategy (2019). The government runs an ongoing social protection programme, including unconditional cash transfers, which supports the ultra-poor populations and most vulnerable and is itself insured by ARC.

Madagascar joined ARC later, in 2018, and took out its first drought insurance in 2019 and cyclone insurance in 2020. Some essential building blocks were already in place at the time of joining ARC. These included the National Disaster Management Act (2003, amended in 2016), the National Climate Change Policy (formulated in 2010), and the National Strategy for Disaster Risk Management (2015–2030), as well as associated institutions. After 2018, when Madagascar joined ARC, further changes took place. In 2019, the roles of the two key DRM institutions were further clarified. The Cellule de Prévention et d'appui à la Gestion des Urgences (CPGU) (the Emergency Management and Prevention Unit) attached to the Prime

Minister's Office was given a strategic role, while the Bureau National de Gestion des Risques et des Catastrophes (BNGRC) (the National Office for Disaster Risk Management) under the Ministry of Interior took on a more operational role. Since the country joined ARC, capacity to deliver assistance improved via enhancing technical skills at national level.

1.3 To what extent has ARC contributed to any improvements?

ARC has made direct and indirect contributions to improvements in the DRM systems, especially on a technical level – improving technical capacities in specialist areas – and in the promotion of coordination and comprehensive planning processes by setting up TWGs, drawing up OPs, and making improvements more sustainable. Moreover, the three countries have seen progress in their financial preparedness.

The key contribution of ARC is in system strengthening. By setting up TWGs bringing together experts from across a multitude of government and non-government stakeholders and drawing up OPs, the countries are better prepared in the long term in a number of areas and have greater capacity to respond to disasters. ARC also indirectly enhances the development of broader policies and CPs as the same technical experts trained by ARC (i.e. TWG members) are often involved in their development (e.g. Mauritania's National Response Plan and Madagascar's PDMO – Final Plan of Implementation).

ARC contributes directly to strengthening technical capacity, as well as to the promotion of coordination and to comprehensive planning processes. Countries make use of ARC tools (albeit to varying degrees) and their experts undertake capacity building in the specialist areas required for customising the ARV model (e.g. pluviometry, drought indexes, vulnerability, ARV, modelling software, identification of thresholds for action, etc.). Countries have also improved their financial preparedness to handle crises, although the size of the ARC payouts may not cover the needs of all. Thanks to ARC's insurance, conversations have been initiated around insurance, risk transfer, and risk pooling as a potential mechanism to financing disaster management. Some countries are also exploring the possibility of using insurance products by other providers and other ways of financing.

Below are details of improvements in each case study country:

Madagascar: ARC has empowered the Malagasy state to be able to respond in disasters beyond coordination, i.e. by providing assistance through their own channels. According to KILs, the authorities were able to recognise their weaknesses in disaster management. One of the weaknesses identified was the state's slow procedural system, which delays payments and ultimately the delivery of assistance. This has led to continuous efforts to change the legal requirements for administrative procedures and increase the speed of financial procedures. ARC has also increased the technical capacity of officials on the national level, including the Meteorology Department (training on pluviometry and drought indexes), the Ministry of Population (training on drought indexes and vulnerability), the National Office for Nutrition (training on vulnerability), the Ministry of Agriculture (MoA), and the Statistics Office. It has also increased the state's capacity to model risks (through use of software), to identify thresholds for action, and to plan. However, the training targets only a few individuals, who can sometimes be transferred within the administration.

Malawi: ARC has contributed to: capacity building in using ARV for weather monitoring for drought; training experts in climate risk modelling, agriculture risk management, and contingency planning; capacity building in DRM that is complementary to other organisations such as the Red Cross, United Nations Office for the Coordination of Humanitarian Affairs, and the Southern African Development Community; and capacity building in crop-weather

modelling that helps with other activities of the Department of Climate Change and Meteorological Services (early warning) besides ARC. Improvement in coordination with other stakeholders (government and NGOs, as well as the private sector) can be attributed to ARC because ARC initiated coordination between a number of stakeholders, particularly through the TWGs. Further, ARC's TWG structure helped partly inform the development of policies over recent years. ARC has supported the setting up of systems and processes such as the TWGs and processes for developing CPs. ARC also helped strengthen the contingency planning system because the MDAs that participate in ARC's TWG (such as the MoA, Disaster Management Affairs, Economic Planning and Development, Ministry of Finance (MoF), and the Reserve Bank) are also the same agencies and (often) individuals that participate in government contingency planning. Moreover, ARC helped initiate conversations around insurance, risk transfer, or risk pooling as a mechanism to finance disaster management and encouraged the country to pursue sustainable and innovative ways of financing DRM such as risk financing. However, it should be noted that there are other stakeholders in Malawi that are also exploring weather-based insurance. For example, WFP is working with the National Insurance Company on other weather-related insurance products. All these efforts have opened up discussions on insurance as an option.

Mauritania: Within the CSA, with the introduction of the National Response Plan, there have been significant positive changes in the planning and coordination of responses to food insecurity crises. This has built on the experiences of the CSA with the ARC planning process. One respondent informed us that *'The National Response Plan was much inspired by the ARC planning process. Before there was no (response) planning'* (KII with government stakeholder). The effects of ARC in improving financial preparedness were also mentioned by other respondents. Mauritania is now increasing its coverage with ARC due to co-financing support from ADRiFi, allowing for greater coverage of at-risk people, although the size of payouts received is still small compared to overall crisis financing requirements. ARC has also indirectly contributed to a political environment of managing crisis risks. A key change in recent years has been the creation of the national contingency fund (Fond National), within which the ARC premium is budgeted on an annual basis (thereby facilitating payment) and receives ARC payouts. However, the operationalisation of this fund was carried out with the World Bank, WFP, and French Development Agency as supporting partners, and no direct contribution of ARC was referred to in KIIs. Outside of the CSA, the ARC mechanism is not well known in Mauritania (e.g. among district authorities, national government stakeholders, and partners in different MDAs such as the Ministry of Economy, MoF, and Bureau of Social Protection). In sum, the KIIs informed us that there is little evidence that ARC is contributing directly to changes *outside* of the CSA.

1.4 To what extent has ARC's risk model been effectively customised to country needs? How much has ARC's risk model contributed to early warning systems for drought and cyclones?

ARC's ARV model for drought has been utilised in early warning systems in the case study countries. There are varying degrees of success and challenges in its customisation and contextualisation, and concerns about performance and data reliability persist. This is especially the case in Mauritania, while more positive, if mixed, results were reported in Malawi. In all three countries, the model is used alongside other models. The evaluation obtained only very limited information on the TCE model.

ARC has a well-established country customisation process. However, there was substantial variation between the case study countries in their views on ARV. Confidence in the ARV

model is low in Mauritania, where all stakeholders perceive it to be suboptimal and have low confidence in its utilisation for early warning purposes. Given these concerns, the country requested a paragraph be inserted into the ARV customisation report stating that Mauritania will conduct its own analysis and can appeal to ARC if differences with the ARV model are noted (although such triangulation of findings is said by ARC to be common practice). This lack of confidence in the model is considered to be a serious problem for the sustainability of the mechanism in Mauritania:

We often hesitated; if ADRiFi hadn't existed, we wouldn't have bought the premium policy. Too often, ARV didn't capture what was going on – our data told us so. (KII with government stakeholder)

This suboptimal performance of the risk model is partly influenced by the country's landscape. Key informants report that Mauritania straddles the boundary between the Sahara Desert to the north and the Sahel region to the south, posing challenges for use of satellite-based systems to assess rainfall deficits and generate early warning of food insecurity such as via the methodology used by ARV and similar systems. In addition, high levels of vulnerability at household level mean that even small deficits in rainfall can have significant consequences, requiring a model that is highly sensitive to such changes. Informants reported gaps in data that hinder effective customisation of the model; as a result, the model was widely considered by in-country stakeholders to be quite distant from reality.

In Madagascar the ARV model was used in drought payout, which was not reviewed in this impact assessment. According to Madagascar government stakeholders, ARV has inspired the development of additional risk models. According to the BNGRC, ARV was used as an inspiration to develop a different risk model. The ARV model is perceived to add value due to existing gaps in hazard monitoring and prediction and is used complementarily to cross-check information. For cyclones, TCE is used but we have limited data about its appropriateness.

Malawi's experience with the ARV model reflects a mixed picture, although one of substantial improvement over time. While there have been improvements in customisation to the country's context, key informants report that gaps in data and the complexity of the model remain hindrances to its effectiveness. The noted improvements are partly due to the further training and refining of parameters following the lack of automatic triggering of the model for the 2015/16 drought insurance policy purchased by the Government of Malawi, which led to the departure of Malawi from ARC for some time. In addition, improvements in customisation are also attributed to the zoning of the country within the ARV model:

There have been notable enhancements in modelling drought and its affected regions. Initially, the model was imbalanced due to Malawi's geographical diversity, with varying water levels in different areas. Treating Malawi as a single entity was problematic. However, dividing it according to agro-ecological zones has significantly improved modelling outcomes, and ARC is credited for this improvement. (KII with development partner)

Malawi was thus a good example of learning and adjustment that has led to significant improvement in the relevance of the model.

The ARV model is adding to an existing landscape of early warning systems and other risk models that are already well rated, at least for Malawi and Mauritania. Indeed, ARC risk models in all case study countries exist in parallel with broader early warning systems. They

complement what is already in place; more strongly in Malawi and Madagascar where it has more credibility. Mauritania's DRM system already had strong risk assessment and early warning systems for drought-induced food insecurity in the form of the Cadre Harmonisé process. Malawi's DRM system also has several institutions providing early warning information such as the Famine Early Warning Systems Network, the MoA, the Department of Climate Change and Meteorological Services, the Malawi Vulnerability Assessment Committee (MVAC), and the Department of Water Resources. Madagascar has some hazard monitoring, profiling, and prediction in place. There is an ongoing process of development of more thresholds to establish and clarify the decision-making process in response. Therefore, the ARC model is perceived as adding value and as also complementing other risk modelling systems.

1.5. To what extent does the capacity developed by ARC meet the needs of the overall government (and partner) DRM systems (versus mostly meeting the requirements of ARC)?

ARC's capacity-development efforts show alignment with government needs in some areas. The majority of capacity building conducted by ARC focuses on enhancing two elements, which help countries access ARC services. These are: 1) helping countries to understand and customise the risk model; and 2) contingency planning. Enhancing these two areas has helped countries not only meet the requirements of ARC but also helped improve technical capacity and planning beyond that needed for ARC. The extent of understanding of countries' needs is, in principle, outlined in country-specific strategy papers, which are informed by the findings of ARC's scoping mission and information provided by the partners. These papers are supposed to be reviewed every two years. The research team was unable to access the strategy papers, however, and it is not clear if this process is undertaken comprehensively. Case study countries' representatives and our review show that countries also have wider capacity-building needs (e.g. broader adoption of financial preparedness, additional strengthening of response delivery systems, and M&E), which go beyond ARC's usual support.

The majority of capacity building conducted by ARC focuses on enhancing two elements – **risk model customisation** and **contingency planning**. The primary recipients of such capacity building are usually individuals operating at the national level (often members of the TWG).

For example, in Madagascar the capacity support from ARC is focused on technical capacity at the national level via training on risk profiling, modelling (use of software), and identification of thresholds for action.

[ARC's capacity-building approach] is participative and collaborative because they take our needs and requests into account. (KII with government stakeholder, Madagascar),

ARC capacity building process is very technical and includes coaching and training in parametrisation and software manipulation, like ARV. These things are difficult to master and periodic refreshers are required for the technicians to fully master the skills. (KII with government stakeholder, Madagascar)

Key informants in Madagascar, Malawi, and Mauritania reported that ARC's support in contingency planning and overall preparedness met the broad needs of their countries. The

capacity building of TWG members facilitates improved contingency planning overall, with secondary benefits mentioned above.

National-level KIIs in Malawi reported that ARC helped increase awareness about forecasting and planning for drought preparedness and provided guidance on what measures to put in place for a timely and effective response to the adverse impacts of drought and food insecurity.

In Mauritania, the contingency planning process of developing an OP and FIP was perceived by stakeholders to be useful and not duplicative of the National Response Plan. They felt it was an important tool in defining decision making and actions to be taken, allowing continuity even when there is staff rotation: *'The most important thing is to have a document describing the need for help, and the funding to provide this help'* (KII with government stakeholder, Mauritania).

The extent of understanding of countries' needs is, in principle, outlined in country-specific strategy papers, which are informed by the findings of ARC's scoping mission and information provided by the partners. The papers are supposed to be reviewed every two years.

The views of case study countries on ARC's understanding of their needs vary. For example, there was criticism about the mismatch between the needs of the country and the content of training for TWG members.

In Mauritania, some stakeholders felt that the capacity support provided to the TWG was not sufficient to enable them to confidently customise the model. Key informants reported that in the early years ARC provided much support on ARV, but in recent years this has declined. ARC conduct visits to support with customisation, but respondents reported that this does not include sufficient transfer of knowledge. The TWG was felt to lack sufficient capacity to make decisions required to customise the model. This results in a perceived inequality in competency between ARC staff and government, leaving government stakeholders feeling vulnerable – *'they can do what they want with us ... we are at the mercy of ARC'* (KII with government stakeholder).

In Madagascar, the sustainability of capacity-building efforts is challenged by staff transfers:

Some TWG members are well established. But it is also somehow an annual challenge, as the membership changes every year within the TWGs: some members are well established but find themselves transferred to other locations. As a result, we ask ARC to refresh trainings with the new members. (KII with government stakeholder, Madagascar)

In Malawi, a national-level key informant mentioned that ARC may need to undertake a proper needs assessment to ascertain the gaps that exist in the system. On the other hand, a non-government informant reported that ARC does not understand the needs of the Malawi government, as the government itself struggles to understand its capacity requirements.

According to the interviewed stakeholders and our document review, countries also have wider capacity-building needs (e.g. in terms of broader adoption of financial preparedness, wider strengthening of response delivery systems, and M&E), which go beyond ARC's usual support. In Mauritania, for example, the broader government DRM systems needs include wider financial preparedness and M&E of drought responses in Mauritania. Respondents

reported that engagement of ARC outside the CSA is minimal. Moreover, although ARC is a financial initiative it does not involve the MoF beyond simply ‘paying the policy’. At the level of the MoF, support was requested on how to budget for droughts, to be used as a decision-making tool – something that ARV should in principle be able to offer. Mauritania is also seeking to better prepare for other risks such as flooding: *‘What we want ARC to do is help us develop our financial capabilities... We want ARC to establish a relationship with the Ministry of Finance’* (KII with government stakeholder). Key informants note that there are few systems in place regarding M&E of response implementation. This is an area that government stakeholders are keen to strengthen, particularly at subnational level where the project execution takes place. ARC has not been involved in this aspect; however, one stakeholder suggested they should provide more support on this element.

1.6 How well is ARC’s work coordinated with existing government systems and with support from other partners?

The TWGs established by ARC in each country play a significant role in facilitating coordination. While ARC is integrated into government structures to harmonise activities and enable coordination with existing government systems, the degree of awareness about ARC activities outside of the MDAs that coordinate ARC varies. The level of harmonisation, access to stakeholders, and awareness of ARC outside their host institution largely depend on the particular MDA’s position within the overall government structure. Coordination between ARC and other actors, including the World Bank and bilateral agencies, is often quite limited.

ARC is hosted by government MDAs in Malawi, Mauritania, and Madagascar, allowing for coordination with existing government systems. In Madagascar, ARC’s work is coordinated by the CPGU, which is based in the Prime Minister’s Office, enabling access to relevant senior actors. In Mauritania, ARC is housed within the CSA. The advantage of this arrangement is that ARC’s engagement is closely tied into the technical and operational processes associated with the planning and implementation of responses to food insecurity. In Malawi, ARC is coordinated by the Department of Disaster Management Affairs (DoDMA), which sits under the President’s Office. In Malawi, ARC also insures a shock-responsive social protection system through the World Bank; this is under a different government department and has limited connection to the sovereign insurance.

In Mauritania, the ARC mechanism has become well integrated into the CSA annual cycles of planning and response. For example, the Cadre Harmonisé is used to triangulate and validate findings from ARV and in principle the National Response Plan creates a wider framework in which to develop a FIP and to coordinate and implement any payouts. In Madagascar, ARC processes have also become part of the annual cycle, which results in a DRM PDMO (Final Plan of Implementation). In Malawi, the ARC mechanism is integrated into the annual national food insecurity response plan. ARC-supported assistance is delivered through the existing government DRM structures and staffing at national, district, and community levels, allowing for some degree of coordination. It also uses existing registries; for example, in Malawi ARC has worked with existing targeting mechanisms in-country to profile and target beneficiaries. Malawi’s existing integrated social registry – known as the Unified Beneficiary Registry (UBR) – is used in parallel with DoDMA’s Joint Emergency Food Assistance Programme guidelines.

ARC has facilitated the creation of a TWG in each country, bringing together representatives of various governmental bodies as well as Replica partners. ARC’s structure and planning processes have created space for coordination and sharing experiences and lessons. For example, in Mauritania the ARC planning processes have enabled harmonisation of

activities with the Replica partner WFP (including selection of activities, selection of geographic zones of implementation, and harmonised criteria for household targeting). This has generated experience that has been adopted within the National Response Plan.

Creating a TWG structure whose members mirror those in the national contingency team in Malawi has created a space for sharing of lessons and facilitated the breaking down of silos within the government early warning entities. TWG members also often contribute to the formulation of national policies.

Coordination of ARC with existing government systems faces challenges related to the timing of the different government systems (planning cycles). In Mauritania, ARC's FIP process has encouraged the government to create an earlier plan for needs ('Plan National des Besoins'), which is a positive development. This plan allows for earlier development of the FIP to meet the early action window. Challenges with timing also extend to financing: *'We finish planning our budget for the year, and the next day someone comes and asks us for 12 million for a response'* (KII with government stakeholder). Key informants in Mauritania therefore state that the National Response Plan cycles (including ARC) need to be better aligned with annual budgeting cycles.

Humanitarian actors present in ARC member countries are often part of crisis response. However, their awareness about (and therefore their engagement with) ARC is limited. This is the case especially for non-Replica actors in Madagascar and Mauritania. Humanitarian and development partners in some countries seem to be more proactive in pre-disaster support and capacity strengthening in multiple ways, but there is no linkage between those efforts and the ARC engagement. For example, multiple partners operate in Madagascar (including IFRC and some UN agencies) and many of them, besides WFP, are unaware of ARC. These partners provide DRM capacity building, as do bilateral partners from countries like Singapore, India, and South Korea. ARC's contribution within this wide pool of agencies and organisations is considered relatively small. In Mauritania, key informants noted that non-Replica partners like the World Bank are supporting the government through the MoF and Ministry of Economy to create disaster financing by re-allocating funding through their existing projects and to consider different kinds of risk financing instruments. However, these efforts are not coordinated or linked to the ARC engagement, which is more limited to the CSA.

1.7 Is engagement with ARC catalysing the adoption of financial and operational preparedness ahead of extreme weather events in member countries?

Engagement with ARC is catalysing the adoption of financial and operational preparedness ahead of extreme weather events to a varying extent. All three case study countries identified improvements in financing and OPs that were due at least in part to engagement with ARC. However, the value of ARC payouts relative to need is often small.

In terms of financial preparedness, member countries value ARC insurance as a component of financial preparation in advance of disasters. UN and INGO stakeholders in Malawi reported that ARC processes – including customising parameters, developing the operations plan, and getting approval from the ARC Board – make ARC unique and thorough in comparison to other insurance programmes. However, problems with ARV have led to a perception among some stakeholders that insurance payouts can be negotiated by appealing for assistance. The responsiveness of ARC to such appeals has been important in maintaining trust in the face of the problems with ARV, but is contrary to *ex ante* financing

principles (predictable, trigger-based, quick) and if over-relied on undermines efforts at catalysing *ex ante* financial preparedness.

All case study countries benefit from premium subsidies offered by the donor community (particularly AfDB and KfW), where the countries pay only 5% of the premium one year and 10% the following year. However, and although the ARC payout is not intended to meet the entire response needs, the value of the ARC payout is not considered significant relative to need in many instances of crises. The case study countries also acknowledge they need to accelerate their internal procedures to process ARC payout payments and have begun to take steps toward acceleration.

Through participation in ARC (and possibly engagement with other actors), conversations have been initiated within governments about how to meaningfully financially prepare for disasters. This includes explorations of innovative DRF strategies, including insurance as a type of risk transfer, as well as contingency funds and redirecting the national budget. Such conversations have contributed to important changes on the national level, including the creation of the National Response Fund in Mauritania and provisions for early financial mechanisms being included in DRM funds in Malawi. However, a wider DRF strategy defining how crises should be financed is often not in place.

Regarding operational preparedness, stakeholders in all three case study countries reported that the ARC process of developing CPs (both OPs and FIPs) is useful. It is aligned to already existing policies (e.g. the PDMO in Madagascar) and contributes to shaping new policies and plans (such as the National Response Plan in Mauritania). ARC's capacity building on climate risk modelling, agriculture risk management, contingency planning, customisation of parameters (rainfall and agriculture parameters), and identification of action thresholds has increased the capacity of in-country experts.

In some countries, ARC guidelines to reach the first beneficiaries within 120 days helped focus and streamline processes. However, this is not the case across all member countries and timeliness of delivery of assistance remains a challenge.

1.8 Do governments learn and improve DRM mechanisms based on previous experience and lesson-sharing by ARC?

While ARC member countries report some learning and improvement in their DRM systems over time thanks to ARC's lessons-sharing (especially Madagascar), most have limited formal learning processes for systematic tracking and integration of lessons learnt and there is insufficient evidence of revisions being made to future response planning based on those lessons. This was the case for all 11 payout countries in Sample A where the formal learning mechanisms were relatively weak, i.e. between emerging (score 1) and evolving (score 2). Similarly, the three case study countries often faced challenges in terms of formal learning, with limited M&E systems, poor data management, and inconsistent capturing of lessons and recommendations hindering effective learning and improvement processes.

In line with the relative weaknesses identified in the document review for Sample A countries, the M&E and formal learning mechanisms in the case study countries were reviewed and generally found to be quite limited. However, the situation in the three countries varies.

For example, unlike the other countries, Madagascar has a dedicated national institution, the Centre d'Etude de Reflexion de Veille et d'Orientation (Centre for Study and Reflection of

Surveillance and Direction), which is responsible for learning lessons from previous disasters, with some lessons learnt captured in reports. However, the reviewed documents did not provide enough information to assess how systematic the learning is, how this affects future planning of response, and how it translates to the local level. ARC's lesson-sharing happened on multiple occasions since 2019, and has been well received in Madagascar.

On the other hand, in Mauritania ARC's role in learning and experience sharing was not mentioned by stakeholders, with some expressing a desire for more experience sharing facilitated by ARC. After the first two payouts, the government conducted workshops to extract learnings. However, it is unclear what data these were based on due to limited M&E systems. There was mixed feedback on the extent to which the results of these have informed subsequent planning and responses and this process was not repeated for the most recent payout.

In Malawi, it is acknowledged by all stakeholders that existing M&E systems and reporting are very basic and depend on the availability of resources, with reporting mostly focused on relief issues after the response, and that lessons learnt are not consistently systematically captured. Human resources shortfalls at subnational level (in particular, the limited number of M&E officers) add to the shortfalls in the wider DRM system and this affects the country's ability to monitor, learn, and improve. The TWG undertakes an end-of-response review where lessons, challenges, and recommendations are identified, but it is acknowledged that this process of capturing lessons is not consistent.

Q2. What factors influence the effectiveness of ARC's capacity-development work?

Response summary:

Across the three case study countries, ARC's approach – including the establishment of national TWGs and capacity building through technical trainings – is considered useful in developing in-country capacity. The breadth of membership of the TWGs is a particular strength. However, the frequency and content of capacity building varies substantially from country to country. While ARV has been useful in some cases, attitudes are mixed and there are concerns about its performance.

Various contextual factors affect ARC's capacity building. Positive factors include favourable political will, pre-existing national frameworks and systems, proximity of ARC to implementing departments, and the prestigious status of ARC. Factors hindering ARC's capacity building include government staff turnover, lack of clarity on training of new members of TWGs, a dependence on short-term in-country training models, and limited mechanisms for flow-down of training to district and community levels by the government. ARC has made some attempts to address some of these, especially in regard to the onboarding of new members.

The WFP is a Replica partner in Madagascar and Mauritania. In both countries, it has provided capacity building on DRM and support with logistics and mobilisation of funds. Officially, Malawi has not had a Replica partner for payout pools between 2020 and 2023. However, WFP as well as other actors have provided DRM capacity building and logistical support in Malawi too.

2.1 To what extent do ARC's product(s), approach, and quality of implementation of its model influence its effectiveness in terms of supporting in-country capacity development?

Across the three case study countries, ARC's approach, such as the establishment of national TWGs and capacity building through technical trainings, has been perceived to be useful in developing in-country capacity. However, the frequency of capacity building varies from country to country and in some cases is reported to be insufficient. While ARV has been useful in some cases, attitudes are mixed and there are concerns about its performance.

For instance, national-level stakeholders in Malawi greatly appreciated the overall ARC structure, especially the establishment of the TWG, which enabled effective collaboration between different stakeholders and specialists during a time of crisis:

I would say for the other partners, maybe we don't have a specific Technical Working Group, it's just a cluster, while ARC has structures. ARC has multisectoral Technical Working Group, which has the academia, the UN agencies, civil society, members of the insurance association and the like. The strength of ARC approach lies in the involvement of such a diverse group. (KII, national stakeholder, Malawi)

The TWG was also appreciated in Madagascar, where ARC contributed to in-country capacity development through shadowing, technical training, and visits to other countries (like Malawi). In Mauritania, the engagement of ARC directly with the CSA contributed to improvements in the planning and coordination of responses to food insecurity, most notably by generating experience with a cyclical calendar of planning (e.g. through the OPs and FIPs). However, in Mauritania stakeholders felt that they had not received sufficient, recent training to enable them to fully engage with ARC on ARV.

ARC's products have been influential in building in-country technical capacity. For instance, in Malawi ARC's contingency planning process prior to a payout enhanced contingency planning. ARC also facilitated a platform for lesson-sharing between the ARC TWG and the broader national contingency planning members. National-level stakeholders in Malawi recognised the contribution of ARC's products, especially ARC's risk model, in building capacity for drought monitoring in-country. Training participants were able to gain insights on undertaking crop-weather modelling, customisation of the ARV model, risk transfer parameters, and vulnerability assessment. ARC enabled the Malawi government to have discussions and consider more proactive approaches to allocating resources for disaster response within the ARC insurance policy. It not only helped with developing human resources and the establishment of the TWG but also with contingency planning and through financial support for coordination. In Mauritania, it was mentioned that ARC provides support in risk assessment but there is no support regarding financial preparedness and budgeting for future droughts. ARC's products in Madagascar helped country officials realise where their gaps were in terms of contingency planning. In regard to financial and operational preparedness, they were able to test their mechanisms through ARC and identify weaknesses.

However, there were concerns regarding the performance of the ARV model, especially in Malawi and Mauritania, which influenced uptake of the ARV model and of ARC. The suboptimal performance of the ARV model in recent years in Mauritania inhibited the effectiveness of ARC's capacity-development work. The ARV model undermined the confidence of stakeholders in its ability to trigger and release funding for severe drought-induced crises, generated mistrust regarding the customisation process and why decisions were made, and fuelled misunderstanding around how insurance works (e.g. that payouts can be negotiated). A similar concern was also raised by a development partner in Malawi. There was hesitancy in the Malawian government to keep up with premium payments because ARV had failed to trigger a payout in 2016. It was reported that, although the

government had a lot of competing priorities, they eventually decided to recommence paying the premiums after some time and negotiations. The tailoring of Malawi's risk model was subsequently substantially improved. This indicates that, in addition to the benefits perceived by stakeholders to ARC's ARV model being more adaptive and tailored to the country's context, it also needs to build trust from the government to ensure its uptake.

2.2 What has been the role of contextual factors in determining the effectiveness of ARC's capacity building?

Various contextual factors specific to the case study countries affect ARC's capacity building in both positive and negative ways. The factors supporting ARC's capacity development in the three case study countries are favourable political will, pre-existing national frameworks and systems, proximity of ARC to implementing departments, and the prestigious status of ARC. The adverse contextual factors hindering ARC's capacity building include government staff turnover, lack of clarity on training of new members of TWGs, a dependence on short-term in-country training visits, and limited mechanisms for flow-down of training to district and community levels by the government. ARC has made attempts to address some of these challenges, especially in terms of onboarding of new TWG members.

Several contextual factors supported ARC's capacity-development efforts in the case study countries. For example, in Malawi there is currently strong political will from the President and the government (especially the MoF) to engage with ARC. This is in stark contrast to the prevalent attitudes toward ARC after an earlier basis risk event, although the history of how attitudes changed remains unclear. Some countries had pre-existing frameworks and systems in place that were ideal for ARC assistance. Staff familiar with these systems and frameworks were receptive to ARC capacity strengthening. The pre-existing frameworks include contingency planning (Madagascar, Malawi) and social registry and assistance delivery mechanisms that ARC could easily draw on and so did not have to implement/create new mechanisms (Malawi). For example, ARC's cash payout in Malawi was meant to facilitate horizontal and vertical expansion of an existing social protection programme,²¹ but there were challenges in implementation (see Section 4.2). In Mauritania, ARC is hosted by the CSA and as such is closely tied into the technical and operational processes associated with planning and implementation of responses to food insecurity. This close relationship with CSA facilitated good access to strengthen capacity within CSA during early ARC engagement (although no training has happened since 2019). In Madagascar, ARC's cyclone model is perceived as a prestigious 'model of science' and the capacity-building efforts associated with it are accepted and welcome.

Some common contextual factors affect ARC capacity building in negative terms. Staff turnover was mentioned as a major problem for capacity building and retention of knowledge in all three case study countries. Government officials are trained by ARC and sometimes within months they are transferred into a different post. This leads to failure in retention of knowledge and expertise and limited ability of government staff to participate at various collaboration platforms. In the words of one government respondent:

...Staff turnover is real and it's a problem. Especially from the government side because now you have a pool of the team that has been trained and then later on you realise they have been moved to an institution that is completely not involved in such areas. Even myself, any time I can move away from here, they will have a

²¹ Delivery mechanisms that were used as part of the Lean Season Food Insecurity Response Programme.

completely new person to start with. So staff turnover is one key challenge that is affecting the programme. So we are not really institutionalised. Because we rely on the nominations that are done by the respective institutions. So the moment someone moves, then we definitely will be getting a new one. (KII with government stakeholder, Malawi)

Staff turnover is often a problem in capacity-building efforts across the globe. To address this issue in Malawi, stakeholders suggested that more people from different institutions should be included in the capacity-building platforms. The high staff turnover also means that TWG members are frequently moved. It is unclear how new TWG members should be trained and brought up to speed within limited timeframes.

Various stakeholders in different case study countries also mentioned that ARC's training can be somewhat erratic in nature, with ARC representatives flying in for a few days for a TWG training workshop and then leaving. It was felt that, for improvement in understanding of government capacity needs by ARC and for their capacity building to be more effective, they need to have longer presence in-country, suggesting that ARC coordinators are not managing to provide this specialised support.²² It was also noted that, while ARC needed to better understand government needs, the government also failed to pinpoint capacity gaps as a result of structural fragmentation in how DRM entities operated. It was also reported that there is limited willingness on the part of some state representative stakeholders to learn and implement, which makes capacity building less effective.

In both Malawi and Madagascar, stakeholders noted that there are limited or no ARC trainings at district and community level, which may negatively affect the institutionalisation of capacity and the effectiveness of ARC training.

Another factor is that the placement of the ARC supervisor (high-level official) and ARC coordinator (executive role) within a government's operational structures and subsequently their proximity to key decision-making stakeholders affects ARC's ability to coordinate and operationalise response. Usually, the closer the placement of the coordinator's institution is to the high-level decision makers, the better access they have to key decision making stakeholders. For example, in Madagascar ARC's work is coordinated by a unit based at the Prime Minister's Office and is high profile with good access to relevant senior actors. In other cases, the position of the coordinator is somewhat removed, limiting their access to high-level decision makers and thus their ability to coordinate. For instance, while ARC in Malawi is supervised by the DoDMA, which sits under the President's Office, the ARC coordinator official is based within the MoA (as an entity overseeing drought). This unit is understaffed and has minimal engagement with other key government stakeholders, such as the MoF. In Mauritania, ARC is coordinated by the CSA. While this allows ARC to be close to technical and operational processes associated with the planning and implementation of responses to food insecurity, they are not involved in high-level inter-ministerial coordination and communication. Therefore, the positioning of ARC within government structures requires careful consideration.

²² It is noted that ARC has responded to some of these concerns when they have been identified previously, including through developing an online learner management system that is, among other things, intended to provide learning resources for new TWG members. They were nevertheless identified as ongoing concerns.

2.3 What has been the contribution of Replica partners vis-à-vis ARC to building capacity? And other partners to governments?

WFP is a Replica partner in Madagascar and Mauritania. In both countries, it has provided capacity building on DRM and support with logistics and mobilisation of funds. Officially, Malawi has not had a Replica partner for payout pools 7, 8, and 9. However, WFP as well as other actors have provided DRM capacity building and logistical support in Malawi too.

In all three case study countries, there are a number of organisations and partners that provide capacity building support to governments in their DRM efforts. This support includes contribution to strategy formulation (e.g. World Bank support to the Government of Malawi to develop its DRF Strategy 2019–2024). Other development partners and academia assist in developing various capacities, including risk analysis studies, support to district councils' programming, and post-disaster assessments. Capacity building and training also often occur as part of bilateral collaboration between countries (e.g. trainings in Madagascar run by partners from Singapore, India, and South Korea). ARC is responsible for a relatively small but vital contribution to overall DRM capacity-building efforts.

In Madagascar, WFP as a Replica partner contributed to building government capacity by engaging in collaborative data collection and processing to elaborate risk profiles. Moreover, it developed simulation exercises and provided logistical support for the organisation of training courses. By becoming a Replica partner, WFP gained better insights into the Madagascar DRM system. Previously, WFP had only collaborated with BNGRC, which coordinates government response, in the operational sphere. Since becoming a Replica partner, however, WFP has also worked with CPGU on engaging with strategy and therefore has a more comprehensive approach to work with all entities.

In Mauritania, WFP made a significant contribution as a Replica partner in building capacity by providing technical support, especially in terms of financial preparedness. For instance, as an active and ongoing member of the TWG, WFP delivered training on ARC to the TWG in 2019. It also provided support for financial preparedness by assisting with the operationalisation of the Fond National, including developing a manual for how funds are released and tracked (to increase donor confidence). As one stakeholder put it, '*Replica has contributed a great deal in terms of capacity building, training, and impact – along with finance*' (KII with government stakeholder).

However, some frustration was also expressed that donor interest in Replica may be distracting from support to national governments and initiatives such as ADRiFi, which could play a larger role in capacity support.

Malawi did not have a Replica partner up to Pool 9. However, WFP remains an important partner supporting the Government of Malawi (as is the case in many other countries). It has provided training in many DRM areas to DoDMA, to authorities at district level, and to traditional authorities. Training was held on conducting assessments, implementing food assistance programmes, identifying and selecting beneficiaries, maintaining stocks, reporting, and logistical training to DoDMA staff at national level and at their warehouses. These are trainings within the usual remit of WFP and take place regardless of whether they are or are not a Replica partner. WFP in Malawi also played an important role in mobilising funds by putting accountability elements in place. For example, for the national fund WFP helped put in place a manual that guarantees the traceability of funds in order to give confidence to those who contribute to the fund.

4.2 Findings: Deploying payouts to reduce the impact of climate disasters

Q3. To what extent and how has ARC contributed to reducing the impact of droughts and cyclones on vulnerable households in its member states?

Response summary:

The assessment of country responses against the quality rubric found that, overall, the CPs scored moderately well, suggesting that, at the point of payout, most responses were set up to deliver 'improved assistance' in line with good practice. At the level of implementation, among the five ARC payouts reviewed in case study countries, only one response was faster than the 'traditional' response timing in comparable crises. Also, while the choice of intervention activities was generally perceived to be appropriate, there were reported challenges with targeting. At household level, the assistance provided allowed for urgent needs to be met, but most of the responses were too late to deliver the expected benefits in preventing recourse to negative coping strategies.

Approach

This section of the evaluation analyses the sample of ARC payouts between 2020 and 2023 and, in more depth, the three country case studies in order to identify the contribution made by ARC planning and financing to improving the timeliness and effectiveness of response, as well as the effects this has had on mitigating the impacts of crises at the household level. Using a rubric of quality criteria, the section firstly evaluates the **CPs** themselves, then the **implementation of the plans**, and finally the **effects of the responses** at household level.

Table 14: Overview of case study country responses that were evaluated

Country	Crisis	Policyholder	ARC payout (US\$)	Activities
Malawi	Drought 2022	Government	\$14.2 million	Food distribution Cash through Social Cash Transfer Programme (SCTP)
Mauritania	Drought 2021/22	Government	\$1.7 million	Food distribution
Mauritania	Drought 2021/22	Replica (WFP)	\$1.1 million	Cash transfer programme
Madagascar	Cyclone Batsirai 2022	Government	\$10.7 million	Food distribution, agricultural kits, reconstruction
Madagascar	Cyclone Freddy 2023	Replica (WFP)	\$300,000	Food distribution

Evaluation of the plans was carried out by drawing on a dataset of OPs and FIPs from the 19 payouts implemented over the past three years. Evaluation of the implementation and impact of responses was restricted to recent ARC payouts in the three case study countries, details of which are outlined in Table 14 above.

3.1. What is the evidence on good practice in assisting households to mitigate the effects of drought / cyclones?

ARC financing, together with pre-agreed CPs, is intended to enable more timely responses that can reach households before they resort to negative coping strategies (such as selling assets or reducing food consumption), which can undermine resilience and erode development gains. The evidence base for early action continues to grow, but a more nuanced approach is emerging that focuses on ‘windows of opportunity’ for timely assistance within a seasonal livelihoods calendar and/or crisis timelines. In addition to timeliness, experts identified wider dimensions of quality that need to be in place to ensure that responses deliver the intended benefits for households. These dimensions (see Table 15) have been used as a basis to evaluate the ARC plans and responses.

A central part of ARC’s value proposition (and that of wider DRF instruments) is that it facilitates access to earlier funds than could be mobilised through ‘traditional’ *ex post* financing approaches such as humanitarian appeals. Access to reliable and early funds can increase the speed at which implementation of responses to drought (and now cyclones) are implemented (in the term used in FE2, the ‘speed benefit’).

The original ARC cost–benefit analysis (CBA) outlined how in extreme weather events that cause hunger and malnutrition, such as drought, the negative effects unfold gradually over time (Clarke and Hill, 2013). Coping strategies are sequenced, with households resorting to progressively more negative coping strategies as the weeks or months pass (e.g. from reducing investments to taking loans, to reducing consumption and selling assets). The CBA presented evidence for the cost-effectiveness of supporting households before they resort to the most negative coping strategies through well-timed and targeted assistance.

Since the inception of ARC, the CBA has been updated twice and the body of evidence on the importance of early action continues to grow. In the context of food crises, the need for ‘no-regrets’ approaches to providing early assistance²³ – which require strong early warning systems and rapidly available finance – is now widely recognised as good practice (Maxwell *et al.*, 2023). Pilots within the humanitarian community in anticipatory action and/or forecast-based-financing have demonstrated improved outcomes for populations receiving earlier assistance to mitigate crisis impacts, compared to later ‘traditional’ reactive emergency response.²⁴ While these evaluations have been limited in scale and number to date and have typically not made use of randomised or quasi-experimental methods, as anticipatory action scales up the evidence base is also projected to continue to grow, with several further studies planned or underway.

In recent years, best practice is evolving toward a more nuanced understanding of ‘early’ crisis assistance. To inform our understanding of the most appropriate timing for assistance,

²³ The ‘no-regrets’ approach centres on the recognition that triggering early action on the basis of forecasts presents a risk that the crisis will not materialise as expected, but the benefits of early action are such that early response should nevertheless go ahead on a ‘no-regret’ basis.

²⁴ For example, see Pople *et al.* (2021) and <https://odi.org/en/publications/the-evidence-base-on-anticipatory-action/>.

we need to know: (i) how likely it is that the negative coping strategies will be undertaken; (ii) at what point (i.e. how many months) after a shock do households start to engage in the costly coping strategies; and (iii) the impact of engaging in these coping strategies (Hill *et al.*, 2019). The focus is increasingly on identifying the windows of opportunity within a particular seasonal calendar or crisis timeline, when different coping strategies are deployed, and the various actions that can be taken to reduce the impacts of that hazard on a population (Choularton and Montier, 2023). These windows are identified through seasonal calendars that allow the periods of peak impact to be identified, combined with knowledge from communities themselves on how they cope with crises. For example, where the lean season marks the point at which the most negative coping strategies intensify, then best practice is typically that assistance should arrive before this point, i.e. ahead of households having to sell assets thereby eroding development gains.

For cyclones, the body of evidence on timeliness focuses a great deal on the benefits of early warning and evacuation ahead of impact (NDMA, 2008). Timeliness of assistance post-landfall is also important in maintaining household welfare (through relief activities) and thereby preventing recourse to negative coping and replacing assets and infrastructure quickly that are essential to income generation. Where income is seasonal, an important window of opportunity for assistance is to replace assets ahead of the next season (e.g. crop planting or tourist season), so as to avoid income losses being compounded (Hill *et al.*, 2019).

In addition to improved timeliness, the experts consulted identified a number of other dimensions of good practice that would indicate improved capacity of countries to assist in mitigating the effects of drought/cyclones. These included the type of activity and how this has been selected, recognising recommended practice in use of cash programming where market conditions and delivery modalities allow (Bailey, 2013). The volume of ARC funds available at national level compared to overall needs, as well as the amount received by each household, were considered important in determining whether the assistance will deliver the desired impact. Who and how recipients are targeted for assistance, and whether gender considerations are taken into account, was also considered important.

The main elements of best practice were assembled into rubrics to make judgements on quality and so inform the assessment of the EQs on the extent to which ARC's capacity building and payouts are contributing to improved assistance. It is important to note that, because sophisticated products such as ARC insurance come at a financial cost, the rubric emphasises the importance of demonstrating not just good assistance but *improved* assistance (compared to 'traditional' assistance funded through normal *ex post* funding appeals). The rubric is summarised in Table 15 and can be accessed in full in Annex B, which details the evidence used to make judgements against each criteria on a four-level scale of emerging (1), evolving (2), embedding (3), and excelling (4).

Table 15: Criteria for assessing the quality of assistance

Timeliness
Enhanced response time for assistance to targeted households
Assistance within defined window of opportunity to mitigate or reduce crisis impacts (slow onset)
Volume and type of assistance
Type of assistance (activities) and delivery modality meet expressed needs and priorities of target populations
Logical pathway between choice of activities and impacts

Timeliness
Volume of assistance sufficient to achieve desired impact (national level)
Volume of assistance sufficient to achieve desired impact (household level)
Targeting and equity
The most vulnerable households are identified and reached
Effects are felt evenly across genders and by marginalised groups
Impact
Reduced reliance on negative coping strategies (compared to those not reached by the 'improved' assistance)
<ul style="list-style-type: none"> • Less recourse to borrowing • Maintained food consumption • Maintained assets that are considered vital to wellbeing and livelihoods

Evaluating the plans

3.2. Do the FIPs provide a good basis for the effective distribution of assistance?

FIPs are intended to improve planning and increase the likelihood that countries are able to rapidly implement drought and cyclone responses after receiving payouts. The sampled FIPs scored moderately well against the rubric of 'improved assistance'. On the dimension of timeliness, the majority of FIPs (10 out of 17) scored highly (embedding (3) or excelling (4)), evidenced by their *intention* to implement an intervention ahead of the relevant lean season and/or the 'traditional' period of response to peak humanitarian needs. However, in over a third of FIPs it was already clear at the moment of submission of the FIP that the ARC payment was not going to achieve the intended catalytic effect (e.g. where timelines had slipped into 'normal' response planning). The FIP documents are generally successful in presenting a clear 'line of sight' between the choice of activities and mitigating or reducing crisis impacts, but in many cases presented evidence that the ARC finance was insufficient compared to overall response needs to achieve the desired impact. Moreover, the FIPs lacked detail on targeting and gender dimensions, which contributed to the lower scores in those areas. They were, however, found to be reflective of dynamic and changing situations and remain an important tool for ARC and member states to carefully plan and document their intentions on how the payout will be implemented.

ARC is the only regional risk pool that links payouts to pre-approved CPs. These are intended to improve planning and increase the likelihood that countries are able to rapidly implement drought and cyclone responses after receiving payouts. The FIPs provide an important piece of evidence in assessing the ToC by allowing us to understand whether, at the point of payout, the response was set up to deliver 'improved assistance' in line with best practice as per the rubric of quality criteria. Note that this part of the analysis is an assessment of what was planned, not what was actually implemented. The FIPs were assessed against the rubric of improved assistance (detailed in Annex B), and the results are summarised in Table 16.

Table 16: Scoring of FIPs against quality criteria

Evidence of 'improved assistance' assessed among sample FIPs	Average score out of 4 (mean)
Timeliness	
Enhanced response time for assistance to targeted households	2.4
Assistance within defined window of opportunity to mitigate or reduce crisis impacts (slow onset)	2.5
Volume and type of assistance	
Type of assistance (activities) and delivery modality meet expressed needs and priorities of target populations	2.7
Logical pathway between choice of activities and impacts	3.0
Volume of assistance sufficient to achieve desired impact (national level)	2.0
Targeting and equity	
The most vulnerable households are identified and reached	1.3
Effects are felt evenly across genders and by marginalised groups	1.2

Timeliness

Seasonal calendars are readily available for all ARC countries,²⁵ allowing us to identify the timing of the lean season period and peak periods of need (and likely also negative coping), and compare this to the intended timing of the assistance. Ten out of 17 FIPs scored highly (embedding (3) or excelling (4)) on timeliness, evidenced by their *intention* to implement an intervention ahead of the relevant lean season and/or the 'traditional' period of response to peak humanitarian needs.

However, over a third of FIPs (seven) scored low on timeliness (emerging (1) or evolving (2)), meaning that assistance was planned to be delivered to households at a similar time or later than the 'traditional' response timing in comparable crises. For four of these, delays in the ARC trigger and/or payment played a role, meaning that the FIP had to be adjusted to reflect the new timelines, pushing the intervention later into the year (further explained below in Section 3.4). In a small number of FIPs it appears that the governments had chosen in their drought OP and FIP that the ARC funds would be implemented over the peak of the lean season, not seeking to leverage earlier windows of opportunity to mitigate crisis impacts.

Volume and type of assistance

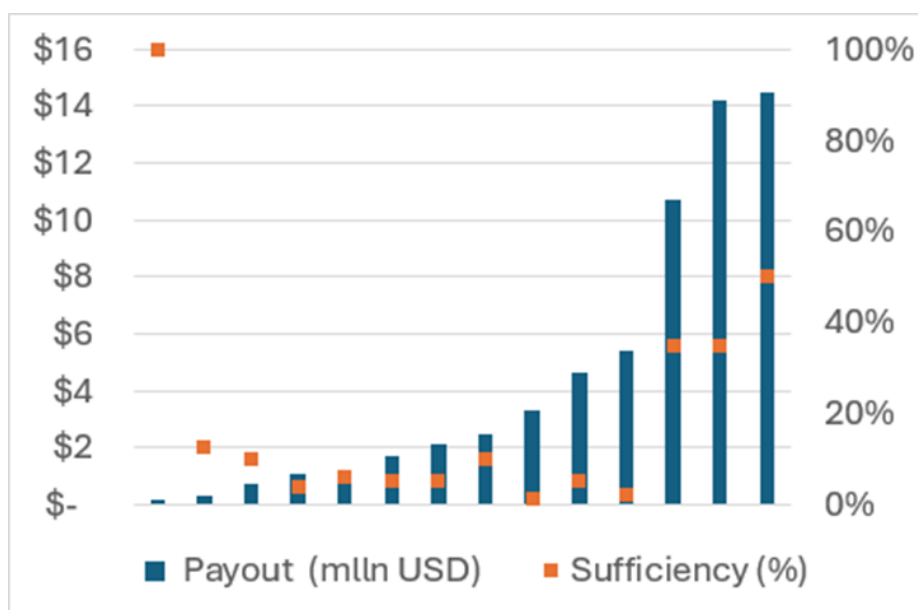
The FIP documents are generally successful in presenting a clear line of sight between the choice of activities and mitigating or reducing crisis impacts, meaning that the justification for the choices was clear. Cash transfer programming was part of the planned response in two-thirds of FIPs, which is seemingly consistent with good practice since cash can be a more cost-effective, flexible, and dignified modality, although it cannot be applied in all scenarios.

Evidence from the FIPs suggests that the volume of early finance available compared to overall crisis financing requirements varied widely across different payouts. Out of the 14

²⁵ A simple Google search of FAO seasonal calendars for each country provided the necessary information here.

FIPs that provided sufficient evidence to analyse this question, in over half of these (nine FIPs) the payout covered 10% or under of the reported total assistance requirements, while three FIPs covered 11–35% of assistance requirements and two covered 50–100% (see Figure 6). On average, the payouts met 20% of requirements, and 14% when Gambia (a clear outlier) is excluded, with an average value of payouts of almost US\$ 4.5 million. Funding sufficiency at household level is very context specific and could not be assessed from the plans.

Figure 6: Payout amount (million US\$) and coverage of estimated assistance requirements (%)

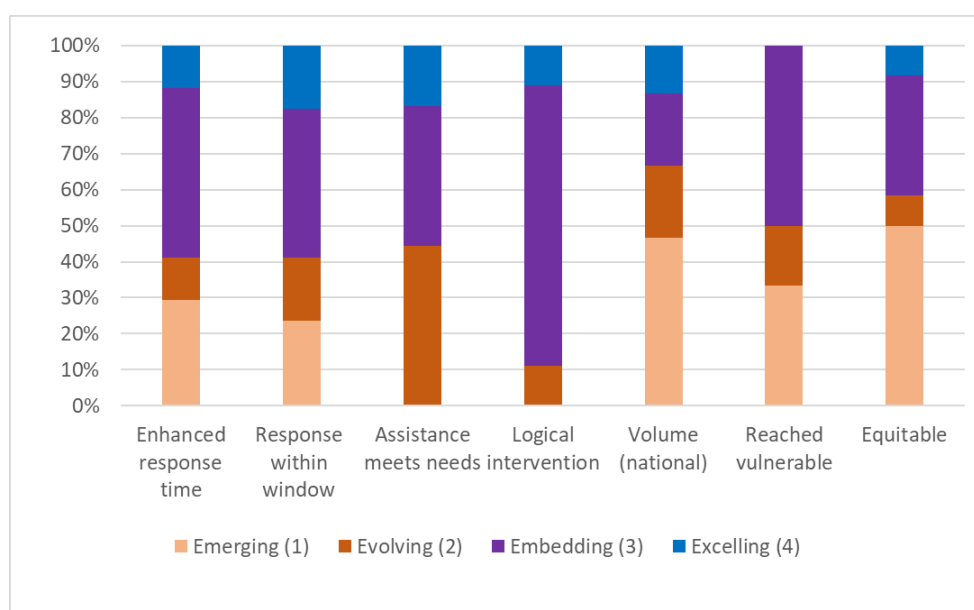


Targeting and equity

The majority of FIPs scored low on their ability to document how the most vulnerable households will be targeted and reached; either the plans were lacking in clarity on the targeting process or on the criteria that would be used to target²⁶. Very few FIPs (four out of 19) offered evidence that the design and distribution of assistance planned to take into account gender and equity considerations (e.g. by including gender considerations in targeting criteria).

Figure 7 shows the distribution of FIP quality ratings by sub-criteria. It shows that, while many sub-criteria were classed as ‘embedding’, a significant number were classed as ‘emerging’ – particularly around the volume of support and equity.

²⁶ Under workstream 1, targeting scored slightly higher due to the focus on targeting systems and processes (how), whereas under this evaluation question clarity on the targeting criteria (who) was also taken into account, which in many FIPs was lacking clarity.

Figure 7: Distribution of FIP quality ratings by sub-criteria (percent)

Gaps and limitations in the analysis

The FIP template is an important tool for ARC and member states to carefully plan and document their intentions on how the payout will be implemented. They were found to be reflective of dynamic and changing situations. For example, in circumstances where a payout was delayed, the timelines and even in some circumstances the programme objective were updated to reflect the situation. However, they were also found to have some significant gaps. For example, the template does not require countries to identify when beneficiaries will first be reached, which often results in inconsistencies across the document regarding the planned timing of support. Details on targeting criteria were often lacking in FIPs and there was little information on gender considerations, which contributed to the low scores in these areas.

3.3. How well do the FIPs align with the OPs, and is the rationale clear for any differences?

Few major deviations were noted between the choice of activities in the OP and those in the FIP, indicating that this process is respected by policyholders. Key changes related to slippage of timing, as well as aspects such as the composition of food relief baskets or number of distributions.

Countries receive an ARC policy subject to having an approved OP, which is independently reviewed by the Technical Review Committee using a scoring system for evaluating whether they meet ARC's requirements. The committee evaluates both whether the activities being proposed are an appropriate use of ARC funds in the sense of time-sensitive and/or catalytic (what they call the basic eligibility criteria) and also whether the arrangements are in place for activities to be implemented, monitored, and evaluated (implementation criteria). Importantly, the latter appears to build on learning from previous evaluations, for example by asking countries to document the financial arrangements by which funds will be received and disbursed (identified as a key factor in delayed implementation of payouts in previous evaluations; see OPM, 2022).

The FIP, developed at the point at which a payout is imminent, is intended to provide an up-to-date picture of the planned response, tailored to the expected payout. The plan is reviewed for consistency with the OP by the ARC Technical Review Committee, and to ensure that the country has all the necessary structures in place to implement the plan and that sufficient information has been provided on the planned intervention.

A review of the OPs and FIPs within the sample found few major deviations between the activities in the FIP and the wider menu of activities and implementation modalities in the OP, indicating that this process (the FIP as an update of the approved OP) is understood and respected by policyholders. This was in line with findings from the previous evaluation (OPM, 2022).

Key changes in timing were identified in four FIPs, reflecting delays in the ARC trigger and/or payment, meaning that the FIP was adjusted to reflect the new timelines, pushing the activities later into the year than planned in the original OP. In some circumstances the composition of food relief baskets was different or number of distributions was lower than the OP (e.g. households receiving two months of support instead of four). One KII explained that this was due to the value of the payout, which was low compared to overall needs. It should be noted that two of the three cyclone FIPs were hard to compare to the corresponding OP due to a lack of clarity in implementation details. This could be the result of the dynamic and fast-paced environment in which cyclone FIPs are developed post-landfall, often when assessments are still ongoing.

Evaluating the implementation

3.4. Was the payout released by ARC in a timely manner?

ARC has a KPI target to make payouts within 30 days of a payout being triggered. For the 16 drought payouts analysed, the average (median) period from the end of season to ARC payment was 116 days, which reduced to 68 days when countries that experienced basis risk situations were removed from the analysis. The two cyclone payouts that have been made took 25 days and 71 days; one remains outstanding. Across the full sample, only two payouts were within 30 days of the end of the season. Small delays seem to be apparent across the full process, but two key areas emerged as the sources of the greatest delays: basis risk situations and lengthy FIP approval processes. Once Board approval was reached, payouts were largely made by ARC Ltd within their KPI target of 10 business days.

Part of the overall ARC value proposition is that finances are provided to fund disaster responses faster than they would be through alternative approaches, such as donor-funded humanitarian responses, which can take time to mobilise. ARC is able to ensure that country members receive funds as quickly as possible by minimising the time between a payout being triggered (based on the ARV platform or TCE) and the actual payout being made. ARC has a KPI target to make payouts within 30 days of a payout being triggered.

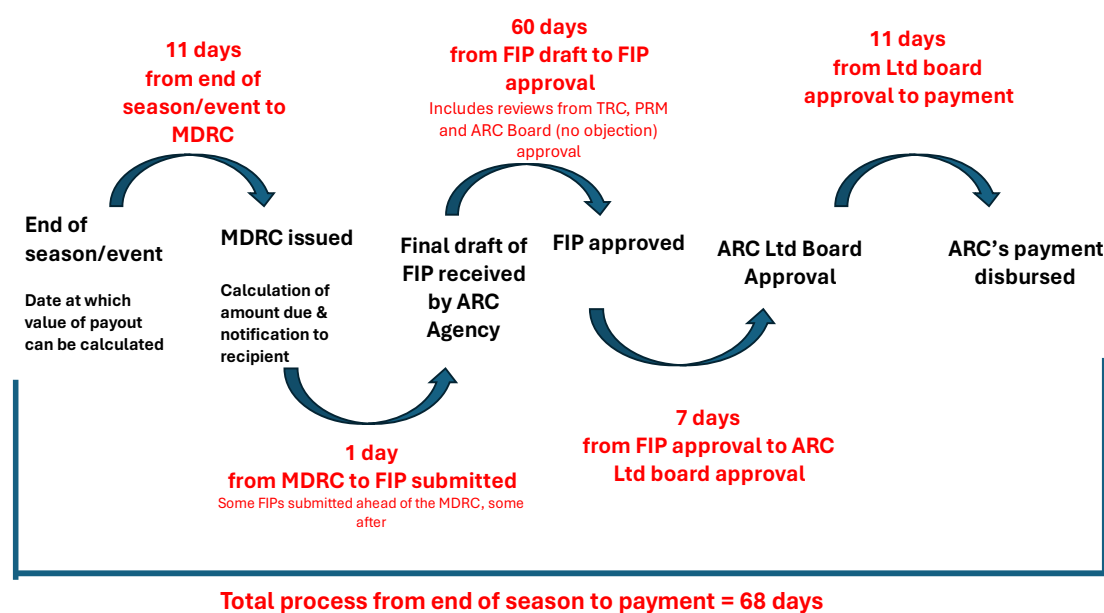
In ARC parlance, ‘trigger’ is used to refer to the point at which ARV alerts users that a payout will be made (e.g. because certain thresholds of rainfall deficit have been breached). In the context of droughts, the trigger can occur many weeks before the end of the season (in a bad drought year), while the actual value of the payout cannot be calculated until the end of the season. For this reason, in our analysis we have focused on the end of season (for a drought) or end of event (for a cyclone), as a fairer reflection of timelines within ARC’s control, although ARC should also be seeking to make use of the early notification normally available before the end of the season.

For the 16 drought payouts made and based on the data provided, the average (median) time from end of season to ARC payment was 116 days. For the two cyclone payouts analysed, the periods from the end of the event to the ARC payment were 25 days and 71 days, while the payout to the Government of Madagascar for Cyclone Freddy (February 2023) has not yet taken place. Only two responses were within the 30-day KPI, even when counting the end of season rather than the formal 'trigger' (see Table 20). This is in direct contrast to the findings of the last OPM evaluation, which concluded that three out of four of the responses sampled received payouts within the 30-day target. Small delays seem to be apparent across the full process, but two key areas emerged as the sources of the greatest delays: basis risk events associated with the ARV model and lengthy FIP approval processes.

- Basis risk situations:** Parametric insurance such as ARC is triggered based on pre-determined thresholds of risk that may not perfectly correlate to the losses sustained in reality. This is termed 'basis risk'. In the second half of 2021, a basis risk situation emerged in which one rainfall dataset (ARC2) produced by the National Oceanic and Atmospheric Administration (NOAA) and largely used for insurance policies in West Africa had a reported loss in quality leading to discrepancies with ground stations and other satellite-based rainfall estimates that were capturing a severe drought, which was not captured by ARV. Four countries with active ARC policies (Burkina Faso, Niger, Mauritania, and Cote d'Ivoire) were affected by the situation. As per ARC's Basis Risk Principles (2019), in such situations and where verified through independent assessment, ARC will make a basis risk payment such as in Malawi in 2017 and Mauritania in 2018. In this instance, ARC indicated that the situation was complicated due to the scale of the problem and delays on NOAA's part in confirming the data failure. Substantial delays were also incurred while ARC Ltd negotiated with the re-insurers to contribute to the payments, an effort that was ultimately successful (although the total re-insurance contribution is not known). This situation contributed significantly to delays in ARC processes, but when removed from the sample the average time taken from end of season/event to payment only reduced from 116 to 68 days, still well over the 30-day KPI. This situation is nevertheless not atypical, as basis risk is a feature of parametric products, and although ARC basis risk principles express an aim to resolve such situations and make payments within 4 weeks, in previous occurrences it also caused substantial delays
- Lengthy FIP approval processes:** Once a payout is expected to occur, ARC Agency will initiate the FIP development process with a country, often through a workshop in-country. By the time the Modelled Response Cost is issued (i.e. the formal notification by ARC Ltd of the payout), many countries have already submitted their draft FIP or do so shortly afterwards. This part of the process (FIP development) is often timely, although concerns were raised that use of new CHIRPS data sets since 2021 is delaying the point at which payouts can be deemed likely and the FIP process by around two weeks. The FIP is subsequently reviewed by a Technical Review Committee comprised of independent experts, whose comments countries have to address before it can go to the next stage of review by the Peer Review Mechanism, and finally to the Board who are given 10 days in which to raise any objection before it is approved. Even when the cases affected by the NOAA data problems and cyclone payouts are removed from the analysis, this process remains lengthy with a median duration of 68 days (see Figure

8).²⁷ The data shows that the process from FIP draft to approval takes on average 60 days. The approval process is lengthy and additional delays are incurred where translation is required (the committees operate in English) and/or if multiple payouts are happening in tandem, thereby putting pressure on the system²⁸. For the cyclone payouts, a FIP-light process enabled a faster approval process for Cyclone Batsirai, but the Replica Cyclone Freddy FIP is known to have taken one month to be approved by the government (before being submitted to ARC), which caused substantial delays. The ARC Ltd Board must approve the payment to be made following Agency approval of the FIP, adding another step. Following Board approval, payments were normally made by ARC Ltd within their KPI target of 10 business days, albeit with some exceptions.

Figure 8: Average (median) times for selected ARC drought payouts 2020–2023



3.5. Did ARC financing help to mobilise a faster intervention? How was it coordinated/sequenced with other financing?

Findings from the case study countries were consistent with previous evaluations, indicating that ARC financing is typically early compared to humanitarian financing, but that payouts are not systematically resulting in faster assistance. Among the five ARC payouts reviewed, only one response was faster than the ‘traditional’ response timing in comparable crises. This was the case despite the fact that four of the five payouts met the ARC KPI for assistance reaching beneficiaries within 120 days of the payout being received.

²⁷ Note that this data includes 11 payouts and some cases have very long times reported for this process (over 100 days). Medians are presented because means will be highly affected by these extreme values. Medians for individual steps of the process are based on those cases where data was provided, which in some cases is missing, and the sum of the medians for each step would not be expected to sum to the total number of days for the process as a whole.

²⁸ Delays in the approval process can also be incurred where ARC is waiting on a response to comments or changes required to the FIP from the country.

Table 17: Timeline of ARC financing and assistance reviewed in case study countries²⁹

County/ Policyholder	Hazard	Date country alerted of a payout	ARC payment disbursed	First assistance received by beneficiaries	First beneficiaries reached within 120 days?	End of assistance	Rubric assessment of timeliness and summary
Government of Malawi	Drought	May 2022	23 June 2022	November 2022	No	March 2023	1 ³⁰ – Assistance delivered in lean season comparable in timing to ‘traditional’ response
Government of Madagascar	Cyclone Batsirai	Jan 2022	2 March 2022	February 2022	Yes (but small number)	Ongoing	1 – Aside from very small first distribution, assistance started nine months after cyclone and still ongoing
Madagascar WFP Replica	Cyclone Freddy	Feb 2023	9 May 2023	May 2023	Yes	May 2023	1 – Assistance started two months after WFP had already been implementing using own funds, thus later than ‘traditional’ response
Government of Mauritania	Drought	Nov 2021	19 July 2022	July 2022	Yes	August 2022	1 – Assistance delivered in lean season comparable in timing to ‘traditional’ response
Mauritania WFP Replica	Drought	Nov 2021	28 March 2022	May 2022	Yes	May 2022	3 ³¹ – Assistance received by most households one month earlier than the ‘traditional’ response timing in comparable crises

²⁹ Two further payouts were triggered in Madagascar during the sample period: a drought payout in 2022 and a government cyclone payout in 2023. The former was not included as the evaluation focused on the cyclone payouts, the latter as the process has not been completed to allow for disbursement to take place. Further discussion on the latter is in this section below.

³⁰ 1 = Emerging: assistance is first received by households similar to or later than the ‘traditional’ response timing in comparable crises

³¹ 3 = Embedding: assistance is first received by most households earlier than the ‘traditional’ response timing in comparable crises

Reasons were related to delays incurred by ‘negotiated’ payments, the length of planning processes (e.g. time spent updating and approving FIPs), the capacity of government systems to implement a rapid and robust response (releasing finance to implementing bodies and long procurement processes), and ARC funds being absorbed into normal annual assistance programming.

Reliable and early ARC payouts are intended to increase the speed of implementation of responses to drought and cyclones. In the case study countries, government, partner, and community respondents were asked to compare the ARC-funded assistance to responses in previous comparable crises and/or to comment on how it was sequenced with other assistance within the same crisis.

The results presented are consistent with previous evaluations indicating that ARC financing is usually early compared to typical humanitarian financing. For the drought payouts, respondents in-country indicated that, regardless of the lengthy time taken to release funds, ARC funds were still available earlier than other funds. This is consistent with other recent studies (e.g. Crossley *et al.*, 2021) that document the lengthy delays from poor seasonal rains to government declaration of a crisis, and subsequent delays of several months to launch emergency appeals. For cyclones, the picture is more mixed. For example, in response to Cyclone Batsirai, the Red Cross, UNICEF, WFP, and INGOs launched appeals within 1–2 days of the cyclone making landfall, but the United Nations Central Emergency Response Fund appeal was not until two months later. The full ARC payout was physically transferred one month after Batsirai landfall, whereas at a similar time the health cluster was reporting to only have received 11% of the required financing needs (World Health Organisation 2022)., although some appeals were launched earlier, it is likely that the Batsirai ARC payout was faster than other types of financing due to the time it takes for appeals to mobilise funds. This was not the case for Cyclone Freddy, however, as is detailed below.

In the case of Mauritania WFP Replica, the ARC payout did facilitate timely assistance. The ARC payout arrived in March and was used to finance cash distributions to households in May, one month earlier than WFP’s ‘traditional’ lean season programming from June to September, which is the period of peak humanitarian needs. WFP reported that this was significant because they have few opportunities to implement early action in Mauritania, as this is not currently allowed by their donors; *‘ARC is very important to us, because it allows us to implement activities in the pre-lean season’* (KII with WFP staff).

In the two other drought responses reviewed, however, early financing was not found to translate into timely assistance; instead, the ARC-funded assistance was received by beneficiaries during the peak of the lean season, which is the ‘traditional’ period of response, and therefore did not represent significant improvements in speed. In Malawi, the financing received by ARC was earlier than that mobilised from other donors and it was said to be helpful in ensuring that the lean season response started on time. However, not all implementation had started by the beginning of the lean season and, in some areas, distribution started in December, six months after the payout. In another response (Government of Mauritania), the financing was not as early as expected due to delays incurred by the negotiated payment (due to a basis risk situation), which was identified as a key factor in the later response timing but was also compounded by lengthy planning and procurement processes. The food distribution was eventually received by communities from July onwards, well into the lean season.

Among the two cyclone responses reviewed, little evidence of speed benefits was reported. Two days after Cyclone Batsirai, the President carried out a quick distribution of relief items

(mainly food) in affected areas prior to ARC's confirmation of payout, which was retrospectively attributed to ARC. Although the speed of the first small distribution was positive, the other distributions funded by ARC happened 9–10 months after the cyclone and the majority of funds were allocated to a 'phase 2' of response, which started over a year after Batsirai made landfall. Delays were attributed in large part to challenges in releasing ARC funds from the treasury to the government department overseeing disaster relief (the CPGU). The CPGU attempted to start implementation while the transfer of funds was being resolved but were obliged to halt programme activities due to an inability to pay partners and suppliers. These problems were also compounded by procurement delays and challenges with access to affected sites. The Replica payout for Cyclone Freddy a year later also incurred some delays as the FIP took a month to be approved by the government and the payout arrived after WFP had already been implementing a response to Freddy for two months using its own internal resources. It therefore did not deliver speed benefits but was nonetheless appreciated as the first specific funding for the Freddy-affected population and complemented WFP's own internal funding.

It is important to note that a government payout of US\$ 1.2 million for Cyclone Freddy was also triggered alongside the Replica payout in March 2023, but at the time of writing this report (mid-2024) the process has not been completed to allow for disbursement to take place. Respondents indicated that, based on the experience of the Batsirai ARC payout from the previous year (which is still being implemented), it was agreed that a project account would be established to receive the Freddy payment. However, the status of this is unclear and the payment is stuck somewhere between ARC and Madagascar. This second government cyclone payout has therefore not been included in the sample as it has not been implemented.

The results presented are consistent with previous evaluations indicating that ARC financing is typically early compared to other financing, but that payouts are not systematically resulting in faster assistance. For example, FE2found that the vast majority of ARC payouts are implemented after the target of 120 days (apart from Replica payouts) (OPM, 2022). It should be noted that, as Table 17 shows, four out of the five responses did start implementation within or close to 120 days of receiving a payout. However, as described above, this metric does not capture delays in the release of funds (prior to the receipt of payout) and/or how the funded response compares to 'normal' assistance programming within a crisis timeline (e.g. starting after WFP had already been implementing a cyclone response for two months). When the latter two factors are taken into account, the responses performed much more poorly, demonstrating the extent to which the dimension of improved timeliness is context specific. It should be recognised that one response was successful in mobilising a faster intervention (Mauritania Replica), showing that the process can work as intended.

3.6. Was assistance delivered in line with distribution plans, and is the rationale clear for any differences?

Countries implemented the menu of activities defined in their plans with no changes in the choice of activities. However, the implementation of responses was generally later than planned (ranging from one month later to delays of 1.5+ years). In addition, in two out of five responses the targeting process was contested at local level and was implemented differently to the specified plans. In that vein, one change in activities was considered positive due to changes in market conditions requiring a switch from cash to in-kind maize distribution, underlining the importance of a degree of flexibility.

ARC guidelines indicate that countries are required to have changes to distribution plans approved by the Peer Review Committee, a sub-committee of the ARC group board. It appears that countries are taking this into account, with little evidence of changes to the menu of activities that are implemented. For example, the process evaluation of the Mauritanian government response reached a positive conclusion that the majority of objectives outlined in the FIP were achieved, including the number of beneficiaries reached (Charlot and Ould El Houssein, 2023). Similarly, the process evaluation in Malawi also confirmed that ARC assistance was provided to beneficiaries through both in-kind support (maize distribution) and cash transfers at the volumes specified in the plans (Charlot and Ould El Houssein, 2023).

FGDs held at project implementation sites in Mauritania, Malawi, and Madagascar also found that communities reported having received the types of assistance that were specified in the distribution plans. However, one key deviation identified was in the timing, as described in the previous section. Assistance was received later than planned in every response, with the shortest delay associated with a WFP Replica intervention in Mauritania (around one month) and the longest delay the Government of Madagascar cyclone intervention, where programming should have concluded within six months but was still ongoing 1.5 years later.

In two cases, a second key deviation related to the targeting processes and quantities received. In Madagascar, more people came to distributions than were officially anticipated, so rations were divided and, in some circumstances, delayed arrival of distribution items (e.g. rice) meant that less of the items was available than planned (leading to reduction of rations). In Malawi, targeting also did not go according to plan. The geographic targeting to allocate aid across affected districts was done at national level using criteria from the MVAC, but the village and household targeting at subnational level varied by district (Charlot and Mwamlima, 2024). Thus, the *'...targeting process went according to how the district councils decide. Normally, on paper it was according to plans, but in reality, it was based on the councils' decisions which was beyond central level control'* (KII with government official, Malawi). Reportedly there was not enough time or resources to register participants and undertake verifications, which meant that the targeting was contested and the programme had to be halted in areas due to inappropriate practices such as favouritism in beneficiary identification. By the time it re-started there was significant maize price inflation, meaning a swap was made to more in-kind distribution of food.

Despite the challenges with targeting and the slippage in timing, the flexibility of the programme in pivoting due to the changes in market conditions in Malawi was reflected in the mainly positive feedback from aid recipients regarding the modality of assistance. As such, this change can be viewed as a positive deviation from the original plan, albeit as a result of initial delays. However, not all areas received the food assistance planned to follow on from the 1–2 months of cash, with the process evaluation revealing that some areas were still waiting for the planned food distribution many months later in December 2023 (Charlot and Mwamlima, 2024).

On a more general point outside of the actual distribution, it is important to note that the M&E sections of the FIPs appeared to be aspirational, with little evidence emerging that the proposed activities (baseline surveys or other) were actually implemented.

3.7. Was the assistance delivered appropriate, timely, and well targeted to the most needy households and individuals?

At community level the type of assistance provided was generally perceived to be appropriate to the needs, but in all of the government responses it was considered to be insufficient in quantity and/or duration. While ARC-financed support is intended only to cover immediate needs and dovetail with a subsequent, traditional humanitarian response, the latter did not always take place. In addition, three out of four of the responses reviewed were reported at community level to be late; while still useful, they did not arrive at the moment at which they could have provided most value to communities (e.g. before food had run out). Two of the case study countries used social registries for targeting, which offered potential for speed benefits, but both suffered from problems with accuracy due to being out of date. The deviations between planned targeting processes and how they were implemented at subnational level call into question the ‘targeting benefit’ (OPM, 2022) that is anticipated to occur by having CPs in place that outline the planned response.

- **Was the assistance appropriate?**

Recipients of ARC-funded assistance in the case study countries reported that, in general, the type of support provided was appropriate to their needs. For example, in Madagascar the provision of food, in a context of inflated rice prices and limited accessibility of markets due to damage incurred by the cyclone, was appreciated. Provision of agricultural kits and support to nutrition were also considered appropriate at community level. However, global stakeholders stated that the ARC cyclone payout was also being spent on reconstruction of health centres and prisons, which was believed to fall outside of the ARC guidelines on how the payouts should be used. This raises questions as to why these activities were approved in the FIP, suggests a lack of clarity about the use to which cyclone payouts can be put, and may have been a contributing factor as to why implementation was still ongoing 1.5 years after cyclone landfall.³²

In the two responses where cash was distributed, this was particularly appreciated by beneficiaries for the flexibility that it affords: *‘Cash is considered better because it enables households to meet their needs in addition to food. It can be used to buy food, small school supplies if needed, and medical care if necessary’* (KII with recipient, Replica Mauritania).

In one response (Mauritania) food assistance was provided, but the beneficiaries fed back that cash would have been more appropriate to allow greater flexibility to address various needs. This was in direct contrast to national and district government respondents who all felt that food distribution is more appropriate as it provides higher certainty of improved food consumption at household level and less risk that money will be spent in other ways. It is important to note that both community respondents and district government stakeholders felt that the preferred type of assistance to mitigate food insecurity is not cycles of emergency relief (even if timely), but rather longer-term assistance that will help to create income-generating activities and build resilience.

Communities assisted by the three government responses emphasised that the assistance provided was insufficient. Recipients noted that the quantity of food assistance was insufficient for large families as opposed to small families, the duration of assistance was too short (covering 1–3 months within a 5+ month lean season), and the composition of food

³² ARC has stated that funds are meant to focus mainly on the early recovery window, i.e. restoring livelihoods and ensuring that the affected population is supported to resume basic food production and related livelihood activities. ARC contingency planning standards and guidelines outline three phases to a cyclone response (relief, early recovery, and rehabilitation/recovery), with a focus on early recovery, but do not appear to specify that payouts cannot be used for rehabilitation (ARC, n.d.).

assistance was too limited (e.g. in Malawi, only maize was distributed). In contrast, fewer concerns regarding the sufficiency of assistance were received from the WFP Replica-assisted communities, where ARC-funded activities complemented other ongoing WFP assistance.

- **Was the assistance timely?**

Community feedback in three out of four³³ of the responses was that the assistance was not timely. The assistance was useful when it arrived, in terms of ensuring people had food to eat, agricultural kits, or other benefits, but it would have had more impact if started at an earlier stage. In one example, communities reported that it should have arrived 2–3 weeks after the cyclone, rather than 9–10 months after. Similarly, in two of the drought responses, communities indicated that the aid should have arrived several months earlier, pointing to the ideal timing being just before communities ran out of food.

The Mauritania WFP Replica response that was implemented one month earlier than the traditional lean season was reported by community respondents to be timely and an improvement on responses in previous years. However, many would have preferred it to start even earlier in March or April.

- **Was the assistance well targeted?**

Two of the three case study countries used a social registry to identify and target beneficiaries. These approaches can offer substantial speed benefits, especially compared to lengthy house-to-house targeting at community level. For example, in Malawi targeting was done by drawing on national protocols together with the UBR, which could produce the lists of households to be reached. However, in this instance the UBR was very out of date, and targeting was eventually believed to mostly have happened on the basis of district council decisions. This was slow and contested and 17% of beneficiaries reported inclusion errors and 62% exclusion errors, with important variations across districts (Charlot and Mwamlima, 2024).

Across all of the case study countries, examples were reported of recipients sharing rations in informal ways, facilitated at the distribution point by community officials (in two countries) or between households themselves in solidarity with non-recipients in a similar situation. As reported in Section 3.6, there were significant deviations between planned targeting processes and how they were implemented at subnational level, calling into question the ‘targeting benefit’ (OPM, 2022) that is anticipated to occur by having CPs in place that outline the planned response.

3.8. To what extent has the capacity developed by ARC contributed to improved assistance delivery?

In only one response out of five did ARC plans together with early financing make a discernible difference to the quality of assistance delivery. Notably, it enabled assistance to be delivered one month earlier than ‘normal’ assistance, which was considered by recipients to be an improvement on previous responses. In the other four responses such a contribution was not observed. In the case of droughts, the funds were absorbed into normal annual lean season programming and in the case of

³³ Note that Madagascar WFP Replica is excluded from this section of the analysis due to the confounding effects of multiple cyclones making it hard to elucidate the timeline of coping strategies compared to assistance received.

cyclones it did not translate into faster or better quality assistance than was achieved with other sources of finance.

As described in previous sections, the ARC-funded assistance enabled WFP in Mauritania to deliver cash assistance in May, which was earlier than 'normal' lean season assistance and was therefore considered an improvement by community respondents. WFP pointed to the importance of the financial capacity provided by ARC, but also the usefulness of having plans in place to facilitate rapid action. The early action was achieved despite there being delays in the ARC payment caused by the basis risk situation. As one respondent put it: *'WFP has never done this before [i.e. being able to respond pre-lean season in Mauritania] and we want the chance to be able to do it again'* (KII with implementer).

In the two other drought responses, the ARC-funded assistance was absorbed into annual lean season assistance. The assistance (including ARC-funded distribution) was not identifiably different in its timing or actions to the regular national lean season response, and therefore we cannot identify significant improvements brought about by ARC. In the case of the Government of Mauritania response, it is important to note that in 2014 the payout was implemented in a timely manner ahead of the lean season (OPM, 2017b). Stakeholders were keen to emphasise the importance of early action and that ARC support ordinarily could have enabled a different and much earlier pre-lean season response if it were not for the issues with the data informing the ARV model that delayed the payout.

The situation in Malawi is more complex as incorporating ARC into the wider lean season assistance was a deliberate strategy rather than due to a slip in timing. National response to food insecurity was based on the MVAC assessment and the Integrated Food Security Phase Classification (IPC) recommendations stating that *'humanitarian response for populations in IPC Phase 3 (Crisis) or above should commence in November 2022 starting with the most affected districts for five months'* (ReliefWeb, 2022). Despite noting that 2.6 million people were already in crisis in the pre-lean season period, the report stated that *'no humanitarian assistance will be provided as is the tradition, as households will continue to depend on their own production or through their social networks'*. The ARC plans were consistent with these recommended timings (although eventually implemented a little later than planned), reflecting a national priority to cushion households through the worst months. One government respondent indicated that a payout triggered in May (which it was) could have been used for farm inputs to irrigate before October and mitigate the crisis, but that this was not included in the menu of options in the OP, which is instead aligned to the peak lean season.

In the cyclone responses stakeholders pointed to the valuable role that ARC played in financial preparedness, which meant that there was dedicated finance available at an early stage of the crisis. Furthermore, for Cyclone Batsirai the volume of finance was also substantial (US\$ 10.7 million). However, in the case of Cyclone Batsirai disbursement of funds was slow, implementation was slow within the challenging operational environment, and no evidence was surfaced that the plans led to a better response. For the Replica cyclone response, the ARC-funded assistance followed WFP's own internally funded assistance, again meaning the evidence does not demonstrate the support improving the assistance.

Evaluating the impact

3.9. To what extent has better delivery of assistance contributed to reducing negative household coping mechanisms, maintaining household assets and consumption levels? How do these benefits vary with the characteristics of the households?

In three out of four responses,³⁴ the aid was delivered too late to prevent negative coping strategies and these were reported by communities to be already fully underway by the time the aid arrived. This included not just reduced food consumption or taking loans, but also the coping strategies most damaging to long-term resilience such as selling of assets such as livestock or household goods. In one circumstance (Mauritania Replica), where the aid arrived earlier than the lean season period it was reported by beneficiaries to be just in time to prevent negative coping. For all responses, communities nonetheless reported that the ARC-funded assistance provided much needed relief, supporting them to meet urgent needs and allowing them to maintain food consumption for the limited duration of the intervention. Larger households found rations to be insufficient but otherwise no significant variations were identified between households.

Community-level respondents interviewed for this evaluation were asked to describe the kinds of coping strategies undertaken to cope with the effects of the crisis and at what point in the crisis timeline these were deployed. Respondents were then asked to reflect on the timing and type of assistance provided, and the effect of the response in reducing negative coping. The results were analysed alongside quantitative data where available from WFP pre- and post-distribution analysis, as well as from household surveys conducted through ARC process evaluations.

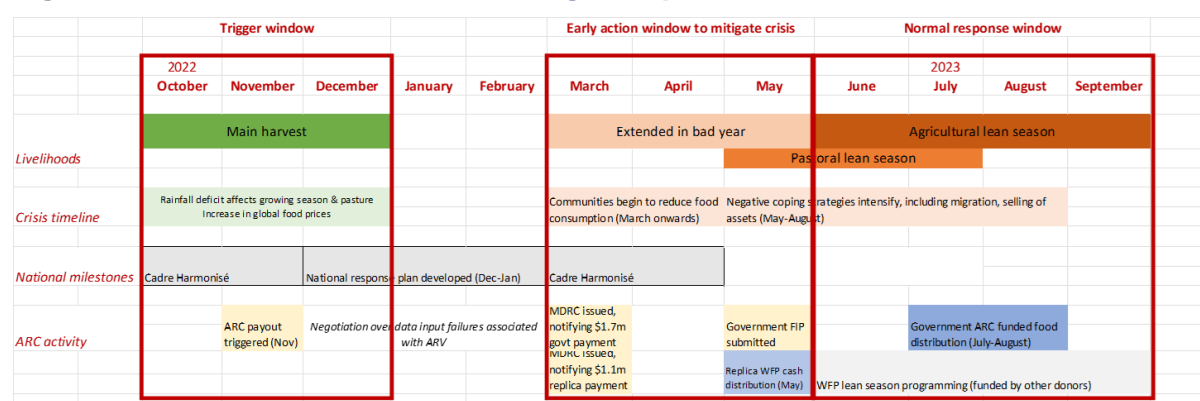
In one country (Mauritania), the great majority of community respondents (23 out of 26 community FGDs) felt that the aid should have started in the months of March, April, or May to protect households from resorting to the sale of animals and/or borrowing from traders. Therefore, as illustrated in Figure 9 below, in Replica (WFP) areas, the aid arriving in May was considered to be just in time to prevent negative coping: *'Household assistance helped preserve some assets, provide for other non-food needs, reduce school drop-outs and ensure acceptable food consumption. This assistance came just in time'* (FGD with recipients, Maghama). However, many recipients felt that the aid could have been even earlier. WFP pre- and post-distribution analysis indicated that, prior to the distribution, 18% of beneficiary households were already resorting to 'urgent' and 28% to 'crisis' levels of coping strategies. Following the ARC-funded assistance in May, the 18% resorting to 'urgent' coping strategies remained consistent, but the 'crisis' levels of coping reduced to 13% (WFP, 2023).

In Mauritania, at the sites supported by a much later government food distribution in July/August, negative coping strategies were widespread; household surveys revealed that 59–91% of households had to buy food on credit, 74–84% of households had to borrow food or money, and 13–36% of households had to sell livestock or other assets (note that the ranges here reflect different intervention areas) (Charlot and Mwamlima, 2024). Fundamentally, households had already been reducing their food consumption since

³⁴ Again, note that Madagascar WFP Replica has been excluded from this section of the analysis due to the confounding effects of multiple cyclones.

April/May when the availability of food decreased, meaning the food distribution allowed for ‘a calming against hunger for a month, no more’ (FGD with recipients, Mauritania).

Figure 9: Mauritania ARC-funded drought response timeline, 2022



The picture in Malawi was similar and, as illustrated in Figure 10, the aid arrived in the lean season. Before receiving assistance, 87% (n=399) of households had resorted to negative coping strategies to meet their food needs (Charlot and Mwalima 2024). The cash and/or food assistance was very important in assisting households to meet their immediate needs such as have food for consumption and other essential expenditures, which allowed households to concentrate on work and schooling for children. However, the assistance came after negative coping strategies were already underway, and some of these strategies – such as selling livestock or assets to meet food needs (19% of beneficiaries) – have longstanding economic consequences (Charlot and Mwamlima, 2024). The effects of the assistance were also limited by the short duration (1–2 months within a five-month lean season), which was flagged by communities.

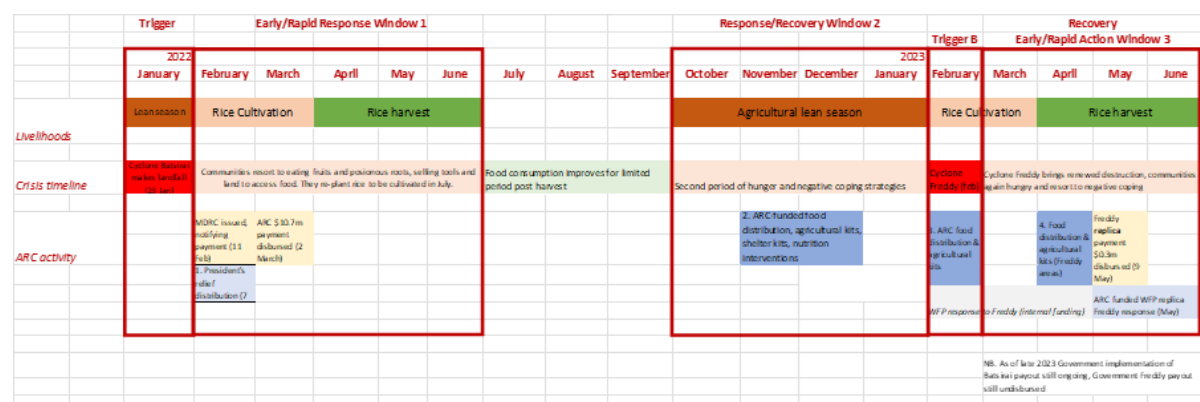
Figure 10: Malawi ARC-funded drought response timeline, 2022



In Madagascar, as illustrated in Figure 11, the negative coping strategies were far more extreme than in the other countries and materialised much faster. Communities reported that within two weeks of Cyclone Batsirai the most affected were eating rotten fruits and roots from the ground to survive. Some of these were poisonous and reportedly resulted in deaths. ‘Most’ people were reported in the FGDs to have sold assets including land, and this negative coping strategy started as early as mid-March – just five weeks after the cyclone. In contrast, most of the recipients started to receive ARC-funded assistance 9–10 months after the cyclone. Few or none of the recipients interviewed maintained normal food consumption levels: ‘When we couldn’t find rice, we only ate coffee made from sugar cane. We used to

eat rice three times a day, but now we only eat it once, at night, and in small quantities' (FGD with Madagascar recipients).

Figure 11: Madagascar ARC-funded Cyclone Batsirai (2022) and Cyclone Freddy (2023) responses



For all of the responses, the ARC-funded assistance supported households in meeting urgent needs and allowing them to maintain food consumption for the duration of the intervention. However, in three out of four responses this was limited due to the late timing and limited duration of the intervention. No significant variations were identified between households aside from bigger households reported being unable to cover their needs with the assistance received (understandable since these were generally distributed as a fixed quantity per household). Some small variations were identified between intervention areas, including due to levels of inflation impacting the usefulness of cash in covering essential needs.

Borrowing was referred to as a positive coping strategy in several contexts. In Mauritania and Malawi, beneficiaries who knew that they were on the list to receive a cash transfer were able to use this knowledge to borrow from shops to meet urgent needs (in effect enabling them to receive the assistance early, albeit at a cost). In Madagascar, being unable to borrow was flagged as a key vulnerability that affected those households most impacted by the cyclone. In Malawi, accessing loans through village banks was listed as a key coping strategy. The results therefore present a nuanced picture of borrowing as an important and sometimes preferred coping strategy.

3.10 How do benefits vary between individuals within households, particularly by gender?

In two out of the three countries, gender and social equity considerations were built into the targeting criteria. In FGDs conducted with men and women separately, the feedback we received suggested that women were benefitting equally to men.

In both Madagascar and Malawi, interventions were targeted in ways that took into account gender and equity considerations, thus demonstrating a level of gender awareness. The beneficiaries who were prioritised varied based on the type of distribution, with criteria including the elderly, pregnant women, people with disabilities, and children under the age of five. However, as reported in previous sections, targeting at community level did not always follow the specified plans. In addition, monitoring and reporting of implementation was not disaggregated by sex or other vulnerability, making it hard to rule out any potential gender-related patterns of exclusion or inclusion. The process evaluations in Malawi and Mauritania were unable to shed further light on gender dimensions due to a reported lack of data in

these areas, in part because they are not explicitly integrated into the ARC procedures and planning templates.

In Mauritania, gender and social equity considerations were not part of the targeting criteria and respondents in government areas also emphasised that the quota is the same for all households (based on indicators of poverty), regardless of the types of household member. This suggests that specific vulnerabilities (such as people with disabilities or female-headed households) that may compound the effect of a crisis and could require additional support are not currently taken into account in the design of the intervention.

However, feedback from all the FGDs conducted with men and women separately was that women were benefitting equally to men. Community respondents (including women) reported that women played an important part in the receipt and distribution of aid, and that benefits were felt evenly within the household. As one respondent put it, *'Assistance from WFP is generally managed by the women who direct it toward household needs, food, healthcare, and hygiene products'* (FGD with recipients, Maghama). In Malawi, district-level government stakeholders said that food assistance was particularly beneficial for the elderly and for people with disabilities, as they had limited ability to search for food independently.

Q4: What have been the main factors explaining the extent of this contribution?

4.1. How does the operational delivery channel for payouts impact the contribution of ARC toward more effective delivery of assistance?

All the responses we reviewed integrated ARC funds into a wider response, rather than treating them as a standalone project. Shock-responsive social protection is a delivery channel with the potential to improve the delivery of assistance, but the anticipated speed benefits were not realised in the example studied for this evaluation. In cases where ARC funds were fully absorbed into business-as-usual lean season assistance, it was hard to identify any effects of ARC on improving assistance. In WFP Replica cases where the ARC assistance was separate but bolted on to existing programming (i.e. providing extra months of assistance before or after) it offered a good shock-responsive approach that leveraged ongoing programming but was reportedly difficult to manage. Pre-financing of assistance (i.e. the use of government funds later paid back by ARC funds) emerged as an important component in speeding up the delivery of assistance.

Previous OPM ARC evaluations have shed light on the challenges of converting early finance into timely assistance, pushing ARC countries – and the wider DRF sector – to consider different kinds of operational delivery channels for payouts. Shock-responsive social protection has emerged as a delivery modality considered to have potential, as payouts are implemented by temporarily scaling up safety net programmes already delivering regular assistance (such as cash) to pre-identified beneficiaries. Within the current evaluation, one of the case study countries (Malawi) indicated in the FIP a plan to channel funds through the scalable SCTP that is used as a modality for implementing the national Lean Season Food Insecurity Response Programme. In practice, ARC funds were used for 'horizontal' expansion to add new beneficiaries to the existing programme. However, it is not clear to what extent the existing structures were used, with the final implementation report stating: *'The ARC cash transfers were used to kickstart the humanitarian response in the targeted districts in the northern and central regions as resources targeting the SCTP beneficiaries through vertical expansion were being mobilised'*. Feedback at community level

was that the targeting of the new beneficiaries was slow and contested, leading to delays and late implementation. In this example, horizontal expansion was not an effective approach to harnessing the speed benefits anticipated from a shock-responsive social protection programme. Indeed, it is unclear why this was chosen over vertical expansion and perhaps the situation would have been different if reversed (i.e. ARC funds were used for rapid vertical expansion, while slower fundraising and targeting for horizontal expansion happen in tandem).

All the responses we reviewed integrated the ARC funds into a wider response, rather than treating them as a standalone project. This is predominantly a sensible operational decision, given the size of the payouts (in most cases representing under 10% of the overall funds required), and also offers benefits strategically in ensuring that ARC is contributing to wider national crisis preparedness and response. However, the way in which ARC was integrated entailed important differences in the impact on quality of response. In two of the five responses (Malawi and Government of Mauritania), ARC was integrated into their 'business-as-usual' programming, i.e. their annual lean season assistance. In these cases it was hard to identify any effects of ARC on improving the timing or quality of response, beyond what could have been achieved through traditional appeals-based humanitarian fundraising. Respondents pointed to the significant experience of the government in this type of response, suggesting a '*status quo*' bias in which deviation from the current ways of working requires significant additional effort and risk. In Mauritania, the importance of early action was underlined by all stakeholders from national to community level, presenting a favourable policy environment in which to experiment with different kinds of response (as happened with the 2014 government payout); this was not the case in Malawi and may not be the case in all countries.

The WFP Replica response that successfully managed to implement early action in Mauritania did so by bolting on the ARC-funded assistance to fund two months' worth of support *ahead* of their normal lean season assistance programme. In this way, they built on existing infrastructure and programming already in place/planned, thereby taking a 'shock-responsive' approach to delivering early action, although not formally identified as such. In Malawi, Cyclone Freddy beneficiaries receiving assistance through WFP's internal funds got an additional month of support after Freddy made landfall for the second time and triggered the small ARC payout. This approach – bolting on ARC assistance to 'normal' or ongoing programming but keeping it distinct within a timeline to be able to account for its effects – appeared to be a good model to be able to deliver and evidence a timely response. However, in practice this can be hard to manage. WFP reported that ARC Madagascar cyclone funds were much more complicated to manage (e.g. the FIP and reporting process) than other sources of funding received, particularly given the small size (\$300,000).

One positive pattern in operational delivery that emerged across all of the countries was the pre-financing of activities to speed up delivery. In Madagascar, the President implemented a small distribution within days of the cyclone, which was later attributed to ARC. In Malawi, the Strategic Grain Reserve was used to kickstart the food distribution and part of the ARC payout resources were later used to replenish the reserves. In Mauritania, the newly established Fond National financed the government response and was later paid back by ARC. Clearly, then, pre-financing is emerging as an important element of more timely ARC assistance. In rapid-onset crises (cyclones and floods), the approach offers the most potential, where very fast assistance is needed more quickly than an ARC payout can be deployed (10 days at the earliest). However, pre-financing could distract from the importance of faster ARC payouts and currently presents a small element of risk to policyholders due to the FIP approval process, which could in theory reject or request changes to an activity.

In cyclone responses, the evidence from Cyclone Batsirai was that the operational environment was very challenging, requiring rapid assistance in a context of high needs and access constraints. While pre-financing may help with unblocking some of the administrative issues associated with the receipt and release of funds, high levels of operational capacity are also required to programme large volumes of finance within the 'relief phase'. Stakeholders indicated that this was recognised early on by the Government of Madagascar and is reflected in the decision to 'absorb' the large payout by including reconstruction activities in their CPs, but that these were unlikely to be achievable within the six-month timeframes specified for ARC implementation. Evidence from the Government of Madagascar cyclone payout is that they have somewhat disregarded the guidelines and are working to their own interpretation of how funds should be used, as demonstrated by the payout still being implemented 1.5 years later and the delay in accessing the second Cyclone Freddy payout. There may be unrealised opportunities to better exploit the links between early finance, available capacity, the different windows of opportunity for assistance, and potential phasing of roles between Replica partners (perhaps covering earlier windows) and government.

4.2. What has been the role of technical design choices in influencing the effectiveness of ARC payouts?

Social registries offer significant potential benefits in timing and efficiency by speeding up targeting in comparison to conducting community-based house-to-house registrations, but only where kept up to date. The choice of cash versus food was widely commented on by government stakeholders and community respondents, with findings suggesting benefits in deploying a more flexible approach that can adjust modality depending on variables such as market prices, access to markets, and individual vulnerabilities such as disability. ARC's model, which assumes that ARC funds will be used first, while other sources of funds are mobilised to cover the remainder of the season, is challenged in situations where no other funds materialise and funds are therefore spread too thinly to achieve the desired impacts at household level.

- **Targeting using social registries**

Social registries were used to facilitate targeting in two out of three countries. These offer significant potential benefits in timing and efficiency by speeding up targeting in comparison to conducting community-based house-to-house registrations. This was observed in Mauritania, where harmonised vulnerability criteria were developed by government and partners at national level and then fed into an online database that, within 48 hours, was able to produce lists of beneficiaries meeting the criteria within the planned geographic areas of intervention. In Malawi, the timing benefits were less evident as the targeting using the social registry was more contested and therefore subject to delays and changes at local level.

In both countries, problems were reported with accuracy and information was not up to date (e.g. some had not been updated for up to five years). This resulted in errors of exclusion and inclusion reported by communities, while concerns regarding the approach were also raised by subnational stakeholders.

Keeping social registries up to date is important in a context of high vulnerability where people can rapidly fall into poverty (e.g. due to death or illness of a breadwinner), but it also requires high levels of effort, resources, and coordination across partners. Where such

systems are in place (such as in Mauritania), they showed significant potential to speed up implementation and facilitate timely response – but only if kept up to date.

- **Cash versus food**

A key design choice that was widely commented on by government stakeholders and beneficiaries was the use of cash versus food to maintain household consumption and welfare. Cash proved to be quicker to implement in some circumstances (fewer procurement delays) and was strongly felt by most recipients to be more appropriate to meeting the diversity of their urgent needs. However, the use of cash raised concerns among some government stakeholders who felt that it would be wrongly spent, while some communities felt that it was unsuitable for people with disabilities who could not travel to buy food and may not factor in transportation costs. Food distributions were appreciated in areas where maize was scarce and prices were inflated, for the ease at which it could be shared within or between households (thereby reducing conflict). That said, some beneficiaries reported having to sell food to meet other urgent needs.

The flexible approach adopted in Malawi emerged as a practical design choice, in which maize versus cash distributions were implemented based on levels of inflation in the markets, which were monitored over the course of the lean season with the implementation modality adapting to the changing conditions.

- **Value of assistance per household**

The value of assistance received per household emerged as a key design choice impacting the effectiveness of ARC-funded assistance. In the two government drought responses (Mauritania and Malawi), the response covered 2–3 months equivalent of needs in a 5+ month lean season (the lean season started earlier due to the drought conditions). Communities indicated that earlier timing of the same assistance would have been an improvement, but we can assume that it would not have eliminated negative coping as so many months would remain uncovered. The WFP Replica programmes provided more sustained assistance (combining ARC-funded action with other ongoing programming) to a smaller number of households over time, which delivered greater impact on a per household basis. However, governments are likely to be under greater pressure than humanitarian partners to spread assistance more widely to cover as many geographic areas in need as possible. This has an impact on the effectiveness of ARC's 'early action' model, which is designed assuming that ARC funds will be used first, with other sources of funds being mobilised to cover the remainder of the season. This was not always evident, and in some areas the ARC-funded assistance was the only form of assistance received. This may also explain why some countries like Malawi are actively choosing to wait to implement their ARC funds over the lean season, i.e. the period of peak needs, rather than looking to leverage opportunities for earlier protective action.

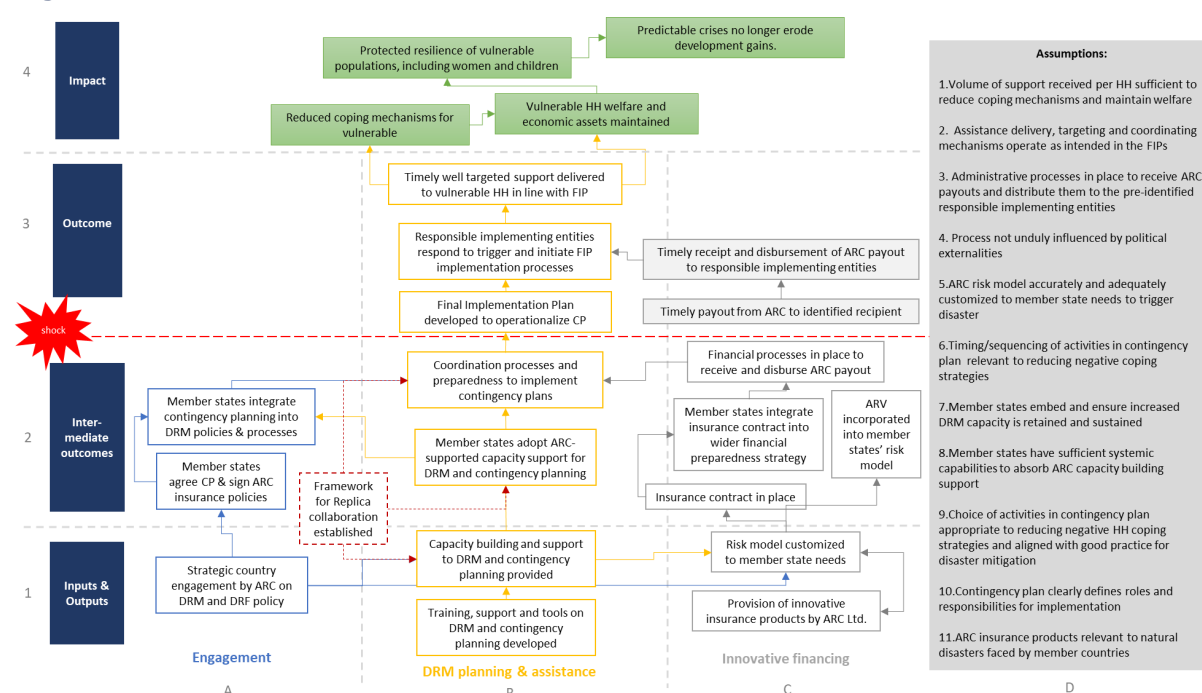
Where large volumes of funds were available (in Madagascar), the systems were not in place to disburse and target these funds in an effective and timely way. This meant that sufficiency of assistance reported by households remained an issue, with few to no recipient households being able to maintain food consumption. In the Madagascar example, and in other FIPs studied, activities are often planned separately without an appreciation of the package of support to be received by each household. Correctly specifying the package of assistance to be received per household is important in addition to there being sufficient finance available through a payout so that it is not spread too thinly.

4.3 Findings: Synthesis

The team reviewed the country-level ToC detailed in Section 2.4 and reproduced in Figure 12 below against the evaluation findings. We assessed the extent to which the evidence demonstrated that the ToC was holding for each stage for the sample of countries included in the evaluation. The workstreams had, where appropriate, already made a judgement on the relative contribution of ARC and other factors to changes observed.

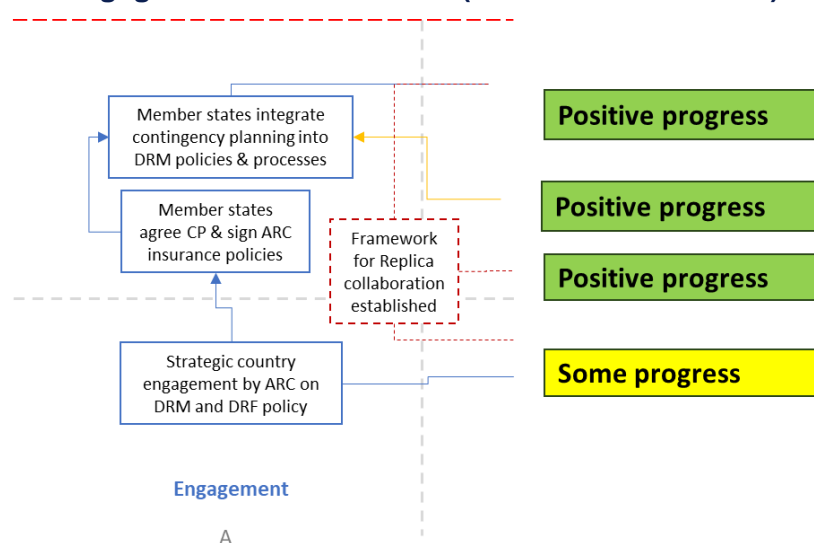
Progress was rated against the scale outlined in Section 3, with green indicating positive progress, amber indicating some progress but also challenges, and red indicating little progress and significant challenges.

Figure 12: ARC's ToC



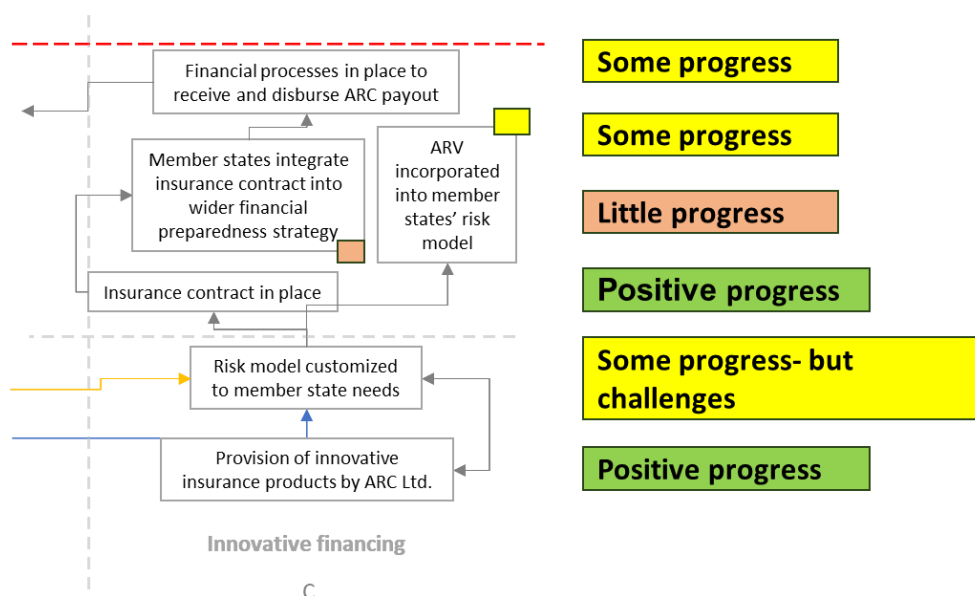
BEFORE THE SHOCK

Figure 13: ARC's engagement before a shock (section of ARC's ToC)



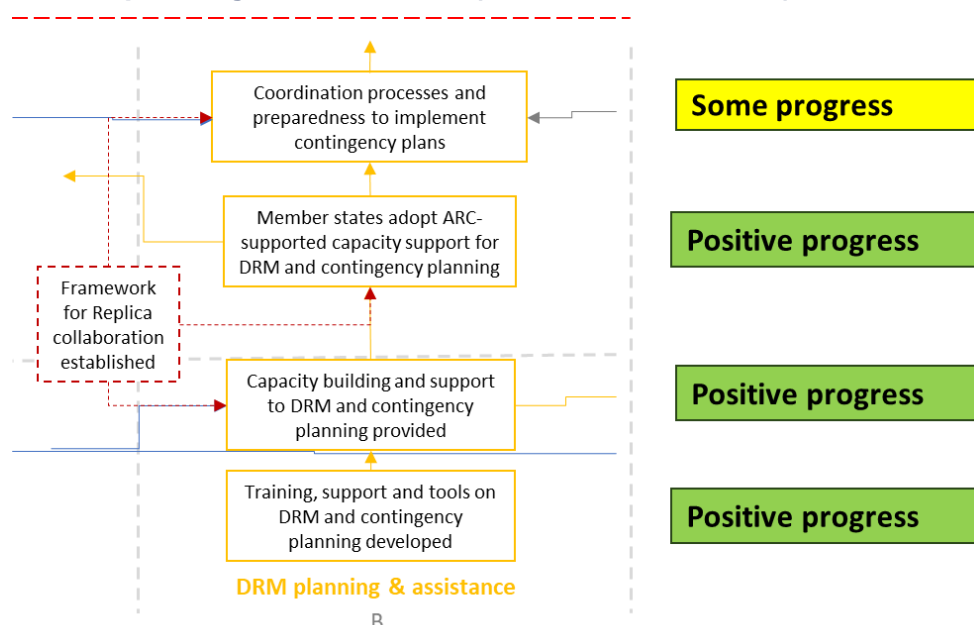
Looking at inputs and the stage BEFORE THE SHOCK, we found that in terms of ENGAGEMENT, there was some progress on strategic country engagement by ARC on DRM and DRF policy, and positive progress made on member states developing and agreeing CPs and purchasing ARC insurance policies, the establishment of a framework for Replica collaboration, and member states integrating contingency planning into their DRM policies and processes (see Figure 13).

Figure 14: Innovative financing (section of ARC's ToC)

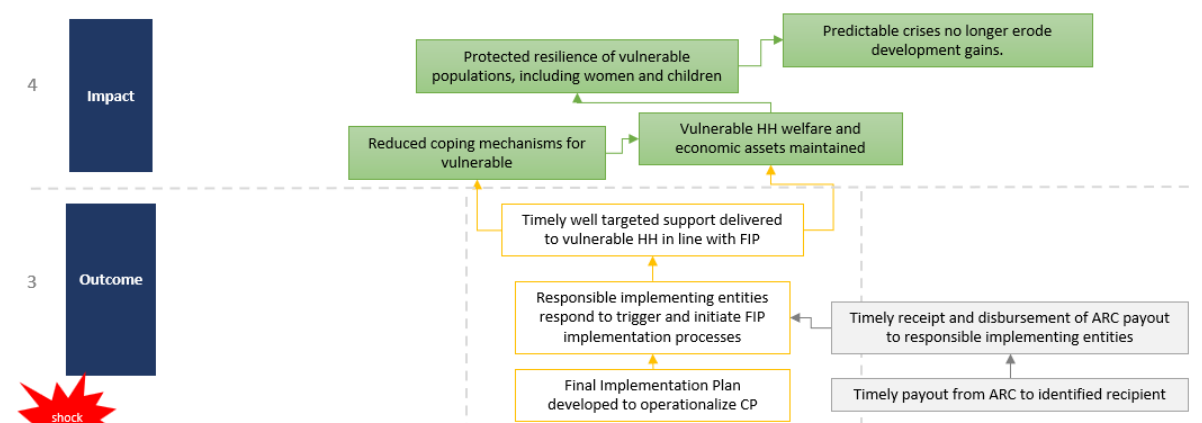


In terms of INNOVATIVE FINANCING (Figure 14), we noted positive progress on the provision of innovative insurance products by ARC Ltd. There was some progress in customising the risk model to member state needs, although this has had significant challenges (as described in previous parts of Section 4). There was positive progress in putting insurance contracts in place (noting, however, that the sample was taken from countries that had payouts and therefore had insurance contracts in place by design). However, it appeared that member states do not integrate the insurance contract into wider financial preparedness strategies. Financial processes are in place only to some extent to receive and disburse ARC payouts. There has been some progress in incorporating ARV into member states' early warning systems, as one part of a wider system.

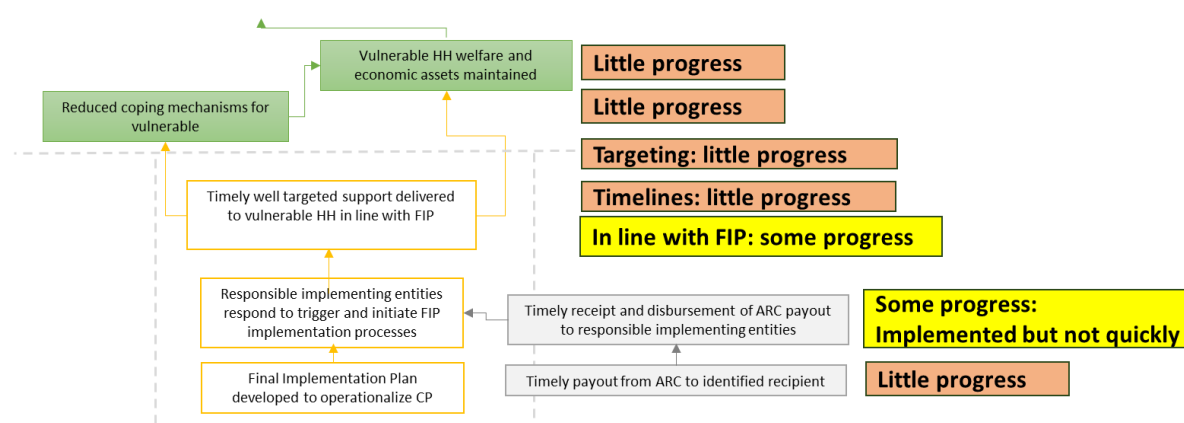
DRM PLANNING AND ASSISTANCE (**Error! Not a valid bookmark self-reference.**) presents the most positive progress overall. Positive progress has been made regarding training, support, and tools on DRM and contingency planning. Positive progress has also been made on capacity building and support to DRM and contingency planning. Moreover, good progress has been made on member states adopting this ARC-supported capacity support for DRM and contingency planning. As a result, there has been some progress in terms of improvements to overall coordination processes and preparedness to implement CPs.

Figure 15: DRM planning and assistance (section of ARC's ToC)**AFTER THE SHOCK**

There has been much less progress in the events that follow the drought or cyclones, which is shown in Figure 16.

Figure 16: ARC's engagement after a shock (section of ARC's ToC)

While there has been progress in developing FIPs to operationalise CPs, payouts from ARC to the identified recipient have often not been timely. While the activities outlined in the FIP are largely implemented as planned, the release of the ARC payout to implementing agencies has often been slow. Moreover, there has also been little progress in terms of targeting and timelines of support delivery to vulnerable households in line with FIPs (see Figure 17). As a result, there has been little progress on the impact level, with vulnerable households not substantially reducing their negative coping mechanisms, leading to limited ability to maintain economic assets. As the response to EQ 3.9 suggests: *'aid was delivered too late to prevent negative coping strategies, and these were reported by communities to be already fully underway by the time the aid arrived. This included not just reduced food consumption or taking loans, but also the coping strategies most damaging to long-term resilience such as selling of assets including livestock or household goods'*.

Figure 17: Assessment of post-shock outcomes and impact (section of ARC's ToC)

In terms of ASSUMPTIONS, assumptions around states' capabilities and the quality of most of ARC's processes are mostly holding, that is: (8) Member states have sufficient systemic capabilities to absorb ARC capacity-building support; (9) The choice of activities in the CP is appropriate for reducing negative household coping strategies and aligned with good practice for disaster mitigation; (10) The CP clearly defines roles and responsibilities for implementation; and (11) ARC insurance products are relevant to the natural disasters faced by member countries.

Assumptions concerning the implementation of the plans for assistance, and ensuring that assistance is designed to be timely, are often only partly holding. These include: (2) Assistance delivery, targeting, and coordinating mechanisms operate as intended in the FIPs; (3) Administrative processes are in place to receive ARC payouts and distribute them to the pre-identified responsible implementing entities; (6) The timing and sequencing of activities in the CP are relevant to reducing negative coping; and (7) Member states embed and ensure increased DRM capacity is retained and sustained.

The assumptions that are not generally holding concern the actual distribution of assistance and ARV. They are: (1) The volume of support received per household is sufficient to reduce coping mechanisms and maintain welfare; (4) processes are not unduly influenced by political considerations (externalities); and (5) The ARC risk model is accurately and adequately customised to member state needs. The assumptions and their RAG rating are presented in Figure 18 below.

Figure 18: RAG rating of assumptions (section of ToC)

Assumptions:	
1. Volume of support received per HH sufficient to reduce coping mechanisms and maintain welfare	Not generally holding
2. Assistance delivery, targeting and coordinating mechanisms operate as intended in the FIPs	Partly holding
3. Administrative processes in place to receive ARC payouts and distribute them to the pre-identified responsible implementing entities	Partly holding
4. Process not unduly influenced by political externalities	Not generally holding
5. ARC risk model accurately and adequately customized to member state needs to trigger disaster	Not generally holding
6. Timing/sequencing of activities in contingency plan relevant to reducing negative coping strategies	Partly holding
7. Member states embed and ensure increased DRM capacity is retained and sustained	Partly holding
8. Member states have sufficient systemic capabilities to absorb ARC capacity building support	Mostly holding
9. Choice of activities in contingency plan appropriate to reducing negative HH coping strategies and aligned with good practice for disaster mitigation	Mostly holding
10. Contingency plan clearly defines roles and responsibilities for implementation	Mostly holding
11. ARC insurance products relevant to natural disasters faced by member countries	Mostly holding

D

5 Conclusions, lessons, and recommendations

5.1 Conclusions

ARC has made a significant contribution to developing country preparedness, particularly in two specific and important areas: 1) it has helped to strengthen coordination between government MDAs and between government and some non-government stakeholders through the TWGs; and 2) it has strengthened response planning through the development of CPs and FIPs. These improvements have helped strengthen country preparedness more generally, beyond simply meeting the requirements of ARC processes. ARC insurance policies increase financial preparedness although, while not expected to finance a comprehensive response, they are typically a modest fraction – around a fifth or less – of total need. There is a concern that the purchase of policies, in some countries at least, is heavily dependent on subsidies.

However, for ARC's objectives to be met improved government capacity is also needed in other aspects of DRM and DRF systems. Some are within ARC's mandate. ARC has built some capacity to use ARV, but it is a complex model requiring significant ongoing support. This is demanding of ARC's limited resources and some member states remain seriously concerned about its performance. Other government capabilities, including rapid targeting and delivery of assistance, M&E, and the integration of ARC's support with wider financial preparedness, are also core to delivering ARC's objectives. However, there are limits to the support that ARC can provide given its mandate, technical strengths, and resources. Other in-country partners, including WFP and the World Bank, sometimes complement ARC's support.

While planning and coordination have been strengthened, most responses were not faster than the 'traditional' response in comparable crises, despite often meeting ARC's 120-day payment-to-assistance KPI. There were significant delays in the process from trigger to payment due to both government and ARC processes, as well as in the actual delivery of assistance once the payout had been received. In some cases, delayed delivery was due to limited capacity to deliver relief rapidly, while in one the assistance was intended to be supplied later due to the lack of other lean season funds. As a result, the assistance provided allowed for urgent needs to be met but most of the responses were too late to deliver the expected benefits in preventing recourse to negative coping strategies. While the type of support was generally considered to be appropriate, there were also challenges with targeting, which quite often did not follow plans. ARC faced some particular challenges during this period due to basis risk problems with ARV, but delays are observed even when these cases are excluded. One of the case study payouts – to WFP in Mauritania – was successfully used to provide assistance in advance of the usual lean season support, demonstrating that it is possible for ARC support to work as intended.

Cyclones are, self-evidently, very different from droughts. They have a rapid onset and sometimes immediate, catastrophic effects on households. Assistance has to be mobilised with much less notice, while preparations and logistics are often more difficult because of damage to infrastructure. Infrastructure repairs are often an essential part of the response. In Madagascar, the support provided by ARC did not enable an effective and timely response by the government. The reasons for this are complex but include slow government

financial procedures, underscored by the fact that the Replica partner was able to deliver assistance in Madagascar much quicker than the government, as well as differences of opinion on the appropriate uses of the payment. Overall, this raises the question of whether current ARC processes are appropriate for cyclones or other rapid-onset disasters and whether the objectives of ARC support are appropriate and clear to all partners.

For the period covered by this evaluation, it is clear that ARC's reporting and MEL systems have not worked as intended. The expected government reports and information on indicators identified in the FIPs were generally not available. Process evaluations were only conducted for a few payouts, and those that were undertaken were unable to assess the gender dimension because this is not captured in ARC plans or reporting templates. This reduces accountability and limits the scope for ARC and member states to learn and improve.

Interventions were generally intended to be targeted to reflect gender and equity considerations. However, in the case-study countries, targeting at community level did not always follow the plans and monitoring and reporting were not disaggregated by sex or other vulnerability. Gender differences in the receipt and relevance of the assistance provided were not reported by beneficiaries.

5.2 Recommendations

A number of recommendations are identified for member states, ARC, and other stakeholders, since the achievement of ARC's overall goal depends on all of these parties. Since both Agency and Ltd must work effectively and in coordination to deliver ARC's ToC, most recommendations apply to both organisations. Where they apply to only one, this is made clear in the text.

It is recognised that the building and strengthening of government systems, which is a fundamental part of ARC's ToC, often requires substantial time and resources.

Some of these recommendations reinforce or develop those made in the second formative evaluation, which was completed in 2022 – and some of those themselves echoed recommendations made in the first formative evaluation of 2017.

ARC accepted those recommendations and is in the process of responding to them through a two-year plan. This evaluation did not examine ARC's responses given the short interval between the FE2 and this evaluation. It is recognised that ARC may sometimes be responding to some of the recommendations made here and assumed that it will be noted in ARC's management response where this is the case. Recommendations were also made for member states in the second formative evaluation, and some may be in the process of responding to them.

Recommendations first cover drought response, then cyclones.

Drought response

Member states:

1) Speed up the response time, from initial identification of drought to assistance reaching beneficiaries.

FE2 recommended: ‘Governments need to find ways to **speed up their response** from the time of receiving a payout to assistance reaching beneficiaries. This should include improved contingency planning and response capacities and other forms of preparedness, including a specific focus on public financial management (such as setting up dedicated bank accounts in advance of payouts) to ensure that governments are ready to act as soon as ARC funds are released. It may also be worth considering **intervention designs** that can help to speed up the response – for example, by reducing the complexity of the intervention.’ (OPM, 2022, p119)

Regarding the interval between receipt of payment and the intervention, the current evaluation recommends the following:

- Member states should act on the above recommendations. Member states need to **ensure that systems for managing funds, targeting, and the procurement and distribution of assistance are established and can be activated well in advance of the payout arriving**. This includes assistance being provided as cash transfers, as food (e.g. through the strategic grain reserves), or other forms of support. Distribution should make use of existing systems where possible – for example, making use of social registries for targeting (when information is sufficiently up to date) and cash transfer social protection schemes for delivering assistance (although assistance should not normally be limited to the existing beneficiaries of those schemes).
- Member states should **explore mechanisms for making more intentional use of pre-financing**, with governments’ own resources mobilised quickly on the understanding that they will be reimbursed by the ARC payout, when this is delayed. However, this should not reduce attention on speeding up the existing payout process.
- Member states should ensure that there is **broad understanding and agreement across government of the importance of early action and the urgency required to deliver it**. This should be facilitated by building and communicating a clear understanding of community needs and coping strategies across the crisis timeline. Otherwise, there is a risk that systems default to the ‘normal’ modes of response programming.

The current evaluation also recommends **(2) reducing the time between the identification of a drought and the initial receipt of the ARC payout**, since there are often significant delays at this stage. Both ARC and member states need to take steps to ensure this. For member states, this requires ensuring that national systems rapidly implement the steps required by the FIP, for example avoiding a lengthy needs assessment process.

Member states should look for ways of **(3) collaborating more closely with country-based organisations**, including ARC Replica partners, whose expertise may help them to increase the efficiency and effectiveness of their support, as recommended in FE2. This should include making more use of these partners to help develop government capacity. It should also ensure planning encompasses the entire assistance programme, recognising that ARC-financed support is typically a modest fraction of need. Where member states struggle to deliver assistance rapidly, Replica partners might be used on an interim basis to fill the gap until government capacity has strengthened.

Member states also need to **(4) enhance their capacity to implement targeting processes, with particular attention to gender and equity issues, strengthen their M&E systems, and better institutionalise capacities developed through ARC support** – as recommended in FE2. Gender-responsiveness can be facilitated by fostering a baseline understanding of the differential impacts of crises across the genders, that should be considered in the design and implementation of any initiative – this can be achieved through (i) studies or analysis to review the gender context and (ii) sex-disaggregated vulnerability data to inform program design and targeting.

Member states should consider carefully where the ARC relationship is ‘housed’ in government (e.g. between the Prime Minister’s Office or an implementing agency) and **(5) actively work to socialise ARC across different government departments** to facilitate the wider catalytic effects that ARC can bring. There are trade-offs between different locations and states should be conscious of these trade-offs and, wherever housed, of the challenges in communication and collaboration that often occur between different parts of government.

ARC:

(6) Identify and implement ways to streamline and speed up the process of FIP approval.

Building on the analysis presented in this report, ARC must analyse the causes of delays in FIP approval and identify how they can be removed. It seems likely that this will involve reducing the number of approval processes required, since each step will tend to introduce delays. It may well require changing the level at which FIPs are approved – this is currently at Board level for both Agency and Ltd. It may also involve more ‘pre-authorisation’ in the OP process. ARC should also seek to ensure that the shift from the NOAA dataset does not cause additional delays in the process of developing the draft FIP.

The review should also consider how the ARC guidance, planning, and reporting templates (for FIPs, OPs, and final reports) can ensure that they can **provide greater clarity and accountability related to gender and M&E activities**, without slowing down the FIP process.

(7) Agree a standardised and faster process for dealing with basis risk events.

Making payouts in the event of basis risk events can undermine the rationale behind parametric insurance. Nevertheless, a set of payouts made following problems with ARV and the NOAA data it depended on were delayed as ARC worked out how to address the problem. Although it would not be expected to be repeated on this scale, similar events have occurred on a smaller scale and ARC should consider if lessons can be drawn from these experiences so that any resolution is timely and transparent.

(8) Help recipient governments improve drought responses.

FE2 recommended: ‘ARC Agency needs to **identify strategies to help recipient governments improve implementation of their drought response** – particularly the timely, sufficient, and well-targeted delivery of support. This requires systematic learning from process evaluations and a stronger country focus on the delivery and monitoring of assistance’ (OPM, 2022, p113).

This evaluation reiterates this recommendation and, in addition to the specific recommendations on this issue made in FE2, recommends the following:

- ARC should explore ways in which it can support member states to **make more use of government pre-financing, based on the expectation of reimbursement through the ARC payouts**. However, this should not be through the introduction of an additional process, which could potentially introduce further delays, and should not reduce attention on speeding up the existing payout process.
- ARC should help ensure that there is **broad understanding and agreement across government of the importance of early action and the urgency required to deliver it**, as outlined above in recommendations for member states, based on a clear understanding of community needs and coping strategies across the crisis timeline. CPs and FIPs should consistently plan for early intervention rather than using ARC payouts to finance a normal lean season response.
- Encourage **identification at country level of the windows of opportunity for early action – based on a specified seasonal/crisis calendar** – that ARC-funded assistance intends to meet and document these in the ARC OP/FIP templates. These should be used to identify concretely the planned timing of assistance to beneficiaries in these documents. It could then form the basis for the definition and assessment of timeliness, rather than using a uniform target of 120 days.

(9) FE2 recommended that ARC Agency should develop a **more strategic and systematic approach to capacity building** and consider how far capacity building may be undertaken through a more cost-effective strategy, making more use of in-country humanitarian agencies and multilateral programmes. Building on this, and in addition to the detailed recommendations made in FE2, this evaluation recommends that **ARC should clarify and delineate its capacity-development mandate and resources available for capacity building** to identify what ARC commits to do and, conversely, what is important for the mechanism (like delivery systems, targeting, and M&E) but sits outside of its mandate, technical strengths, and resources. It should **actively coordinate with other partners to provide complementary capacity building**. This could take the form of coordinated country engagement plans or other approaches. Such an approach will require continued and systematic efforts to further build relationships with other organisations in this space, including AfDB, the World Bank, the Centre for Disaster Protection, and WFP. Such key in-country actors should be added as TWG members in cases where they are currently not represented.

(10) Improve the drought risk modelling available to member states

FE2 recommended that ARC commission a fundamental **external review of the drought model** to ensure that it is fit for purpose. This evaluation recommends that such a review should include within its scope an assessment of the choice of index and of the customisation process, including the availability of data and the capacity required to undertake it (taking into account variations between countries), and should consider the costs imposed on ARC in providing the support necessary for its customisation and use. It should also address the possibility of using alternative indexes and models, including those developed by countries themselves or by third parties, in circumstances where ARV is not appropriate.

Cyclones

(11) **Clarify the ARC objectives of the cyclone insurance** and how far it should address immediate relief requirements, livelihoods recovery, and/or longer-term infrastructure

rehabilitation and reconstruction, including with respect to protective infrastructure such as shelters. This is particularly an issue when payouts are large and governments may struggle to utilise all of the payout in a short time period.

(12) Review and revise ARC processes and guidelines to reflect the specific challenges of cyclones and the objectives of ARC's funding. The speed of payment required and the duration of time in which governments are expected to utilise the funds should be consistent with the objectives of the insurance. Once clarified, ARC should review its processes, drawing on the wider literature and expertise available.

- Consider removing the FIP process, including for Replica partners, to speed up the process and 'de-risk' the pre-financing of activities so that once a trigger is met action can commence immediately. Instead, invest in more support to developing effective OP scenarios and more simulation workshops to identify how a response would be mounted within a short time. Combine this with support to ensure effective M&E during the response itself.
- Encourage countries to consider the complex operational challenges associated with rapid-onset crises (like access to affected areas), the different phases of response, and how they can make best use of complementary support from different partners. This should help to identify where ARC-funded assistance should fit into the overall response. This may require different approaches and guidelines to drought responses.

These recommendations may also be relevant to other rapid-onset disasters such as floods, although the evaluation did not look at them.

AU and development partners

(13) Encourage ARC, through the Board and other channels, to address the findings and recommendations in this report, both in the development of the next strategy and on a shorter timescale. Some of these issues were first identified in FE1 and it is a concern that they remain relevant.

The AU and development partners should **(14) use their influence to encourage member states to consider and address the recommendations made in this report and should provide consistent and coherent support to those that are doing so.** This should help to address both immediate gaps, such as the absence of complementary humanitarian funding, and longer-term systems strengthening.

(15) Consider whether the KPIs for ARC around timeliness of assistance should be based on country-level windows of opportunity for early action based on seasonal/crisis calendars, rather than (or in addition to) using a uniform target of 120 days.

5.3 Lessons

A number of lessons were identified in FE2 for other risk pools, particularly those aspiring to become 'development insurers'.

Additional lessons emerging from this evaluation include:

1. The critical role of government capacity and early planning and preparations in implementing an effective and timely response, and in monitoring and reporting on that response.

2. The importance of knowing who is reached by assistance, with what type of assistance, and how soon in order to understand development/welfare impact. This information is essential to understand if the insurance is delivering on its overall objectives and to provide accountability if development finance is used in support of the insurance.
3. The importance of engaging with different components of governments, both directing and financing bodies and implementing agencies, and recognising the challenges in communication and collaboration that often occur between them.
4. The Replica model demonstrates that a valuable role, complementary to government, can be played by non-government actors both in delivery financed through similar insurance products, particularly where government capacity is limited, and in capacity development.
5. If other regional risk pools seek to draw more extensively on development finance, there will be a need to consider the trade-offs between timeliness and the detailed control and risk management in the use of the payouts that might be expected to accompany it.

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Annex A Detailed outline of methods

The information contained in this annex provides additional details on the qualitative approach and methods used in this evaluation.

A.1 Rigour in qualitative research

A challenge in qualitative research is the definition and achievement of ‘rigour’, particularly when the research methodology should be open to the identification of new hypotheses, causes, and unexpected impacts. Qualitative research is often accused of being: 1) open to research bias or anecdotal impressions; 2) impossible to reproduce; and 3) difficult to generalise. OPM follows a protocol of ensuring rigour throughout its research by implementing specific strategies at each stage of the evaluation process – design, sampling, fieldwork, and analysis. The main aims of these strategies are to minimise single-researcher bias and to be transparent in demonstrating the research process as well as data analysis. In the following subsections, the strategies we adopted to ensure rigour will be discussed as they relate to design, fieldwork, and analysis.

A.2 Design

A.2.1 Tools

The qualitative methodology used two research instruments: KIs and FGDs. All of the tools were semi-structured. This allowed for efficient assessment of pre-specified hypotheses and provided space for unanticipated findings or contexts to be captured and for new hypotheses to be developed.

KIs were conducted with the best-informed individuals on a particular issue. KIs are useful to triangulate findings from other data sources, and to generate questions, since key informants are able to share information not known to most people. KI tools are semi-structured by design. Particular themes already identified as of interest to the evaluation are assessed and open-ended questions are also posed. This flexibility allows the team to probe further and develop inquiry into relevant themes as they arise in the course of the fieldwork. These were conducted with selected representatives from various national-level governments, including members of key ministries involved in DRM (e.g. finance, agriculture, early warning) and other in-country stakeholders supporting national DRM capacity, such as UN agencies, INGOs, NGOs, community leaders, and, where applicable, Replica partners.

FGDs are a qualitative research tool that bring together a group of respondents to discuss a research topic as a group. They provide a social context for research and an opportunity to explore how people think and talk about a topic – how their ideas are shaped and generated through conversation with others. The discussions allow examination of different themes and receipt of consultative feedback from a range of actors. From this, views can be triangulated both within the group (from each FGD) and between the groups (based on other FGDs and interviews). In this study, FGDs were conducted with six to eight participants with two respondent groups – recipient and non-recipient households (men and women). These were carried out to gather their insights on the assistance delivered.

The following tools were used for data collection.

- 1. KIs with government stakeholders** (such as MoF/Treasury, DRM teams, Prime Minister/President's Office representatives, Ministry of Social Protection, MoA): To examine (a) How ARC's capacity-building work and oversight processes have improved national preparedness, both financial and operational, and planning of assistance; (b) whether ARC's capacity-building work and oversight processes have improved national preparedness, both financial and operational, and planning of assistance; and (c) to what extent and how ARC has contributed to reducing the impact of droughts and cyclones on vulnerable households in member states.
- 2. KIs with UN/INGO stakeholders:** To understand (a) to what extent and how ARC's capacity-building work and oversight processes have improved national preparedness, both financial and operational, and planning of assistance; (b) the factors that influence the effectiveness of ARC's capacity-development work; (c) to what extent and how ARC has contributed to reducing the impact of droughts and cyclones on vulnerable households in member states; and (d) to identify the main factors that explain the extent of the contribution.
- 3. KIs with Replica partners:** To explore (a) to what extent and how ARC's capacity-building work and oversight processes have improved national preparedness, both financial and operational, and planning of assistance; (b) the factors that influence the effectiveness of ARC's capacity-development work; (c) to what extent and how ARC has contributed to reducing the impact of droughts and cyclones on vulnerable households in member states; and (d) to identify the main factors that explain the extent of the contribution.
- 4. KIs with community stakeholders:** To understand to what extent and how assistance distributed with support from ARC has contributed to reducing the impact of droughts and cyclones on vulnerable households in member states.
- 5. FGDs with recipients and non-recipients of assistance:** To understand how effectively the assistance helped reduce the impact of droughts and cyclones on vulnerable households and to what extent and how ARC has contributed to that.
- 6. FGDs with non-recipients of assistance** who either missed receiving the assistance or were not eligible to receive the ARC assistance and did not receive other assistance during a similar period. The intention was to understand how vulnerable households coped with the impact of droughts/cyclones in the absence of assistance.

Consent was obtained verbally. Table 18 below outlines the sample size.

Table 18: Sample achieved through data collection in case study countries

Data collection method	Malawi	Mauritania	Madagascar
KIs	31	11	23
FGDs	8	37	13
Total	39	48	36

A.2.2 Development of qualitative tools

The evaluation's qualitative tools were designed in a comprehensive, integrated manner to ensure that each evaluation research question was assessed not only through the perspective of the respondents immediately related to that question, but also from responses from other stakeholders who are likely to know about those issues. For instance, to understand how ARC's capacity-building work and oversight processes have improved national preparedness, both financial and operational, and planning of assistance, we interviewed not only government representatives but also other stakeholders such as UN/INGO stakeholders and Replica partners. This ensured the quality of data through triangulation. Our quality assurance process included a rigorous review of the qualitative tools internally by the leads of workstreams 1 and 2.

A.3 Fieldwork

Data collection in the case study countries was carried out by a team of country-based researchers and international OPM project staff. The country teams were either composed of a senior researcher supported by one mid-level researcher or the team comprised two mid-level researchers and a senior international researcher. Interview guides, consent forms, and relevant project documents were shared with the country teams. A session was conducted with country teams on data management (recording using audio devices, note-taking, transcribing, labelling data, etc.).

In-person data collection was successfully conducted between October and November 2023 in Madagascar, Mauritania, and Malawi. Interviews were conducted by OPM staff and country-based researchers. Interviews were conducted in local languages depending on the comfort of the respondents. Notes and transcripts were collated toward the end of data collection.

A.3.1 Data management

Data is managed and stored on SharePoint and access is limited only to the project research team. Recordings and transcripts were labelled with a clear set of alpha-numeric codes to maintain anonymity. Other measures were undertaken to ensure effective protection and data management. For example, where translation and transcription/note-taking took place, personal identifying information was anonymised to ensure that personal data is protected. At every stage of data collection and analysis, safe storage of data such as audio files and transcripts was prioritised. If data was recorded on devices during data collection, once it was transferred and backed up on SharePoint it was deleted from other laptops and recording devices. Any repository of recordings and personal data is only controlled by select personnel such as the OPM project staff and country-based researchers. No personal-level information is discussed for analytical purposes as well as in the dissemination of findings. At the end of the assessment period, all personal data will be deleted.

A.4 Analysis

A coding matrix based on broad themes and sub-themes (thematic analysis) was developed from the evaluation matrix and interview tools. This coding matrix was added to the NVivo software and, using NVivo, we coded up the transcripts and notes from all interviews using these themes and sub-themes. Any additional themes that arose from the OPM researchers reading through all translated transcripts and notes were added to the coding matrix and

then into NVivo. The transcripts and notes were continuously revisited to check the weight of the arguments and the context of the interview that may have impacted respondents' responses.

The strength of each piece of data was considered in light of the context it came from (for instance, the knowledge that the person cited is likely to have about the subject, the incentives they may have to respond in particular ways, and the corroboration from other qualitative sources). This is based on both the frequency of responses (without claiming to be statistically representative) and the comparison between the views expressed. This analysis thus enables triangulation between KII stakeholders and community-level stakeholders.

A.4.1 Addressing rigour in analysis

Rigour in the analysis of the qualitative data was ensured through:

- Extensive quality assurance procedures implemented during the development of interview tools, data collection, analysis, and report-writing phases;
- Including different members of the team in different stages of analysis (coding, analysis, and write-up), to ensure reliability and consistency in analysis, as well as to mitigate single-researcher bias;
- Triangulation of data through the comparison of different data sources and different stakeholders; and
- Internal peer review.

Annex B Evaluation matrix and rubrics

B.1 Evaluation matrix

DAC criteria	Questions	ToC aspect	Assessment method	OPM ARC evaluation evidence base: ³⁶	Data sources: secondary ³⁷	Data sources: primary ³⁸	Sample ³⁹
Effectiveness (Relevance, Coherence)	1. To what extent and how have ARC's capacity-building work and oversight processes improved national preparedness, both financial and operational, and planning of assistance?						
	1.1: To what extent are country-level DRM systems in place to deliver assistance in crises? ⁴⁰	n/a	Assessment of the extent to which country-level DRM systems are in place to deliver relevant, timely, and effective assistance in crises (droughts and cyclones), using a rubric of quality criteria. This may include dimensions of: governance, coordination and	FE2: Proxy metrics for improved capacity indicate low starting points (e.g. absence of DRM strategies); despite timely payouts, distribution has lagged; capacity largely at individual level rather than systemic, requiring ongoing support SIP: Process to develop a DRM strategy only began in late 2020; some evidence of improved systems but unused by government; government monitoring poor and unimproved	DRM strategies ARC country-level capacity-building plans	KIIs w/ government officials (DRM and early warning teams) KIIs w/ ARC (country engagement)	A

³⁵ This matrix was developed at the start of IA1 and so refers to the evidence base at that time. Strength of the evidence and confidence in its efficacy indicated in colours as strong, moderate, and weak.

³⁶ FE1 = first formative evaluation (2017); SIP = Senegal impact assessment pilot (2021); FE2 = second formative evaluation (2022).

³⁷ For all relevant ARC-supported countries that experienced drought or cyclone payouts in the last *n* years.

³⁸ Case studies in a small number of purposely sampled countries where drought and/or cyclone payouts have recently occurred.

³⁹ A = case study countries + wider selection of countries; B = case study countries only.

⁴⁰ Specifically, droughts and cyclones.

DAC criteria	Questions	ToC aspect	Assessment method	OPM ARC evaluation evidence base: ³⁶	Data sources: secondary ³⁷	Data sources: primary ³⁸	Sample ³⁹
			management, delivery capacity, HH targeting, monitoring and reporting	FE1: Low starting capacity and frequent staff turnover for many countries; evidence of increased capacity but still requiring ongoing support			
	1.2: Has capacity to deliver assistance improved since ARC began working in-country?	B1, B2	Triangulated reports and documentary evidence of changes in capacity in the above dimensions	FE2: 17/35 states have achieved a Certificate of Good Standing SIP: Updates to DR plans; enhanced coordination (w/ START network); increased analytical capacity (w/ ARV); yet high government turnover of ARC-trained staff FE1: Activities verified but ARC staff not training experts	n/a	Kills w/ government officials (DRM, MoA, MoF) Kills w/ DRM agencies (UN, INGOs, etc.)	B
	1.3: To what extent has ARC contributed to any improvements?	B1, B2	Triangulated reports and documents showing contributions from ARC and non-ARC actors	FE2: 17/35 states have achieved a Certificate of Good Standing SIP: Updates to DR plans; enhanced coordination (w/ START); increased analytical capacity (w/ ARV); yet high government turnover of ARC-trained staff FE1: Activities verified but ARC staff not training experts	n/a	Kills w/ government officials (DRM, MoA, MoF) Kills w/ DRM agencies (UN, INGOs, etc.)	B
	1.4: To what extent has ARC's risk model been effectively customised to country needs? How much has ARC's risk model contributed to early	C1, C2	Country-level DRM systems include reference to ARC's risk model as a feature of early warning systems;	FE2: 20/35 member states use ARC risk model as input to national planning (albeit w/ low trust levels) SIP: Strengthened capacity for risk modelling, early warning	Government early warning documentation DRM strategies	Kills w/ government officials (DRM and early warning teams)	A

DAC criteria	Questions	ToC aspect	Assessment method	OPM ARC evaluation evidence ³⁵ base: ³⁶	Data sources: secondary ³⁷	Data sources: primary ³⁸	Sample ³⁹
	warning systems for drought and cyclones?		ARV trusted by country-level respondents as an early warning tool; documentation of customisation process and sign-off / agreement	FE1: Mixed evidence of reliability of ARV to ensure accurate trigger payouts			
	1.5: To what extent does the capacity developed by ARC meet the needs of the overall government (and partner) DRM systems (versus mostly meeting the requirements of ARC)?	B1	ARC preparatory documentation reflects needs assessment basis for tailored interventions; country DRM strategies reflect localisation of assistance planning	FE2: ARC unable to provide technical assistance beyond its own proprietary products; ongoing support suggests lack of embedding SIP: Targeting systems improved but were unused by Government of Senegal (GoS); poor M&E by GoS FE1: Government turnover not sufficiently anticipated in capacity-building strategies; ongoing support suggests lack of embedding	ARC country capacity-building strategies Ongoing capacity-building engagement documentation	KIIs w/ ARC KIIs/ government officials (DRM, early warning) KIIs w/ government DRM partners	A
	1.6: How well is ARC's work coordinated with existing government systems and with support from other partners?	A1, A2, B2	Government coordination strategies well integrated across government systems and incorporate non-government partners	FE2: Replica partnerships growing and positive; few tangible results of wider partnership work SIP: Little impact on GoS financial systems to expedite disbursement; poor M&E by GoS; improvements noted in social protection systems (with World Bank support) FE1: Some evidence of wider stakeholder engagement but with notable gaps, particularly the World	DRM strategies Process evaluations	KIIs w/ government officials (DRM, MoA, MoF, early warning) KIIs w/ DRM agencies (UN, INGOs, NGOs, etc.)	B

DAC criteria	Questions	ToC aspect	Assessment method	OPM ARC evaluation evidence ³⁵ base: ³⁶	Data sources: secondary ³⁷	Data sources: primary ³⁸	Sample ³⁹
				Bank; civil society absent from meaningful involvement; challenges between government officials and technical staff		KIIs w/ Replica partners (if applicable)	
	1.7: Is engagement with ARC catalysing the adoption of financial and operational preparedness ahead of extreme weather events in member countries?	A2, C2	Government policies reflect commitment to ARC premiums; financial planning accounts for ARC payouts with disbursement plan; senior government leadership express value in disaster preparedness (ARC services and products)	FE2: Evidence of government ownership of risk management through ARC insurance purchase; member countries value ARC's drought insurance and capacity support; frequent delays in government disbursement of funds undermines ARC's intended effects SIP: Greater predictability of disaster financing; positive evidence of ARC's contribution to building stakeholder commitment and cooperation through FIP preparation and Replica; little impact on GoS financial systems to expedite disbursement FE1: Early evidence highlights obstacles in country bureaucracies to disburse ARC payouts; challenges noted for effective engagement between government officials and technical staff	Government DRM and DRF policies Government financial plans for ARC payouts Premium payment records	KIIs w/ government officials (political leaders: DRM, DRF, MoF)	B
	1.8: Do governments learn and improve DRM mechanisms based on previous experience and lesson-sharing by ARC?	B2	Robust government M&E plans in place for disaster assistance and complemented	FE2: Noted gaps in capacity building for M&E SIP: GoS monitoring of disaster response has not improved significantly	Government DRM M&E plans	KIIs w/ government officials (DRM, early warning)	B

DAC criteria	Questions	ToC aspect	Assessment method	OPM ARC evaluation evidence base: ³⁶	Data sources: secondary ³⁷	Data sources: primary ³⁸	Sample ³⁹
			with necessary capacity	FE1: Few formal opportunities for peer-to-peer learning		KIIs w/ Replica partners (if applicable)	
Effectiveness (Relevance)	2. What factors influence the effectiveness of ARC's capacity-development work?						
	2.1: To what extent do ARC's product(s), approach, and quality of implementation of its model influence its effectiveness to support in-country capacity development?	A1, B1, C1	ARC's products are technically sound, quality controlled, relevant, and tailored to local needs	FE2: Increased # of CPs in place, though quality is unclear; ongoing capacity support required; risk model distrusted and remains untransparent; very slow product development SIP: Evidence of increased capacity for risk modelling, early warning, risk transfer, operational planning FE1: Risk model complex and not transparent; ARC capacity-building delivery unsophisticated	ARC capacity building country-specific strategies ARV review reports ARC M&E reports	ARC staff External experts (risk modelling, disaster response, public finance)	B
	2.2: What has been the role of contextual factors in determining the effectiveness of ARC's capacity building?	A2, B2, C2	Certain contextual factors – such as conflict/stability, 'political commitment'/ stakeholder support (from whom?), level of government public accountability, general level of extent of pre-ARC existing capacity in DRM – characterise	FE2: n/a SIP: n/a FE1: The low starting capacity for many governments and high turnover are major challenges; politics present a challenge, with short-term incentives for decision makers in contrast to the long-term value of insurance	Political economy analysis of selected countries DRM analysis of selected countries	KIIs w/ government officials (political leaders: DRM, DRF, MoF) KIIs w/ DRM agencies (UN, INGOs, NGOs, etc.)	B

DAC criteria	Questions	ToC aspect	Assessment method	OPM ARC evaluation evidence base: ³⁶	Data sources: secondary ³⁷	Data sources: primary ³⁸	Sample ³⁹
			instances of more successful (effective and durable) capacity building while their absence predicate ongoing support needs			KIIs w/ Replica partners (if applicable)	
	2.3: What has been the contribution of Replica partners vis-à-vis ARC to building capacity? And other partners to government?	B1	Government DRM capacity has been strengthened from multiple sources, with ARC complementing such support and ensuring crucial gaps are filled	FE2: Member states value Replica's increased technical expertise; ARC has not maximised Replica's additional capacity support potential SIP: Improved social protection system through World Bank support; START partnership greatly expanded capacity and coverage FE1: n/a	DRM reports on selected countries Partner reports on capacity support ARC M&E reports	KIIs w/ government officials (political leaders: DRM, DRF, MoF) KIIs w/ DRM agencies (UN, INGOs, NGOs, etc.) KIIs w/ Replica partners (if applicable)	A
Effectiveness (Relevance)	3. To what extent and how has ARC contributed to reducing the impact of droughts and cyclones on vulnerable households in its member states?						
	3.1: What is the evidence on good practice in assisting households to mitigate the effects of drought / cyclones?	B3, B4	Evidence of good practice in assisting households to mitigate the effects of drought	FE2: N/A SIP: N/A FE1: N/A	Secondary literature on drought / cyclone impacts, household	KIIs with key stakeholders / technical experts	A

DAC criteria	Questions	ToC aspect	Assessment method	OPM ARC evaluation evidence base: ³⁶	Data sources: secondary ³⁷	Data sources: primary ³⁸	Sample ³⁹
			/ cyclones assembled into common rubrics / criteria, at general (Sample A) and country-specific level (Sample B)		coping, and effective assistance ARC CBA (2016)		
	3.2: Do the FIPs provide a good basis for the effective distribution of assistance?	B3	Review of FIPs across all Sample A countries against the criteria established under 3.1 to identify extent to which they are meeting recognised good practice (assistance type and volume, targeting, selection of activities, etc.) and/or the rationale for any differences	FE2: FIPs contain pre-specified targeting criteria which identify vulnerable sub-groups and which are based on a prior needs assessment SIP: N/A FE1: N/A	FIPs ARC Technical Review Criteria	KIIs with government staff/TWG involved in developing the plans KIIs w/ DRM agencies (UN, INGOs, NGOs, etc.) KIIs w/ Replica partners (if applicable)	A
	3.3: How well do the FIPs align with the CPs, and is the rationale clear for any differences?	B3	FIPs are compared to OPs, and scored on alignment and/or differences are clearly explained	FE2: Consistency between the sampled OPs and the FIPs in terms of interventions and activities, and responsible implementing ministry/partners SIP: N/A FE1: N/A	FIPs CPs Supporting documentation	KIIs with government staff/TWG involved in developing the plans	A

DAC criteria	Questions	ToC aspect	Assessment method	OPM ARC evaluation evidence base: ³⁶	Data sources: secondary ³⁷	Data sources: primary ³⁸	Sample ³⁹
						<p>KIIs w/ DRM agencies (UN, INGOs, NGOs, etc.)</p> <p>KIIs w/ Replica partners (if applicable)</p>	
	3.4: Was the payout released by ARC in a timely manner?	3C	Number of days between trigger and payout release is consistent with ARC targets (30 days)	<p>FE2: Drought insurance payouts received within specified timeframe for at least two-thirds of member countries, and none received after 40 days</p> <p>SIP: Government and Replica payouts received within target timeframes</p> <p>FE1: N/A</p>	<p>FIPs</p> <p>Supporting documentation from ARC</p>		A
	3.5: Did ARC financing help to mobilise a faster intervention? How was it coordinated/sequenced with other financing?	B3	ARC financing rapidly disbursed to responsible entities for implementation. Entities commenced implementation in a timely manner. Assistance was received by households earlier than that achieved <i>either</i> in previous crises <i>and / or</i>	<p>FE2: Vast majority of ARC payouts are implemented after the target of 120 days (apart from Replica payouts)</p> <p>SIP: Payouts were implemented late (6–9 months); sequencing with other funding hard to ascertain due to confounding effects of COVID19 response</p> <p>FE1: Yes in Mauritania, not in the other countries surveyed due to weaknesses in the process and political constraints</p>	<p>Process evaluations</p> <p>Replica evaluations</p> <p>Wider M&E documentation</p> <p>Secondary data reports of crisis assistance delivered</p>	<p>KIIs w/ government officials (political leaders: DRM, DRF, MoF)</p> <p>KIIs w/ DRM agencies (UN, INGOs, NGOs, etc.)</p>	B

DAC criteria	Questions	ToC aspect	Assessment method	OPM ARC evaluation evidence base: ³⁶	Data sources: secondary ³⁷	Data sources: primary ³⁸	Sample ³⁹
			with other sources of financing for the same crisis		(case studies only)	KIIs w/ Replica partners (if applicable)	
	3.6: Was assistance delivered in line with distribution plans, and is the rationale clear for any differences?	B3	Assistance delivered in line with plans, looking specifically at aspects of timing, targeting and operations (e.g. movement of funds, procurement)	FE2: Evidence of changes made to targeting processes, without clear explanation SIP: Evidence of government targeting process different to FIP; drought response being wrapped into wider COVID-19 response led to adjustments; Replica flour distributions swapped to cash due to shortage of flour FE1: Some evidence of switching of design choices, e.g. grain type with little documented process	Process evaluations Replica evaluations ⁴¹ Wider M&E documentation	KIIs with government staff/TWG involved in implementation KIIs w/ Replica partners (if applicable)	B
	3.7: Was the assistance delivered appropriate, timely, and well targeted to the most needy households and individuals?	B3	Evidence from recipients and non-recipients of assistance on the extent to which the assistance delivered met the quality criteria	FE2: Evidence of assistance being delivered late; some evidence volume of assistance provided insufficient; poor reporting by governments means we do not know whether targeting was effective SIP: Evidence that distributions helped households with their food consumption/requirement; some evidence volume of assistance	Process evaluations Replica evaluations Wider M&E documentation	KIIs with implementing staff (at field level) FGDs with recipient/non-recipients	B

⁴¹ Known Replica evaluations include Pool 7a payout to Start Network in Senegal (available), Pool 8a WFP payout in Mali (underway), and Pool 9a payouts to WFP in Mali and Burkina Faso (planned).

DAC criteria	Questions	ToC aspect	Assessment method	OPM ARC evaluation evidence base: ³⁶	Data sources: secondary ³⁷	Data sources: primary ³⁸	Sample ³⁹
				(cash and food) insufficient; government response missed lean season preparedness period, suggesting it was too late; some evidence of targeting problems, but non-beneficiaries not surveyed so extent of problem unknown FE1: Evidence from process evaluations suggests timing an issue; volume of assistance also questionable in terms of ability to make a tangible impact on protection of assets and consumption			
	3.8: To what extent has the capacity developed by ARC contributed to improved assistance delivery?	B2, B3	Evidence of capacity developed with ARC support improving the actual delivery of assistance to households, as assessed against quality criteria	FE2: Little evidence of capacity development translating into timely drought response SIP: Evidence that the inclusion of a Replica partner, through the ARC process, positively influenced the assistance being delivered FE1: Political process and bureaucracy flagged as an obstacle to the envisaged ARC process (e.g. changes made to FIPs without consultation)	FIPs Process evaluations Replica evaluations Wider M&E documentation	KIIs w/ government officials (political leaders: DRM, DRF, MoF) KIIs w/ DRM agencies (UN, INGOs, NGOs, etc.) KIIs with implementing agents (ideally at field level)	B





DAC criteria	Questions	ToC aspect	Assessment method	OPM ARC evaluation evidence ³⁵ base: ³⁶	Data sources: secondary ³⁷	Data sources: primary ³⁸	Sample ³⁹
	3.9: To what extent has better delivery of assistance contributed to reducing negative household coping mechanisms?	B4	Where 'better assistance' was delivered in ways that met recognised good practice in mitigating impacts of drought / cyclone (e.g. earlier), households exhibited reduced reliance on negative coping strategies (compared to those not reached by the 'better' assistance)	FE2: All sampled payouts late; the assistance reduced negative coping strategies in some households in all payout cases, but not as many as half SIP: Through household surveys, beneficiaries self-reported that food distribution by the government and the Start Network helped a majority of households to avoid negative coping strategies (between 73% and 90%). However, no control group for comparison FE1: N/A	Replica impact evaluations	FGDs with recipient/non-recipients KIs with implementing staff (at field level)	B
	3.10: To what extent has better delivery of assistance contributed to maintaining household assets and consumption levels? <ul style="list-style-type: none"> How do these benefits vary with the characteristics of the households? 	B4	Where 'better assistance' was delivered in ways that met recognised good practice in mitigating impacts of drought / cyclone (e.g. earlier), households maintained assets and consumption levels. Variations	FE2: N/A SIP: Evidence from household surveys that assistance prevented the distress sale of livestock and other assets, and also helped maintain food consumption and dietary diversity. However, no control group for comparison. Household size explored in regard to adequacy of support but not statistically significant FE1: Secondary data on payouts in Mauritania and Senegal suggests that payouts did reduce sale of	Replica impact evaluations	FGDs with recipient/non-recipients KIs with implementing staff (at field level) <i>(Household survey)</i>	B

DAC criteria	Questions	ToC aspect	Assessment method	OPM ARC evaluation evidence base: ³⁶	Data sources: secondary ³⁷	Data sources: primary ³⁸	Sample ³⁹
			surfaced in agro-ecological zone, livelihoods, household composition, household tangible and intangible assets	assets for some households and protect their livelihoods, but sample size small and data inconclusive			
	3.11: How do benefits vary between individuals within households, particularly by gender?	B4	Benefits are equitably felt across individuals, particularly by women and girls, and those with specific vulnerabilities	FE2: N/A SIP: Evidence from payout suggests some inequality due to absence of women from decision making and lack of monitoring of gender characteristics of beneficiaries from government side FE1: N/A	Replica impact evaluations	Kills with recipient/non-recipients Kills with implementing staff (at field level) (Household survey)	B
Effectiveness (Relevance, Sustainability)	4. What have been the main factors explaining the extent of this contribution?						
	4.1: How does the operational delivery channel for payouts impact the contribution of ARC toward more effective delivery of assistance?	B3, B4	Variations in mode of delivery (standalone government response, Replica, scalable social protection programme, or other) examined for evidence of their impact on the performance of	FE2: Some evidence that Replica channels more successful in launching implementation within targeted four months from payout SIP: Evidence that Replica partner brought positive contributions to timeliness of intervention and M&E processes FE1: Social assistance coverage is low across AU countries, presenting a challenge to the idea that these programmes can be	FIPs Process evaluations Replica evaluations Wider M&E documentation	Kills w/ government officials (political leaders: DRM, DRF, MoF) Kills w/ DRM agencies (UN, INGOs, NGOs, etc.)	B

DAC criteria	Questions	ToC aspect	Assessment method	OPM ARC evaluation evidence base: ³⁶	Data sources: secondary ³⁷	Data sources: primary ³⁸	Sample ³⁹
			the assistance and ensuing outcomes for households (analysis to also include cost of aid delivery)	used as a delivery channel for ARC payouts		KIIs with implementing agents (ideally at field level)	
	4.2: What has been the role of technical design choices in influencing the effectiveness of ARC payouts?	B3, B4	Variations in technical aspects – such as selecting cash versus food assistance, or targeting modalities – examined for evidence of their impact on the performance of the intervention and ensuing outcomes for households	FE2: N/A SIP: Households were significantly more likely to report having enough food if: they received larger cash transfers; they received additional assistance from another source; they received fortified flour; they reported an increase in income; or they reported stable or falling prices. This suggests that volume of support is an important factor FE1: N/A	FIPs Process evaluations Replica evaluations Wider M&E documentation	KIIs w/ government officials (political leaders: DRM, DRF, MoF) KIIs w/ DRM agencies (UN, INGOs, NGOs, etc.) KIIs with implementing agents (ideally at field level)	B

B.2 WS1 rubric: Disaster preparedness and response systems

Purpose: To make judgements on the extent to which country-level disaster preparedness and response systems are in place to deliver relevant, timely, and effective assistance in crises (droughts and cyclones), using a rubric of quality criteria. The following rubric was developed with ARC, country government representatives, and other key stakeholders through workshops, providing an agreed basis for rating the quality of disaster preparedness and response systems.





Dimension	Emerging	Evolving	Embedding	Excelling
				
1. Governance				
<ul style="list-style-type: none"> National policies or legislation related to drought or other natural disaster risks (including DRM strategies) 	Little or no national policy related to natural disaster risk management	Some DRM policies in place but with no strategy nor institutional arrangements in place	Some DRM policies in place with provisional strategy and institutional arrangements in place	Extensive and recent DRM policies in place with clear strategy and institutional arrangements in place, including allocated budget
<ul style="list-style-type: none"> Authority structures to manage disaster response 	No institutional focal point for DRM	Institutional focal point for DRM in place but without sufficient staff and resources	Institutional focal point for DRM in place with staff and resources	As Embedding PLUS: DRM agency (institutional focal point) has actively updated workplan
2. Management and coordination				
<ul style="list-style-type: none"> Drought/cyclone response coordination and communication mechanisms in place between relevant stakeholders 	No drought response coordination or communication mechanisms in place, nor stakeholder roles	Drought response coordination and communication mechanisms in place but inadequate clarity on roles and responsibilities of stakeholders	Drought response coordination and communication mechanisms in place with clear roles and responsibilities of stakeholders	As Embedding PLUS: evidence of the drought coordination working well, and evidence of improvements over time
<ul style="list-style-type: none"> Early warning systems 	No early warning systems in place to monitor, profile, or predict hazards	Some aspects of hazard monitoring, profiling, or prediction in place, but incomplete	Early warning systems in place that monitor, profile, and predict hazards	As Embedding PLUS: evidence that the early warning systems are used and incorporated with decision making and response processes
<ul style="list-style-type: none"> Risk assessment information and analysis 	No risk assessment information available	Some risk information available, but of poor quality	High-quality risk information and analysis available	As Embedding PLUS: systems in place for regular sharing of risk

				information and analysis with decision makers across government
<ul style="list-style-type: none"> Contingency planning procedures, including GESI considerations 	No CP in place	There is a basic CP in place, but it lacks detail or is unclear	There is a clear, detailed CP in place with GESI considerations and evidence of cross-ministerial awareness of the plan	As Embedding PLUS: evidence of feedback from ARC's technical review being acted upon, and a year-on-year improvement in the quality of the CP
<ul style="list-style-type: none"> Cross-government technical mechanisms 	No cross-government technical mechanisms in place	Basic cross-government technical mechanisms in place but irregular meetings with poor attendance	A formal cross-government technical mechanism with regular meetings and consistent attendance from key stakeholders	As Embedding PLUS: evidence of implementation of a relevant programme by the working group and subsequent decision making
<ul style="list-style-type: none"> M&E systems in place 	No M&E systems or functions in place	Basic monitoring and reporting of response implementation	Monitoring and reporting of response implementation, as well as post-response assessments undertaken	As Embedding PLUS: evidence of integration of learnings from previous responses as lessons for improvement
<ul style="list-style-type: none"> Formal learning mechanisms in place 	No systematic tracking and integration of lessons from disaster responses into future planning	Some tracking and integration of lessons but not systematic or consistent	Systematic tracking and integration of lessons but no resulting processes for revising future planning in response	Systematic tracking and integration of lessons with processes for and evidence of revising future planning in response
3. Finances				
<ul style="list-style-type: none"> DRF policy and strategy in place 	No DRF policy or strategy in place	Basic DRF policy and strategy in place	Up-to-date DRF policy and strategy in place, which includes climate risk insurance	As Embedding PLUS: evidence of knowledge and ownership of the strategy across and outside the MoF
<ul style="list-style-type: none"> Financing tools in place to adequately cover disaster risks 	No financing tools in place to cover disaster risks	Minimal financial tools identified to covered disaster risks	A range of financial tools, including insurance, under development and focused on the main hazards in the country	A range of financial tools, including insurance, in place and focused on the main hazards in the country
<ul style="list-style-type: none"> Financial management plans in place for disbursement and 	No financial management plans for disbursement and distribution	Financial management plan in place but insufficiently specifying how funds will pass	Financial management plan in place with clear specification for how funds will pass	As Embedding

distribution of funds in response to disasters		between government bank accounts and to suppliers / delivery partners	between government bank accounts and to suppliers / delivery partners, and timelines for doing so	PLUS: evidence of effective use of financial management plan with year-on-year improvements to funds disbursement processes
4. Targeting and delivery capacity				
• Social registry data	No social registry or data available	Social registry in place, but outdated and without vulnerability data	Social registry in place, up to date, and includes vulnerability data	As Embedding PLUS: evidence that the registry is updated with accurate vulnerability data
• Needs assessments that identify degrees of need	No needs assessment capacity or processes in place	Basic needs assessment capacity and processes in place, but low accuracy levels and not disaggregated by vulnerabilities	Needs assessment capacity and processes in place, with accurate data disaggregated by vulnerabilities	As Embedding PLUS: able to capture dynamic changes in needs and vulnerabilities of the population
• Beneficiary profiling and targeting	No targeting approach or capacity in place	Basic beneficiary profiling and targeting criteria in place, but lacking targeting mechanisms and categories	Clear beneficiary profiling and targeting criteria in place, including targeting mechanisms and categories	As Embedding PLUS: with capacity to target in advance of disasters
• Defined and capable response delivery mechanisms	No delivery mechanisms identified for disaster response	Some delivery mechanisms identified for disaster response but with limited coverage and insufficient funding	Established delivery mechanisms for disaster response in place with broad coverage and sufficient funding	As Embedding PLUS: with evidence of previous usage and experience and improvements made over time

B.3 WS2 rubric: Improved assistance

Purpose: To make judgements on the extent to which ARC's capacity building and payouts are contributing to **improving the delivery of assistance** to vulnerable households in ways that mitigate crisis impacts. The following rubric was developed with ARC, country government representatives, and other key stakeholders through workshops, providing an agreed basis for rating improved delivery of assistance.

Dimension	Emerging	Evolving	Embedding	Excelling
				
Timeliness				
Enhanced response time for assistance to targeted households	Assistance received by households similar to or later than the 'traditional' response timing in comparable crises	Assistance is received by households somewhat earlier than the 'traditional' response timing in comparable crises. (e.g. 1–2 months earlier for slow-onset crises, 2–3 weeks earlier for rapid-onset crises). This may not be consistent across all activities/districts	Assistance is received by households earlier than the 'traditional' response timing in comparable crises (e.g. 2–3 months earlier for slow-onset crises, 3–4 weeks earlier for rapid-onset crises)	Assistance is received by households significantly earlier than the 'traditional' response timing in comparable crises (e.g. 3–4 months earlier for slow-onset crises, 4–6 weeks earlier for rapid-onset crises)
Assistance within defined window of opportunity to mitigate or reduce crisis impacts (slow onset)	Intervention misses defined window of opportunity to mitigate or reduce crisis impacts (or assumed windows if not defined)	Intervention started within a defined window of opportunity to mitigate or reduce crisis impacts	Intervention mainly completed within a defined window of opportunity to mitigate or reduce crisis impacts	Intervention started and completed within a defined window of opportunity to mitigate or reduce crisis impacts
Assistance early enough to meet urgent life-saving needs and mitigate or reduce crisis impacts (rapid onset)	Assistance received by households is not within identified 'first phase' of life-saving response actions, nor is it early enough to minimise assumed income losses due to loss of productive assets	Assistance received by households is not within identified 'first phase' of life-saving response actions, <i>but</i> it is early enough to minimise assumed income losses due to loss of productive assets	Assistance started within identified 'first phase' of life-saving response actions <i>Plus</i> assistance smoothly transitions into livelihoods interventions that address the loss of productive assets to minimise income losses	Assistance received by households within identified 'first phase' of life-saving response actions <i>Plus</i> assistance smoothly transitions into livelihoods interventions that address the loss of productive assets to minimise income losses
Volume and type of assistance				
Type of assistance (activities) and delivery modality meet expressed needs and priorities of target populations	Type of assistance and delivery modality does not match expressed needs and priorities of target populations	Type of assistance and delivery modality somewhat matches expressed needs and priorities of target populations. This may not be consistent across all districts/category of recipient	Type of assistance and delivery modality mainly matches expressed needs and priorities of target populations. This may not be consistent across all districts/category of recipient	Type of assistance and delivery modality predominantly matches expressed needs and priorities of target populations

Logical pathway between choice of activities and impacts	Unclear line of sight between selected activities and mitigating or reducing crisis impacts	Some line of sight between choice of activities and mitigating or reducing crisis impacts. This is inconsistent across activities	Line of sight between choice of activities and mitigating or reducing crisis impacts is clear for the majority of activities	Clear line of sight between choice of activities and mitigating or reducing crisis impacts
Volume of assistance sufficient to achieve desired impact (national level)	Volume of early finance available compared to overall crisis financing requirements widely insufficient to meet expressed objectives to mitigate or reduce crisis impacts (e.g. maintain food consumption in target population)	Volume of early finance available compared to overall crisis financing requirements sufficient to meet some of the expressed objectives to mitigate or reduce crisis impacts (e.g. maintain food consumption in target population)	Volume of early finance available compared to overall crisis financing requirements adequate to meet most objectives to mitigate or reduce crisis impacts (e.g. maintain food consumption in target population)	Volume of early finance available compared to overall crisis financing requirements sufficient to meet expressed objectives to mitigate or reduce crisis impacts (e.g. maintain food consumption in target population) <i>Plus some evidence that subsequent cost of overall response was lower</i>
Volume of assistance sufficient to achieve desired impact (household level)	Volume of assistance per household widely insufficient to meet expressed objectives to mitigate or reduce crisis impacts	Volume of assistance per household is mainly insufficient to meet expressed objectives to mitigate or reduce crisis impacts	Volume of assistance per household is mainly sufficient to meet expressed objectives to mitigate or reduce crisis impacts	Volume of assistance per household is widely sufficient to meet expressed objectives to mitigate or reduce crisis impacts
Targeting and equity				
Most vulnerable households identified and reached	Assistance often not aimed at or reaching most vulnerable households. Identifiable challenges with targeting processes	Majority of assistance reaching most vulnerable households, <i>but</i> targeting processes slow and/or not cost-effective	Most vulnerable households identified and reached but targeting processes require improvements in timing and cost-effectiveness	Most vulnerable households identified and reached through (i) timely, (ii) cost-effective, and (iii) accurate targeting processes
Effects are felt evenly across genders and by marginalised groups	Evidence that effects are not felt evenly across genders and by marginalised groups	Little evidence that effects are felt evenly across genders and by marginalised groups	Some evidence that effects are felt evenly across genders and by marginalised groups	Significant evidence that effects are felt evenly across genders and by marginalised groups
Impact				
Reduced reliance on negative coping strategies	Little/no evidence of reduced reliance on negative coping strategies in recipients (compared to those not reached by the 'improved' assistance)	Some evidence of reduced reliance on negative coping strategies in recipients (compared to those not reached by the 'improved' assistance)	Good evidence of reduced reliance on negative coping strategies in recipients (compared to those not reached by the 'improved' assistance)	Significant evidence of reduced reliance on negative coping strategies in recipients (compared to those not reached by the 'improved' assistance)
Maintained food consumption	Few/none of recipients maintain food consumption	Some (<50%) recipients maintain food consumption	Majority (>50%) of recipients maintain food consumption	Most recipients maintain food consumption
Maintained assets that are considered vital to wellbeing and livelihoods	Few/none of recipients maintain assets considered vital to wellbeing and livelihoods	Some (<50%) recipients maintain assets considered vital to wellbeing and livelihoods	Majority (>50%) of recipients maintain assets considered vital to wellbeing and livelihoods	Most recipients maintain assets considered vital to wellbeing and livelihoods

Annex C Payouts and payment times

The payouts considered for Sample A are presented in Table 19 below:

Table 19: Payouts for Sample A

ARC member states	Type of policy	Payouts 2020–2023 (million US\$)		
		Pool 7 (20/21)	Pool 8 (21/22)	Pool 9 (22/23)
Burkina Faso	Drought Replica		\$1.19	
	Drought Replica			\$7.2
Cote d'Ivoire	Drought	\$2.1		
	Drought		\$0.65	
The Gambia	Drought			\$0.19
	Drought Replica			\$0.19
Madagascar	Drought		\$0.8	
	Tropical Cyclone		\$10.7	\$1.2
	Tropical Cyclone Replica			\$0.3
Malawi	Drought		\$14.2	
Mali	Drought		\$14.5	
	Drought Replica		\$7.1	\$8
Mauritania	Drought		\$1.7	
	Drought Replica		\$1.14	
Niger	Drought		\$2.15	\$4.6
Somalia (R)	Drought Replica			\$3.3
Togo	Drought			\$2.5
Zambia	Drought		\$5.4	

Table 20: Summary of payment times

Country	Type of policy	Pool	Payout	End of season: date at which value of payout can be calculated	Date FIP approved by Agency (no objection from the Board)	Date of ARC Ltd Board approval	Date ARC's payment was disbursed	Timing from end of season to payment disbursed (days)	Comment
Cote d'Ivoire	Drought	7	\$2.1	17/10/2020	30/11/2020	06/12/2020	24/12/2020	68	
Malawi	Drought	8	\$14.2	16/05/2022	07/06/2022	14/06/2022	23/06/2022	38	
Zambia	Drought	8	\$5.4	06/05/2022	07/06/2022	14/06/2022	23/06/2022	48	
Mali	Drought Replica	8	\$7.1	06/11/2021	17/11/2021	18/11/2021	29/11/2021	23	
Mauritania	Drought Replica	8	\$1.1	26/11/2021	14/03/2022	25/03/2022	28/03/2022	122	
Cote d'Ivoire	Drought	8	\$0.7	26/11/2021	27/01/2023	N/A	26/05/2022	181	Basis risk incident
Mali	Drought	8	\$14.5	06/11/2021	08/12/2021	11/02/2022	28/02/2022	114	Mali under sanction
Burkina Faso	Drought Replica	8	\$1.19	16/12/2021	04/04/2022	25/03/2022	12/04/2022	117	Basis risk incident
Madagascar	Drought	8	\$0.8	26/05/2022	22/07/2022	23/02/2023	13/03/2023	291	
Mauritania	Drought	8	\$1.7	26/11/2021	11/07/2022	25/03/2022	19/07/2022	235	Basis risk incident
Niger	Drought	8	\$2.2	06/11/2021	11/07/2022	25/03/2022	19/07/2022	255	Basis risk incident
Togo	Drought	9	\$2.5	06/10/2022	13/03/2023	03/02/2023	28/03/2023	173	
Niger	Drought	9	\$4.6	26/10/2022	13/03/2023	23/03/2023	30/03/2023	155	
The Gambia	Drought Replica	9	\$0.2	26/11/2022	19/01/2023	26/01/2023	09/02/2023	75	
Mali	Drought Replica	9	\$8.0	06/11/2022	30/11/2022	05/12/2022	09/12/2022	33	

Country	Type of policy	Pool	Payout	End of season: date at which value of payout can be calculated	Date FIP approved by Agency (no objection from the Board)	Date of ARC Ltd Board approval	Date ARC's payment was disbursed	Timing from end of season to payment disbursed (days)	Comment
Somalia (R)	Drought Replica	9	\$3.3	06/02/2023	22/03/2023	25/03/2023	30/03/2023	52	
Cyclones									
Madagascar	Tropical Cyclone			05/02/2022	24/02/2022	01/03/2022	02/03/2022	25	
Madagascar	Tropical Cyclone			27/02/2023	01/09/2023				Process incomplete, payment outstanding
Madagascar	Tropical Cyclone Replica			27/02/2023	N/A	05/05/2023	09/05/2023	71	

Annex D List of key informants

Malawi data collection

1. Director, Debt and Aid
2. Principal Economist, MoA
3. Ministry of Finance and Treasury
4. British Council
5. WFP
6. MVAC
7. M&E, Ministry of Agriculture and Planning
8. Ministry of Social Protection
9. DoDMA
10. Department of Climate Change and Meteorological Services (Early Warning)
11. CISONECO
12. District social welfare officers
13. District DRM officers
14. District crops officers
15. Malawi University of Science and Technology
16. Director, Planning and Development at District Council
17. Monitoring and Evaluation Officer, District Council
18. Chairpersons, Village Protection Committee
19. Chairpersons, Village Development Committee
20. Chairpersons, Area Protection Committee
21. Chairpersons, Area Development Committee
22. Group Village Headman

Madagascar data collection

1. British Embassy
2. WFP (Replica)
3. CPGU
4. BNGRC
5. MoF
6. MoA
7. National Nutrition Office
8. Regional Ministry of Population
9. Governor of Vatovavy
10. Regional Coordinator, Nutrition Office
11. MoA
12. Governor of Fitovinany Region
13. Community leaders (mayor of the rural municipality of Marofody, Vatovavy region and representative of village chiefs)

14. Community leaders, Ambahatrazo
15. Community leaders, Antsenavolo
16. Village Chief (Fokontany)
17. Mayor and Deputy Mayor of Ambahatrazo
18. Coordinator of ADRA (ARC Replica)
19. Administrative and Finance Manager and Officer of Nutrition Office
20. Deputy Mayor, Nosy Varika
21. Regional Office, MoA
22. IFRC Indian Ocean

Mauritania data collection

1. ARC Coordinator and ARC Supervisor
2. Advisor, MoF
3. Directeur General du Registre Sociale
4. Directeur General of Technical Support, DCAN
5. Head of programmes, Risk Financing Officer (Replica) and Risk Financing Officer – Mauritania
6. Advisor, Ministry of Economy
7. WFP RAM (Replica)
8. Directeur de L'observatoire
9. Délégué regional
10. Chef de bureau WFP (Replica)
11. Regional Delegation CSA (2)
12. Monitoring of the MAP programmes in the region
13. Wali
14. Action Against Hunger
15. Regional Delegate of MoA
16. Regional Cabinet Director
17. Regional Councillor in charge of Legal and Administrative Affairs
18. Director of the Observatory (CSA)
19. Hakems