Oxford Policy Management

Value for money in sovereign drought insurance

Findings from value for money and cost−benefit analyses of the African Risk Capacity

Introduction

The African Risk Capacity (ARC) was established in 2012 'to help African governments improve their capacities to better plan, prepare, and respond to extreme weather events and natural disasters' (see: African Risk Capacity Group). ARC comprises two entities: ARC Agency, a Specialised Agency of the African Union, builds capacity in member countries to plan for and respond to climate disasters and raises awareness of ARC; it is funded by donor grants. The ARC Insurance Company Limited (ARC Ltd) provides risk transfer services – particularly insurance; it operates on a commercial basis, with initial capital provided by donors.

ARC evaluation

Oxford Policy Management is undertaking a 10-year independent evaluation of ARC, financed by the UK's Foreign, Commonwealth and Development Office. This note reflects selected findings from the second formative evaluation, conducted in 2021−22 (Oxford Policy Management, 2022a). In this evaluation, one key question was 'To what extent does ARC represent value for money (VfM) for countries, beneficiaries, and donors?' The focus of the analysis is on drought. Findings are based on evidence from key programme documents, independent payout evaluations commissioned by ARC, ARC financial data, and key informant interviews with programme and government respondents conducted as part of the broader second formative evaluation.

A separate cost−benefit analysis (CBA) was conducted in parallel to assess the full social costs and benefits of the ARC drought insurance scheme (Oxford Policy Management, 2022b).

For the full evaluation report, other summary briefs, and reports from previous phases of the evaluation, see here.

ARC VfM and CBA

According to the theory of value creation (ToVC) developed together with the key programme stakeholders, ARC needs to have three broad impacts to create value: (1) smoothed household consumption and a reduction in the need for negative coping strategies; (2) greater predictability and smoothing of donor and sovereign humanitarian spending, compared to a typical humanitarian response; and (3) increased national ownership over, and sovereignty and sustainability in, country-level risk planning. The creation of this value relies on two key outcomes: (1) the reliable and timely availability of ARC resources; and (2) increased country capacity to effectively plan for and respond to shocks, which requires effective capacity building by ARC.

VfM is assessed against the 4 E's conceptual framework: economy, efficiency, effectiveness, and equity. Aligned with the ToVC, the nine sub-criteria in Table 1 were selected and assessed based on their ability to collectively cover the most critical aspects of VfM for ARC. The assessment focuses on ARC's support to sovereign governments provided by ARC Ltd and covers ARC expenditure, activities, and results achieved since 2020.

The 2022 CBA is an ex-ante assessment, complementing the more operational focus of the VfM assessment. It is essentially an extension of two previous CBAs: the 2012 CBA (Clarke and Hill, 2012), completed before the launch of the ARC scheme, and the 2020 CBA (Kramer et al 2020), conducted following some years of actual operation of the ARC scheme.

Table 1: ARC VfM criteria, sub-criteria and summary judgements

Criteria	Sub-criteria	Judgement
Economy	Capital, reinsurance, and running costs are kept as low as possible	Adequate
	ARC offers relevant, well-priced products	Adequate
Efficiency	Accurate prediction of relevant drought events	Adequate
	Reliability and timeliness of ARC payouts	Good
	ARC provides high-quality technical assistance and capacity-building support to countries to improve drought preparedness	Good
Effectiveness	ARC support to enhanced contingency planning and capacity building contributes to timely and appropriate drought response	Poor
	ARC-funded drought response reduces negative household-level coping strategies	Adequate
	ARC successfully facilitates increased sovereignty and sustainability in country-level risk planning	Adequate
Equity	ARC-funded drought response support reaches the people who are most in need	Poor

VfM findings

The evaluation found that ARC is generally performing just within expectations across most, but not all, critical VfM factors. There is significant scope for improvement.

Economy:
Capital, reinsurance, and running costs are kept as low as possible
Adequate

ARC Ltd has a 20-year, interest-free loan of approximately US$ 100 million and earns around US $1.8 million per year by actively investing part of this amount. Unlike commercial insurance companies, ARC Ltd's capital costs are effectively low due to the implicit subsidy provided by the donors' interest-free loan. In 2021, ARC Ltd's operational costs were 14% of the total premium value, exceeding the 5% target set out in the original specification. In absolute terms, ARC Ltd's operational costs were around US$ 4.1 million in 2021, of which US$ 1.6 million was for executive management and administration for an organisation of around 12 employees. ARC Ltd's operational costs are high relative to its size and as a percentage of premium value.

In 2021, reinsurance premiums (US$ 17.8 million) as a percentage of total expected insurance payouts (US$ 22 million) were 81%. The original specification assumed that the rate reinsured would be no more than 15%.

ARC Agency's **running costs** were budgeted at US$ 12.13 million in 2020, corresponding to 16% of the total budget. This is in line with other large, complex donor-funded programmes.

Economy:
ARC offers relevant, well-priced products
Adequate

Currently, there are 36 member states, of which 16 have bought at least one drought policy. In other words, just 44% of member states have bought at least one drought policy, despite subsidies now being available to support policy purchases for most member states. Also, four sampled countries with policies who were interviewed as part of the evaluation generally reported drought insurance to be good value, but this view is heavily caveated due to the lack of previous payouts (where payments were expected), the price of premiums relative to other budget priorities, and diminishing confidence in the drought risk model.

Efficiency:
Accurate prediction of relevant drought events
Adequate

Member states have used the Africa RiskView (ARV) platform and its risk model to provide early warning information, it is used to trigger payouts, and there are clear examples of improvements being made to the ARV platform by ARC. However, the reviews of ARV in 2017 and 2018 described several areas where improvement was needed, such as systematic changes to the risk model using the latest technology and the use of alternative data and indices for risk modelling. While there are cases where new datasets have been introduced, there were significant issues with the quality of rainfall data in 2021. Similarly, while documentation is in place to more effectively manage basis risk, these issues with data quality in 2021 led to significant discrepancies between the impact modelled by ARV and the actual impact on the ground in several countries.

Efficiency:
Reliability and timeliness of ARC payouts
Good

Payouts by ARC to governments are generally reliable and timely. ARC ensures that country members receive funds as quickly as possible by minimising the time between a payout being triggered (based on the ARV platform) and the actual payout being made. ARC has a key performance indicator target to make payouts in less than 30 days from when a payout is triggered. This target was achieved for three of the four payouts in the reporting period for the VfM analysis, meaning 75% of payouts are considered to have met the target.

Efficiency:
ARC provides high-quality technical assistance and capacity-building support to countries to improve drought preparedness
Good

ARC's value depends on the capacity building being of sufficient quality to enable country members to independently manage drought risks in the long term. Contingency plans developed with support from ARC and positive country member feedback indicate good capacity-building practice. However, ARC's approach lacks a clear long term capacity-building framework and appropriate monitoring data.

Effectiveness:
ARC support for enhanced contingency planning and capacity building contributes to timely and appropriate drought response
Poor

ARC has contributed to the design and implementation of appropriate interventions. Though the early stages of the response, such as contingency plans, have often proceeded as anticipated, the timely operationalisation of the plans (following ARC's payout) to deliver a fast response to households has generally not occurred. None of the last four evaluated drought responses reached beneficiaries within a sufficiently timely manner: that is, within four months of the payout.

Effectiveness:
ARC-funded drought response support reduces negative household-level coping strategies
Adequate

Except for in Senegal, the assistance reduced negative coping strategies in some households but not as many as half, in Cote d'Ivoire, Zimbabwe, and Madagascar. The failure to help a significant proportion of households to avoid negative coping strategies in most payouts calls into question ARC's overarching objective of protecting livelihoods and saving lives.

Effectiveness:
ARC successfully facilitates increased sovereignty and sustainability in country-level risk planning –
Adequate

ARC has helped develop country-owned risk management strategies in some member countries. There is evidence that the Senegal team is influential with ministers, undertakes simulations, uses payout calculators, and independently defines risk parameters. Madagascar has also demonstrated a deep understanding of the ARC model, with government staff leading risk transfer workshops to establish risk transfer processes. All other countries are on longer journeys towards increased independence in managing their disaster risks.

Equity:
ARC-funded drought response support reaches the people who are most in need
Poor

Final implementation plans contain interventions' targeting criteria for identifying vulnerable sub-groups, with geographic targeting based on needs assessments. However, due to poor monitoring and evaluation in all payouts, disaggregated records on beneficiaries who received assistance were not kept. The extent to which interventions were delivered to those who were most in need could not be ascertained. The failure to ensure that interventions are always delivered to those that most need them represents poor VfM.

CBA findings

The original rationale for ARC was that drought relief funded by swift, reliable payouts from ARC would be much better targeted and more timely than under the traditional humanitarian aid system or through other government action. The critical finding of the most recent CBA is that ARC-financed drought relief is not being implemented quickly enough to realise these social benefits of 'speed' identified in previous CBAs. This greatly reduces the estimated social rate of return – from 133% (the most optimistic scenario in the 2012 CBA) to 11%, in the 2022 CBA. That is, for every dollar spent, there is one dollar plus an extra 11 cents in social benefits before the next annual cycle starts. The overwhelming reason that higher social returns are not seen is that the relief implemented by national governments and enabled by ARC funding is much more delayed than was initially anticipated.

Opportunities to improve VfM

The evaluation makes recommendations for a number of different stakeholders, drawing on findings relating to each of the evaluation questions. The main recommendations made that are relevant to improving VfM are as follows.

Economy
- Operational costs for both ARC Agency and ARC Ltd should be reviewed and, where possible, reduced, based on an understanding of expenditure drivers. The objective should be to improve overall VfM, not simply cut costs.

- ARC Ltd should take measures to reduce its running costs as a percentage of the volume of premiums and reduce reinsurance levels, given the high levels of capital held.

Efficiency
- ARC should undertake or commission a full review of the ARV model to improve its drought prediction accuracy and reliability, and to restore confidence in the model and corresponding payout decisions.

- ARC Agency should establish a clear capacity-building strategy to determine how long-term and sustained capacity is expected to be achieved.

Effectiveness
- ARC Agency needs to find ways to facilitate and support a faster response to drought by governments so that support reaches beneficiaries more quickly and helps them to avoid negative coping strategies. The potential role of Replica partners (the World Food Programme and the Start Network) in helping to improve this should be explored.

- ARC should improve capacity building in monitoring and evaluation to help ensure that governments collect and report accurate data on the effectiveness of their support.

- ARC payout evaluations need to be strengthened to better understand the effects of ARC-financed assistance on households. Member states should use these findings to systematically learn and to improve their responses.

- ARC Agency should develop and establish ways to measure and monitor the sustainability of progress in country risk planning and risk ownership.

Equity
- Recipient governments and ARC need to know who receives ARC-financed support and whether they are as intended: i.e. whether beneficiaries are as identified in needs assessments and targeting criteria.

- Payout evaluations need to be strengthened to enable them to provide more robust assessments of the effectiveness of targeting.

References

Clarke, D. and Hill, R.V. (2012) 'Cost–benefit analysis of the Africa Risk Capacity (ARC)', IFPRI Discussion Paper 1292.

Kramer, B., Rusconi, R., and Glauber, J. (2020) 'Five years of risk pooling, an updated cost–benefit analysis of the Africa Risk Capacity', *IFPRI Discussion Paper 1965*.

Oxford Policy Management (2022a) 'Independent Evaluation of the African Risk Capacity: Second Formative Evaluation Final Report'

Oxford Policy Management (2022b) 'Cost–benefit analysis of the African Risk Capacity, 2022'