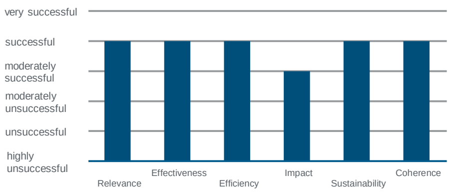
KfW Development Bank

Ex-post evaluation ARC Replica, Africa regional

Title	Supporting the introduction of Replica policies at African Risk Capacity (ARC)
Sector and CRS code	Disaster prevention (74010)
Project number	2016 188 34
Commissioned by	Federal Ministry for Economic Cooperation and Development (BMZ)
Recipient/Executing agency	World Food Programme (WFP) and Save the Children/Start Network
Project volume/ Financing instrument	*EUR 10 million grant*
Project duration	*2018 to 2022*
Year of report	2023 **Year of random sample** 2023

Overall rating: successful



Objectives and project outline

At impact level, the objective of the project was to contribute to alleviating the worst effects of food crises caused by droughts in Sub-Saharan Africa. At outcome level, poor and vulnerable people should also be protected against drought risks and a contribution should be made to the ongoing development of the international emergency aid system. Humanitarian stakeholders have, for the first time, taken out insurance to finance emergency aid through the regional Africa Risk Capacity (ARC) insurance pool and coordinated the design and implementation of emergency aid with the relevant governments.

Key findings

The project is rated as overall "successful":

– The project is highly relevant and helps humanitarian actors to join forces with African governments to prepare for natural disasters so they can respond more quickly and effectively. The project is characterised by a high level of coherence, which is reflected in the full use of the executing agencies' and ARC's systems and procedures.

– The objectives were successfully achieved at outcome level, although it is clear that the measurement methodology overestimates the number of beneficiaries.

– The programmes were implemented in a cost-effective manner – albeit with a delay, which is understandable for a pilot project, especially during the Covid-19 pandemic.

– The pilot project showed demonstrative effects and ARC Replica was subsequently continued with further donor financing.

– The direct impact for the target group is to be classified as positive, but there is potential for improvement with regard to emergency aid services. The broad impact of the project made it possible to contribute to the further development of international emergency aid.

Conclusions

– Insurance solutions represent a valuable addition to the financing of humanitarian aid. The establishment of ARC Replica itself has a structure-building character, but it is dependent on continuous financing through grants.

– Early insurance disbursement is not enough to successfully counteract crises before they occur. Therefore, disaster preparedness is essential.

– Joint emergency planning involving governments and humanitarian stakeholders leads to positive effects in implementation.

– Expanding the number of Replica partners and making greater use of the approach for countries that cannot insure themselves offers potential for the future.

Ex-post evaluation – rating according to OECD-DAC criteria

General conditions and classification of the project

The African continent is particularly affected by climate change. In many countries, more frequent and more severe extreme weather events, especially droughts and heavy rainfall events, are accompanied by high multidimensional vulnerability of the local (especially rural) population. The result is famine and increased poverty. In poorer countries in particular, governments are usually not in a position to sufficiently attend to disaster prevention, preparedness and protection to respond quickly and effectively in the event of a natural disaster.

In addition to strengthening local resilience and the country's own systems, international emergency aid is a central component in mitigating the acute consequences of natural disasters. However, humanitarian stakeholders are chronically underfunded and often struggle to quickly raise funds to provide sufficient support in the event of a disaster. A logical consequence is therefore to anticipate recurring disasters, such as droughts, and to strengthen ex-ante disaster preparedness.

The regional African Risk Capacity (ARC) insurance pool promotes a proactive approach to dealing with food crises by not waiting for a natural disaster to occur, but by taking out insurance for this eventuality. ARC stands out from other regional insurance pools because, in addition to the financing mechanism for risk transfer, there are extensive requirements for disaster preparedness. Before a government is able to conclude an insurance policy, it must draw up an emergency plan and determine how the funds will be used if necessary. The disbursements are index-based, i.e. they depend on defined triggers. If an agreed threshold indicating a drought is exceeded, the states receive a payment within a short period of time. Final emergency response plans must be approved by ARC, which then monitors the use of the funds. ARC consists of the ARC Agency, a special organisation founded in 2012 by the African Union and the ARC Insurance Company Limited (ARC Ltd), which is the actual insurance company. In addition to African countries, Germany and the United Kingdom are also currently involved in the latter as donors.

ARC currently offers a maximum coverage of USD 30 million per country and per season for drought events. The share of total disaster response needs covered is between less than 10% and 30%. ARC Replica was therefore initiated in 2018 as a supplement. ARC Replica enables humanitarian stakeholders (within the scope of the pilot project: the United Nations World Food Programme (WFP) and Start Network, an international association of 80 aid organisations that now also includes the UN Refugee Agency (UNHCR)) to also insure themselves with ARC and work with African governments to prepare for natural disasters and provide coordinated emergency aid in the event of a disaster.

The concept envisages that humanitarian stakeholders increase the insurance coverage that a country purchases from ARC by mirroring the country's insurance policy, i.e. to conclude an additional insurance policy on behalf of the country ("replication"). The key here is that governments and Replica partners go through all the preparatory steps that are mandatory for concluding a one-year insurance policy with ARC and, in the event of an insurance claim, coordinate the final emergency aid planning with each other.

The German FC provided EUR 10 million to finance the piloting of the programme (01/01/2018 – 31/12/2020, transitional aid) and then purely subsidised premiums in the amount of EUR 8.5 million for Replica partners (31/05/2020 – 31/12/2021, funding from the IKU (German Initiative for Climate and Environmental Protection)). Since 2020, premiums have also been financed by governments as well as Replica partners – initially directly and later via the premium subsidisation facility, which is implemented by ARC. So far, EUR 29.1 million has been committed and a further EUR 31 million is being prepared (title: FC with regions, ECF special funds and the "Transformation of agricultural and food systems" special initiative, etc.). Around one third of the funds of the premium subsidisation facility are used for Replica policies.

This report refers to the piloting of ARC Replica. The project was randomly selected for evaluation in 2023.

Brief description of the project

This is a regional project for which the country selection had not yet been finalised at the time of the project appraisal (PA). The project's overarching development policy objective was to help alleviate the worst effects of food crises caused by droughts in Sub-Saharan Africa (impact). The project envisaged opening up the existing ARC drought insurance, which had previously only been available to African governments, to humanitarian stakeholders or "Replica partners" and piloting its application. In this way, additional poor and vulnerable people were to be protected against climate risks (outcome 1). The insurance payment in the event of a predefined extreme event should enable the Replica partners to provide emergency assistance at an early stage. The project was intended to contribute to the further development of the international emergency aid system with a view to anticipatory action[1] by piloting the application of insurance to finance humanitarian stakeholders (outcome 2).

First, the legal basis had to be established so that humanitarian organisations could acquire insurance cover from ARC for the benefit of countries. Subsequently, the Replica partners joined the regular cycle of ARC activities and, together with the government, went through the annual steps to purchase the policy (Start Network in Senegal, WFP in Mauritania, Zimbabwe, Mali, Gambia and Burkina Faso). The first step is the risk and vulnerability analysis and adjustment of the insurance model to government preferences. Subsequently, preliminary emergency plans are coordinated between the government and the Replica partners and then approved by ARC. In both steps, the involvement of the Replica partners with the corresponding technical expertise should contribute to strengthening the national government's capabilities. Once these advance payments have been made, the policy can be taken out for the relevant harvest season by paying the insurance premium. If a drought with accompanying food crisis appears, ARC's parametric trigger is activated and policyholders are informed of the expected disbursement (this has occurred in Senegal, Mauritania and Zimbabwe). The final emergency aid plans agreed between the government and the Replica partners are a prerequisite for disbursement. On this basis, emergency aid in the form of cash transfers and food was subsequently provided to particularly vulnerable households. Finally, the use of the funds had to be reported to ARC. In addition, Start Network has set up a reserve fund for Senegal to meet financing needs that do not trigger ARC disbursements.

ARC Replica's direct target group comprises African countries where a Replica policy has been concluded. The project's indirect target group comprises the households affected by droughts and benefiting from the emergency aid to be financed in the event of an insurance payout.

Breakdown of total costs

The pilot phase was fully financed by the FC project.

In EUR million	Inv. (Plan=ACTUAL)
Investment costs (total)	**10.0**
Counterpart contribution	0
Debt financing	10.0
of which BMZ budget funds	*10.0*

Following the pilot phase, the executing agencies were able to raise additional grant funds to support the ARC Replica approach, although not all funds have yet been spent and not all have gone entirely into premiums but have gone into technical support programmes instead. In 2020, USAID made a multi-year commitment of USD 10 million to the WFP for ARC Replica, of which USD 3 million has gone into the financing of premiums to date. BMZ, on the other hand, committed a further EUR 8.5 million to premium financing alone in 2020. The funds from

[1] Anticipatory action is an innovative approach for humanitarian aid and the DC. The focus is on helping people before an imminent disaster causes damage. Accurate risk and threat analyses enable hazards such as extreme weather events to be predicted more and more effectively and action to be taken on the basis of these early warnings, before a disaster reaches its full extent. This will enable people to make vital decisions in good time before the disaster occurs.

the premium subsidisation facility can also be used exclusively for this purpose. FCDO launched an initial commitment of GBP 0.75 million in 2021 and made annual commitments in the following years.

The total premium payments made by Replica partners and facilitated by the pilot phase and the various follow-up financing amounted to USD 32 million from 2019 to 2022. Of this, around USD 21 million was financed by the FC (from 2019), USD 8 million by FCDO (from 2021) and USD 3 million by USAID (from 2020).

Map of the project countries (as part of the pilot project)

Source: Own illustration.

Rating according to OECD-DAC criteria

Relevance

Policy and priority focus

Since the German G7 presidency in 2015, the issue of hedging against climate risks has been the top priority for climate policy for BMZ. In 2017, Germany launched the InsuResilience Global Partnership (IGP)[2] together with partners from the G20 countries and a group of finance ministers from 48 climate-vulnerable countries, known as the "V20". In 2022, Germany launched the Global Shield against Climate Risks with the G7 and the V20. Since 2014, BMZ has overseen the special initiative "A World Without Hunger", which was renamed "Special Initiative for the Transformation of Agricultural and Food Systems" in 2023. The topic is also centrally anchored in the BMZ Agenda 2030. The core thematic strategy "Life without hunger: transformation of agriculture and food systems" contains an action area on food security. These priorities contribute to quality attribute 3, poverty reduction. Humanitarian aid, including emergency aid, is formally mandated by the Federal Foreign Office. It also refers to the topic of anticipatory action, i.e. anticipating crises and taking action before they occur, with Germany acting as the driving force.

The United Nations World Food Programme is the world's largest humanitarian organisation. Its mandate includes providing emergency aid and food aid for people suffering from conflicts, natural disasters or the effects of the climate crisis. The WFP is chronically underfinanced. Since the World Humanitarian Summit in 2016, WFP has committed to increasing the use of ex-ante disaster risk financing (DRF) and insurance instruments. Any form of cooperation that leads to more funds made available more quickly is in the WFP's own interest. Start Network is a global network of more than 80 non-governmental organisations providing humanitarian aid at local level. Emergency aid as a result of food crises is naturally part of this. Rapid and early aid after disasters was one of the main focuses of the work of Start Network.

Due to the somewhat insufficient national financial resources and institutional capacities of the partner governments – along with the formal framework conditions of ARC (the maximum cover sum per insurance policy is USD 30 million, so a higher level of protection per country cannot be represented via the national governments as policyholders) – ARC Replica was developed, enabling a humanitarian stakeholder to acquire a policy for the benefit of a country. The capacities of the executing agencies to operate under given local framework conditions were checked in advance and the host countries were allocated accordingly. Both the WFP and Start Network have already had experience in implementing emergency aid in the selected countries.

Focus on needs and capacities of participants and stakeholders

In the event of a major natural disaster, African countries do not have sufficient national capacity to absorb the consequences independently. They rely on humanitarian aid. ARC Replica meets the countries' need for more external support in the event of extreme weather events by using joint planning processes to strengthen these countries' technical capacities in disaster preparedness and improve the responsive capacity of humanitarian stakeholders in the provision of emergency aid.

The selection of participating countries should be based on criteria at the start of the project. The criteria were 1) no payment arrears of the countries with ARC insurance, 2) more than two insurance policies concluded with ARC, i.e. experience with ARC procedures, and 3) a high probability of reinsurance during the pilot period (2018). Initially, the countries of Mali, Mauritania and Senegal qualified for the 2018 insurance year. After ARC Replica 2018 could not be implemented in these three countries as planned, the Replica partners also included Burkina Faso, Gambia and Zimbabwe in 2019, as these countries are characterised by their high vulnerability to climate risks and had specifically expressed interest in participating in the Replica programme.

In addition to the type of emergency assistance, the principles for selecting beneficiaries (targeting) are also defined as part of the emergency aid planning ARC envisaged as a prerequisite for concluding insurance. In the event of an insurance claim, the final implementation plan for the emergency aid is prepared and agreed between the government and the Replica partner and submitted to ARC for approval. The final plan involves targeting, which uses the ARC insurance model Africa Risk View for the geographical selection and the national population

[2] Includes the InsuResilience Investment Fund, evaluated with an overall rating of 2 in 2022 (Phases I–IV)

statistics (which often have shortcomings) as the preliminary basis. The selection of the specific households to receive emergency aid is done through surveys at local level (community-based), where the local authorities usually make their own assessments of the needs, including the identification of pregnant women, nursing mothers and young children, which are validated by a third party.

The project has gender equality as a secondary objective (GG1). From today's perspective, a gender analysis should have been carried out when assigning the GG1 identifier; a secondary objective should have been introduced at least at output level (with a corresponding indicator) and the data should have been collected in a correspondingly disaggregated manner. The project proposal identified the risk that women and other disadvantaged groups could have limited access to emergency aid, which was not further monitored during the course of the project. According to the WFP, an explicit gender focus at the time would have overloaded the project's design. However, WFP promotional approaches are generally gender-sensitive and, for example, women-led households are rated higher in targeting. At the time of the EPE, disaggregated monitoring by gender and age is a standard procedure at the WFP. Start Network is already pursuing a dedicated gender approach across all stages of the pilot phase (needs analysis, targeting, distribution of aid supplies, monitoring and reporting). In Senegal, Oxfam and the Catholic Relief Service in particular have contributed their expertise to the consortium.

Appropriateness of design

The project's design is generally suitable for helping to alleviate the worst effects of food crises resulting from droughts in Sub-Saharan Africa, not only by providing financial funds for emergency aid but also by improving emergency aid planning and implementation. The latter is achieved by ARC's comprehensive requirements for its policyholders with regard to disaster preparedness and the early provision of funds compared to traditional humanitarian aid financing. The concept was also realistic, as the ARC insurance concept, including the associated disaster preparedness programmes, had already been established and tested, as had the ability of the Replica partners to provide high-quality emergency aid.

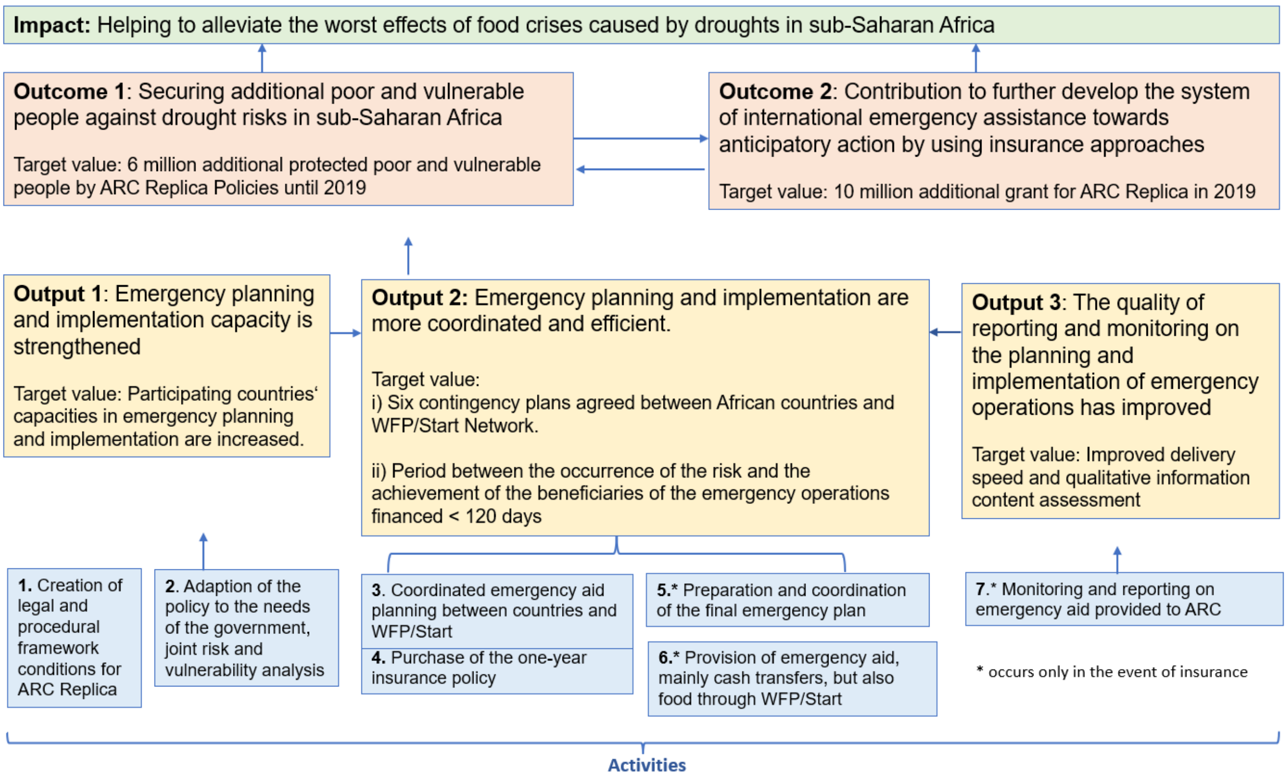


Figure 1: Reconstructed effect logic, ARC Replica Pilot, source: own illustration.

The target system appears to be transparent, whereby the impact, outcomes and their indicators (see annexes) are formulated more precisely as part of the EPE:

At outcome level, the following two separate objectives had originally been formulated although there is no formal provision: (1) The use of ARC is increased by the introduction of Replica policies and (2) A contribution has been made to the further development of the international emergency aid system in the sense of the increased use of insurance approaches. However, since this is a pilot project that is only partially effective in isolation, it is understandable that the continuation of the approach is a key stated objective in addition to the direct effect of the insurance approach. Nevertheless, this objective could also have been established at a different impact level. Specifying the first objective in the final report “(1) Protecting additional poor and vulnerable people against climate risks in Sub-Saharan Africa” seems appropriate for clarifying the purpose of using ARC. Calculating the number of beneficiaries by using the proxy indicator specified by the international insurance initiative IGP – i.e. the maximum sum insured (i.e. the maximum disbursement in the event of an extreme drought) divided by USD 10 – is understandable, but in practice leads to an overestimation of beneficiaries as EUR 10 per person is considered too low, which a comparison between disbursements and the actual number of people reached will show.

With regard to the formulation of the second objective, the following slight reformulation was made as part of the EPE. The intention is to clarify that the use of insurance is to be understood as an ongoing development of the emergency aid system “(2) Contribute to the further development of the international emergency aid system with a view to anticipatory action through the use of insurance approaches”.

The impact-level objective originally formulated in the PA was to contribute to food security and alleviate poverty. Later, the objective was reformulated as “Strengthen climate resilience in Africa”. Food security is generally suitable as an impact, as it is to be guaranteed by the emergency aid services financed by ARC Replica stakeholders. However, with regard to the developmental effects of emergency food aid or cash-based assistance for food security, it must be taken into account that many factors have an impact on the undernourishment of a population and that undernourishment can therefore only be counteracted sustainably in conjunction with multi-sectoral, longer-term programmes. The ambition to promote food security, alleviate poverty and build resilience to drought risks seems too ambitious. In this respect, the objective was moderated at impact level as follows: the aim is to contribute to alleviating the worst effects of food crises caused by droughts in Sub-Saharan Africa.

The lack of an indicator at impact level is critical, especially as the design does not include the monitoring of the actual short- to medium-term impact for the indirect target group at other levels either. Although the outcome objectives relate to the impact objective, these are not the outcomes traditionally used for this purpose in emergency food aid or cash transfers. In this respect, the effect cannot be verified.

The selected outputs are reasonable although when considering the intended impact, an outcome regarding the impact on the ultimate beneficiaries of emergency aid appears to be missing (see above). In the case of emergency food aid programmes, a short-term contribution to preventing further deterioration or to stabilising/improving the nutritional situation in the short term can be expected at outcome level due to the consumption of food. This contribution can be estimated by using various (proxy) indicators, e.g. success of the treatment of acutely undernourished groups of people (children, pregnant women, nursing women, the sick), measured by indicators that map the immediate use of fortified foods by the target group (death/mortality rate, recovery rate and drop-out/absence rate). A high drop-out rate (i.e. beneficiaries receive the services for less time than planned) is associated with insufficient capacities in the implementation of the programmes. Food consumption and diversity can be measured, for example, via the Food Consumption Score or Household Dietary Diversity Score. Output indicators can also be used as a proxy outcome indicator – for example, the distribution of food measured by the energy content of the distributed rations, the number of people reached, or the quantity of food distributed compared to the plan or demand.

Two of the three outputs are measured via non-specific qualitative indicators (capacities are strengthened, reporting is improved), which limits their meaningfulness and verifiability.

The results chains are generally plausible (see Figure 1). First, the legal and procedural framework conditions – especially the adjustment of the ARC insurance contracts to the Replica concept – are created by the Replica partners. In the selected countries, the Replica partners and the government jointly participate in ARC's regular annual processes. Specifically, they participate in the national technical working party on the adjustment of the ARC insurance model and risk transfer parameters to the needs of the government ("customisation"). Joint disaster risk analyses and vulnerability assessments are also carried out. This is followed by emergency aid planning, including simulating the finalisation of emergency aid plans in the event of a disaster, whereby the plans of the Replica partners must be designed and coordinated to complement the government plans (a prerequisite for concluding a policy). By bringing in additional technical expertise from the Replica partners, the government will benefit from better planning results and the learning experiences will strengthen the government's own capacities. The one-year insurance policy can then be purchased. Based on the maximum sum insured, i.e. the maximum possible disbursement from the insurance, it is calculated how many people could theoretically benefit from the emergency aid, i.e. are hedged against the consequences of drought.

In the event of an insurance claim (the insurance model detects a severe drought based on predefined parametric triggers and assumes this will lead to a food crisis), the joint planning initiated in advance and the joint finalisation of the emergency plans will lead to coordinated and thus efficient implementation among the government and the Replica partner. As humanitarian stakeholders receive disbursements earlier than in the case of traditional emergency aid, emergency aid can achieve additional gains in terms of efficiency and effectiveness. The provision of emergency aid in the form of cash transfers and food to poor and vulnerable people is intended to help mitigate the worst effects of the food crisis for this group of people. Learning experiences are to be gathered through the monitoring of the emergency aid implemented by the Replica partners and the corresponding follow-up reporting. These are intended to help improve the design of ARC as an insurance mechanism and the implementation and monitoring of emergency aid by the Replica partners and governments.

A successful pilot of the Replica approach should motivate other donors to finance the premiums of the Replica partners in the future, thereby establishing insurance as a fixed financing approach in humanitarian aid and so further develop the system of international emergency aid in terms of anticipatory action. This will enable humanitarian stakeholders to contribute beyond the project to alleviating the worst consequences of food crises following droughts.

At the time of design, it was not possible to estimate whether the approach would be financially sustainable in the long term, as the executing agencies' premiums and personnel costs are fully financed, as is customary for UN organisations and non-governmental organisations, particularly in the context of humanitarian aid. However, the issue of future financing was already centrally anchored at outcome level in the design, insofar as financial sustainability was also considered to be an objective. From today's perspective, it is not clear which considerations have been made with regard to social and environmental sustainability. According to the environmental and social impact assessment, the project was classified in risk category C, i.e. low risk. Today, the appraisal would very likely come to a different result and require the creation of an environmental and social management framework that particularly takes into account the issues of occupational safety and, if necessary, child labour. However, the greatest risks lie in procedural and distributive justice. These arise from asymmetries of political power in local decision-making processes (elite control) and the favouring of influential stakeholders (elite capture) linked to the selection of project beneficiaries and project programmes. This can lead to social tensions and intra-communal conflicts (keyword "conflict sensitivity"). To avoid social conflicts and tensions, questions of distributive and procedural justice should therefore be taken into account in the selection of project beneficiaries and their participation so that marginalised groups are not excluded from the funding measures as part of inclusive, participatory and transparent decision-making processes. This would be ensured by developing a stakeholder engagement framework (SEF).

Response to changes/adaptability

The original concept had envisaged that an ARC Replica policy could only be taken out in countries where the government also takes out a policy with ARC for the corresponding year. The aim was to create an incentive for the countries to continue to insure themselves with ARC (basic membership with ARC was a prerequisite anyway; however, countries must renew their policies annually). Initially, the countries of Mali, Mauritania and Senegal qualified for the 2018 insurance year. After the first year of implementation, it became clear that the decision to take out insurance does not depend on the prospect of an ARC Replica policy, but on various domestic and financial aspects. In order to be able to offer countries cover via ARC, especially in this situation where they are not in a position to take out a policy themselves, the linking of the policies has been lifted. Theoretically, the prospect of a Replica policy could create a misguided incentive for governments to solely rely on humanitarian stakeholders and not take out a policy themselves. However, there is no evidence to support such behaviour. In the following years, with a few exceptions, Replica policies were always taken out in parallel with government policies.

As the demand risk materialised in 2018 (massive downturn in government policies) and no Replica policy could be concluded, the number of countries was increased from three over two years to six (Mali, Mauritania and Senegal, plus Burkina Faso, Gambia and Zimbabwe) in one year. On the one hand, this change led to higher costs for technical advice for the Replica partners (supporting six countries instead of three in all the preparatory steps) and to an extension of the project by one year.

A number of minor adjustments were made by Start Network. In addition to the financing of insurance premiums, a reserve fund was piloted for Senegal as a further financial hedging instrument to address less severe extreme weather events. Start Network attempted to implement Replica in Madagascar in 2019. Due to the national authorities' lack of willingness to participate in the cooperation, the activities had to be discontinued. Due to the Covid-19 pandemic, emergency aid in Senegal had to be adjusted in some aspects in 2020. Among other things, Start Network had to coordinate its activities with the government's general coronavirus aid. In addition, physical contact was reduced during the distribution of services. The same applies to the implementation of emergency aid in Mauritania and Zimbabwe by the WFP.

Summary of the rating

The project is classified as successful with regard to the relevance criterion. The alignment with political priorities, needs and capacities is rated as very good. There are minor deficiencies in the design of the project, as the impact cannot be fully verified. However, the results chains are completely transparent and plausible.

Relevance: 2

Coherence

Internal coherence

The project is fundamentally coherent with the BMZ Africa Strategy established in 2023. Although risk hedging and emergency aid do not feature prominently in the strategy, which is already extremely wide-ranging, ARC is nevertheless mentioned by name. (One of the six priorities is "Sustainable economic development, employment and prosperity". Under this priority, one of the two subtopics is "Just transition: a social and environmental transformation of the economy, conservation of vital natural resources, energy and infrastructure". Specific measures under this priority include "Expanding protection against climate risks; improve adaptation and climate resilience"). As a regional project, there is no DC programme objective that the project could be aligned with. However, the priorities of the bilateral German DC in the participating countries are coherent with the project's objectives in a narrower or broader sense. In Senegal, for example, the Food security (2.1) action field (AF) contributes to similar goals. In Mauritania it is AF 1.3. Flight and migration, while in Mali and Burkina Faso it is AF 1.2 Crisis prevention. Gambia and Zimbabwe are not partner countries of the German DC.

ARC Replica – with its main objective of providing support in addressing the consequences of climate change – is coherent with one of the three core concerns of the Paris Agreement set out in Article 2.1: "*This Agreement [...] aims to strengthen the global response to the threat of climate change*, *in the context of sustainable development and efforts to eradicate poverty* [...]. "The Loss and Damage Article (Article 8) also provides a clear basis for ARC Replica "*1. Parties recognise the importance of averting, minimising and addressing loss and damage associated with the adverse effects of climate change, including extreme weather events and slow onset events, and the role of sustainable development in reducing the risk of loss and damage*." ARC and ARC Replica are a central component of the IGP, the international initiative for hedging against climate risks and the pioneer of the Global Shield against Climate Risks. The Sendai Framework defines four priorities: *"Priority 1: Understanding disaster risk. Priority 2: Strengthening disaster risk governance to manage disaster risks. Priority 3: Investing in disaster risk reduction for resilience. Priority 4: Enhancing disaster preparedness for effective response and to "Build Back Better" in recovery, rehabilitation, and reconstruction."* ARC Replica contributes to priorities 1, 2 and 4 (i.e. risk understanding, governance, preparedness). Furthermore, ARC Replica contributes to the objectives of the "Risk-informed Early Action Partnership", which is actively supported by the German Federal Foreign Office. Objective 2 states the following: "*One billion more people are covered by financing and delivery mechanisms connected to effective early action plans, ensuring they can act ahead of predicted disasters and crises."*

External coherence

The project supported the efforts of the participating governments to mitigate the worst effects of food crises insofar as strengthening the government's capacities for planning and implementing emergency aid is a central output of the project. The activities of the Replica partners also complement national efforts, as reflected in the preparation of coordinated complementary emergency plans. The project also supports the Replica partners' own efforts. Based on the activities to date, the planning and implementation of emergency aid by the project is to be more effectively coordinated and even more efficient. The project also creates additional technical capacities for risk analysis at the executing agency level.

There was a constant dialogue with the donors who provided grants for the financing of Replica policies following the pilot phase (US and UK). This was in the context of the global climate risk insurance forums such as IGP and via the ARC exchange platforms, especially the Annual Forum.

ARC Replica is completely based on the already established ARC procedure as an insurance approach, as well as the structures and procedures of the WFP and Start Network as implementers of emergency aid. The Replica partners only had to create additional procedures and capacities so that they and the government can cover all the preparatory activities required at ARC. Furthermore, at the beginning of the project a single legal framework had to be created so that humanitarian stakeholders could gain access to ARC insurance cover, and memorandums of understanding between the Replica partners and the participating governments had to be signed.

Monitoring as part of the project is largely based on the formats/information established by the ARC. This includes information about the purchase of the insurance policy with the corresponding maximum amount covered, the agreed emergency plans and the period between the notification of the insurance claim and the provision of emergency assistance. The Replica partners only had to formally report to ARC on the use of the disbursements in accordance with the final emergency plan. The ARC reporting standards were used for this purpose. The Replica partners exchanged learning experiences with each other. Start Network prepared learning experiences that were distributed throughout the network.

In addition, the commitment to ARC, including ARC Replica, is in line with EU policy. Here, the Federal Ministry for Economic Cooperation and Development (BMZ) was the driving force behind the creation of a Team Europe initiative for the promotion of adjustment and resilience in Africa, which primarily focuses on risk protection.

Summary of the rating

The achievement of both internal and external coherence is considered successful, primarily due to the ARC insurance approach in itself.

Coherence: 2

Effectiveness[3]

Achievement of (intended) targets

The objective adjusted as part of the final evaluation was (1) Protect additional poor and vulnerable people against climate risks in Sub-Saharan Africa, (2) Contribute to the further development of the international emergency aid system with a view to anticipatory action through the use of insurance approaches.

The target achievement at outcome level is summarised in the table below:

Indicator	Status during PA	Target value PA/EPE	Target achievement at the time of the final inspection (optional)	Actual value at EPE (last available value 2022)
) Number of poor and vulnerable people additionally hedged due to the introduction of Replica policies	0	According to value configuration in the 2020 report: 2018: 3 million 2019: 3 million	2018: 0 2019: 5.5 million (via financing of premiums in 2019, which correspond to a cover sum of USD 50,543,847)	2020: 3.88 million 2021: 4.93 million 2022: 5.80 million (Financing via other FC projects, FCDO and USAID)
) In addition to the current German financing contribution, additional grant funds are being raised for the ARC Replica approach.	0	Target value: EUR 10 million (2018–2019)	2018:0 2019: 0 2020: USD 10 million 2021: GBP 0.76	Replica premium payments in USD million (financed by grant funds from Financial Cooperation, FCDO, USAID) as a proxy: 2019: 7.2 2020: 6.7 2021: 8.5 2022: 9.6

In the pilot project to be evaluated, the insurance premiums of the Replica partners were only paid for 2019 and these corresponded to a cover sum of USD 50,543,847. According to the IGP calculation method, this corresponds to 5.5 million covered persons, so the target value of the first indicator of 6 million covered persons was narrowly missed in 2018 and 2019. However, a proportion of the funds from the pilot phase was also used for direct costs and, to a lesser extent, for indirect costs for the following year (Start Network: direct costs for 2020 of around EUR 950,000; WFP: direct costs for 2020 and 2021 of EUR 820,000), thereby indirectly facilitating the conclusion of the premiums for this year.

However, if the actual insurance payouts are compared with the number of beneficiaries of the emergency aid provided according to the reports of the providers, the costs per person are much higher, averaging USD 42 instead of USD 10. If these average values are used, only 1.2 million people were covered by the sum of USD 50.5 million. There is therefore a drastic overestimation of the insured persons.

In addition to the current German financing contribution, further grant funds could be raised for the ARC Replica approach (indicator 2). However, the target value was very ambitious for such a short-scale pilot project and could only be achieved almost a year later than planned – a multi-year commitment by USAID to premium financing and accompanying measures in the context of ARC Replica, and a one-year commitment by FCDO to premium financing. In total, annual premium payments of EUR 32 million were made by the Replica partners from

[3] Note: In the following, the figures for the achievement of the targets refer to the executing agency's reports, which may deviate from those of the final inspection.

2019 to 2022. These were entirely financed by donors, whereby around USD 21 million was financed by the FC, USD 8 million by FCDO and USD 3 million by USAID. In addition to German support via the premium subsidisation facility, USAID, FCDO, and now Canada for the first time have committed funds to the WFP for ARC Replica starting in 2023.

Contribution to achieving targets

All outputs were fully delivered (1. Capacity has been boosted in emergency planning and implementation of emergency response, 2. Emergency planning and implementation are more coordinated and efficient, 3. The quality of reporting and monitoring concerning the design and implementation of emergency aid has improved). Only the target value for the period between the occurrence of the insurance event and the emergency aid measures financed by the insurance payout reaching those affected (< 120 days), which was regarded as one of the indicators for the efficient implementation of emergency aid, was missed by a small margin. It is likely that this was mainly due to the effects of the Covid-19 pandemic in 2020.

All outputs were used, with some of the outputs only being used in the countries where an insurance case occurred. Although the project does not envisage active capacity building among government stakeholders by the Replica partners, the participation of the ARC Replica partners, who have technical expertise in the preparatory process steps of ARC, ensures that knowledge is passed on to government representatives. The Replica partners have contributed to the improved adaptation of the respective insurance models to the countries, providing the government with ample technical advice, and initiating improvements in the design of state emergency aid. The knowledge/improvements gained here have been directly incorporated into the design of the insurance cover and the emergency aid planning for the respective year. Capacities were also expanded among the Replica partners, not in terms of emergency aid planning and implementation, but in terms of risk modelling. Coordinated emergency aid planning was a prerequisite for purchasing the insurance policy. In the three countries where a disbursement took place, the final emergency plans had to be drawn up and coordinated. Subsequently, the emergency aid had to be distributed to the beneficiaries as quickly as possible (within 3 months) and a final report on the use of the funds had to be made.

At the time of implementation, ARC was striving for gender inclusiveness, but did not follow this up or support it with specific guidelines. In Senegal, where three evaluations[4] on the use of disbursements were carried out, the criticism was levied that women were nationally underrepresented during planning and decision-making processes. In the needs assessment, planning and implementation of emergency aid, on the other hand, both agencies state that women were treated equally (e.g. through representation on local committees to determine the people in need) and, in some cases, were explicitly addressed (pregnant and breastfeeding women, as well as the target group of the hygiene information campaign in connection with Covid-19 in Senegal), as were children under the age of five. While monitoring/reporting on gender is based on estimates at the WFP, Start Network collects gender data on a disaggregated basis. The evaluations for Senegal attest to Start Network's consistently high level of gender inclusion, which the government could learn from, but recommend that all ARC stakeholders take better account of marginalised groups such as the elderly, people with disabilities and the sick in addition to gender.

The successful conclusion of the Replica policies in the six countries has meant that additional poor and vulnerable people have been hedged against the risk of drought. This fact, paired with the subsequent successful implementation of emergency aid in the countries where an insurance payment was made, has led other donors to decide to provide humanitarian stakeholders with grants for Replica policies, which represents a further move towards anticipatory action in the international emergency aid system. It is not known whether these are additional emergency aid funds or merely a reallocation of emergency aid funds. In the case of the German DC, the funds are at least additional, as otherwise no humanitarian emergency aid could have been financed via the DC (see division of responsibilities between the German Federal Foreign Office and the BMZ).

In addition to the poor and vulnerable people theoretically covered by the insurance, 264,000 people in three countries (in this case Senegal, Mauritania, Zimbabwe) actually received emergency aid in the form of cash transfers and food for 1–3 months to mitigate the worst effects of the droughts in 2019/2020. In Senegal, where

[4] Kimetrica (2021): Final Report: ARC Senegal Payout. Process Evaluation; Oxford Policy Management – OPM (2021): Independent Evaluation of the African Risk Capacity. Pilot Impact Country Study: Senegal; Start Network (2021): ARC Replica Payout Senegal 2020. Internal evaluation.
Since the disbursements in Mauritania and Zimbabwe were so low, neither the WFP, the donors nor the ARC agency conducted an evaluation in these countries.

cash transfers and dietary supplements were provided for around 220,000 people over three months, approximately 50% of the recipients were women. Around 40,000 children under the age of five and 40,000 pregnant women and nursing mothers have benefited from nutrient-enriched flour. In Mauritania, the cash transfer for close to 4,000 people reached slightly more women than men for two months, with a particular focus on pregnant women, nursing mothers and children under the age of five. In Zimbabwe, food worth 60% of an adult's calorie requirement was distributed to around 40,000 people for one month. Slightly more than half of the beneficiaries were women, and close to 700 people with disabilities received support.

Compared with ad-hoc, short-term commitments that are customary in international emergency aid, the multi-annual nature of the funds and the possibility of making adjustments to the design were decisive for achieving the objectives, especially since this is a pilot project. The high technical capacities of the executing agencies and their local presence were a key guarantee of success for the project. During the implementation, a relationship of trust flourished between the Replica partner and the government, and the executing agencies maintained a very close exchange of learning experiences, which was also important for achieving the goals.

The fact that the project used the established, successful procedures of ARC paved the way for success. As a result, the strengths and weaknesses of the project can barely be separated from those of ARC as an insurance mechanism in itself. Difficulties in the attractiveness of ARC in the event of the declining solvency of governments (e.g. no policies concluded in Senegal in 2018 and no interest from the government in Madagascar), together with the restrictions resulting from the Covid-19 pandemic, have delayed the achievement of objectives and in some cases made it more difficult, but not impossible.

Quality of implementation

As the world's leading UN organisation for food aid, the WFP is an experienced partner in situations involving drought. The WFP has national country offices and, in 2016, undertook to increase the use of ex-ante financing instruments. Start Network is a network of over 80 international and national NGOs (including Welthungerhilfe, Save the Children, Oxfam, Plan International and Caritas) that provide humanitarian aid. Start Network focuses on implementation via local structures and forward-looking disaster risk management with ex-ante financing.

The WFP and ARC have always been closely linked on an institutional level. ARC originated from the WFP and in many countries the WFP supports ARC with its technical expertise in the field of emergency aid. Accordingly, the WFP co-developed the Replica approach. Since the start of the project, both the WFP and Start Network have been actively involved in the design of Replica, including any necessary adjustments. Both Replica partners have consistently worked to achieve their goals (conclusion of insurance policies and recruitment of further donors). The Replica partners were recognised as having a very high level of technical expertise and broad experience, which has led to a high quality of implementation. Donors and government representatives are very satisfied with the quality. A government representative described the quality of the Replica partners as a benchmark that the government used as a guide.

Gender aspects were not addressed at all stages of project implementation but were addressed in the design and implementation of emergency aid (see above).

Unintended consequences (positive or negative)

Even after consulting the executing agencies and other donors, no unintended consequences are known, whether positive or negative. There was no downturn in government policies due to the introduction of Replica policies.

Summary of the rating

The objectives of the project were consistently achieved, albeit with a slight delay, which was understandable for a pilot project, especially in times of Covid-19. Apart from the delivery of emergency aid, which was slower than planned, the other delays had no negative impact on the impact of the project. For this reason, the effectiveness is still rated as successful.

Effectiveness: 2

Efficiency

Production efficiency

Start Network received a grant of EUR 4.2 million and the WFP a grant of EUR 5.8 million as part of the pilot project. In the first year, around 35% of funds were used to finance preparatory activities. Since no insurance contracts were concluded, only direct and indirect costs[5] were incurred. In 2019, the majority of the funds (78%) were spent because, in addition to direct and indirect costs, premiums were financed for six countries. In the following years – 2020 and 2021 – the remaining 18% of the budget was used mainly for direct costs and, to a very limited extent, for the indirect costs incurred for the continuation of the Replica programme.

The PA target to use 80% of the budget for premiums was missed at 69%. This is because during the pilot phase, an insurance policy was purchased in six countries on a one-off basis rather than three countries that would be supported over two years as originally planned. This meant the insurance premium calculations at the time were no longer current. The direct implementation costs were 27% higher than the originally planned 13%, although it is noticeable that Start Network has almost 10% higher direct costs than the WFP. This is due to the high level of funds remaining after the conclusion of the Senegal premium in 2019. These were then used for the operational implementation of Replica in 2020 and 2021 (not for premiums). In Senegal, there was also a reserve fund of EUR 338,000. This has a trigger that is below the ARC threshold so that financing is provided during drought events when there is no disbursement from ARC. This was distributed in 2021. In 2022, Start Network incorporated the reserve fund concept into the new "Start Ready Risk Pool". Indirect costs amounted to 4% of the total costs as contractually agreed.

The highest premium of EUR 2.3 million was paid for Senegal by Start Network, followed by Mali at USD 1.8 million and Mauritania at USD 1.5 million. Premiums in Burkina, Gambia and Zimbabwe were well below USD 1 million.

START Network expenses (Pilot phase)	EUR	%
Direct costs	1,367,576	32
Senegal premium	2,334,078	55
Senegal reserve fund	338,000	8
Indirect costs	170,779	4
TOTAL	4,210,433	100

Total expenses (Pilot phase)	EUR	%
Direct costs	2,672,853	27
Premiums + contingency fund	6,922,850	69
Indirect costs	404,297	4
TOTAL	10,000,000	100

WFP expenses (Pilot phase)	EUR	%
Direct costs	1,305,277	23
Premiums	4,250,772	73
Burkina Faso	*USD 683,034*	
Gambia	*USD 400,015*	
Mali	*USD 1,817,080*	
Mauritania	*USD 1,500,000*	
Zimbabwe	*USD 200,000*	
Indirect costs	233,518	4
TOTAL	5,789,567	100

The costs cannot be directly allocated to the three outputs (capacity enhancement, efficient and coordinated emergency planning and implementation, improved reporting). Since 69% of the budget was spent on premiums and the costs of implementing emergency aid, including monitoring and reporting, were financed by the ARC disbursement, it can be inferred that the remaining 31%, i.e. EUR 3.1 million, financed the capacity building and emergency planning. This corresponds to an average of EUR 517,000 per country for six countries over a period of three years. The costs incurred once or centrally for the project, such as creating the legal framework for the Replica approach, overall coordination, fundraising and knowledge management, would have to be deducted from this. For each country, the following activities were financed to achieve the corresponding outputs: i) national coordination, ii) participation of the Replica partners in technical working parties on adjusting the ARC

[5] Direct costs include expenditure directly related to the project but not premium payments: customisation of the ARV, contingency planning (preliminary and final emergency plans), risk transfer parameters, coordination, capacity building, policy negotiations and signature, monitoring, evaluation, accountability and learning, reporting, financial sustainability. Indirect costs include overheads, pro rata costs for the country offices, etc.

insurance model and risk transfer parameters to the needs of the government ("customisation"), as well as conducting the disaster risk analysis and vulnerability assessment with the government, iii) emergency aid planning by the Replica partners and coordination with the government, including simulating the finalisation of disaster relief plans with the government, iv) national monitoring and reporting. There are no comparable projects for disaster risk management in the FC, meaning a direct cost comparison is not possible. However, the costs appear to be reasonable, especially when taking into account the need for highly specific technical expertise in some cases.

The executing agencies carried out the activities themselves. Another central goal of the activities was to ensure that learning takes place in the institutions, that knowledge is internalised and that a close, trusting relationship of cooperation is established with the government. An essential part of this was to ensure that the activities were implemented by the executing agencies' staff. It seems unlikely that the same effect would have been achieved through a complementary measure or external consultants.

All outputs were produced in a timely manner, or with a slight delay in the case of the emergency aid provided in Senegal and Mauritania.

Projects with non-governmental organisations usually show indirect costs and administrative expenses (overheads), which generally exceed 10% in total. In the case of the WFP, the uniformly determined indirect costs at the time of the EPE are 6.5%. The direct costs vary depending on the implementation effort but tend to be below 10%. It can be concluded that the indirect costs of ARC Replica can be regarded as low.

Allocation efficiency

Financing for the delivery of emergency aid after a drought could have been implemented in various other ways. On the one hand, the grants for emergency aid could have been issued directly to governments. In this case, however, outputs 1 and 2 would not have been delivered and these had a major impact on how effectively and quickly the emergency aid was implemented. An equivalent implementation of emergency aid could not have been achieved through national systems in such a short period of time. In addition to strengthening the government's disaster risk reduction capabilities relating to the specific annual contingency plans to which the Replica approach contributed, the Replica partners were, in many cases, also a trustworthy, technically savvy partner that accompanied the government on its journey of structural changes in disaster risk management and financing.

Alternatively, the funds could have remained with the executing agencies without going through ARC. With the aim of promoting anticipatory action, countries could have also been selected here and triggers predicting the onset of a drought at an early stage could have been developed, so that the executing agencies could have provided the emergency aid accordingly in advance. A request could likewise have been made by the executing agencies for each country to have a provisional emergency plan. However, output 1 of ARC Replica – namely government capacities in the planning and implementation of emergency aid have been strengthened – would have been difficult to achieve with this alternative approach (see also above). Without the close cooperation between the executing agencies and the governments, which is mandatory for ARC Replica, there would have been no knowledge transfer from the executing agencies to the governments, the potential for improvement would not have been revealed in the ARC modelling, and there would have been no effective coordination of local emergency aid in practice. Furthermore, it is questionable whether the executing agencies could have created their own structures in the same time frame and at the same cost, and whether triggers could have been developed and monitored. The use of ARC with its established procedures (requirements regarding emergency aid, risk software, triggers, monitoring, etc.) was a very efficient way to set up and pilot financing for the promotion of anticipatory action among humanitarian stakeholders. Using insurance as a financing mechanism does not represent any added value in isolation for the pilot phase. This added value only becomes apparent when viewed over time and considered in connection with ARC as a whole, as ARC increases its customer base and risk pool through the additional humanitarian policyholders, thereby contributing to financial stability and further risk diversification. From the outset, the use of an existing risk pool enables disbursements that exceed the deposits, i.e. deposits that could not yet have been accumulated in this amount in a reserve fund (see the Senegal premium payment of EUR 2.6 million versus an insurance payment of USD 10.7 million in 2019). For governments and Replica partners with limited financial leeway, it is also easier to plan annual premiums of a certain magnitude than to mobilise high amounts ad hoc in the event of drought. The extent to which ARC works efficiently as an insurance mechanism is not part of this evaluation.

How an alternative approach – not based on such close cooperation between humanitarian stakeholders and governments – would have impacted the achievement of output 2 (more coordinated and more efficient emergency planning and implementation) cannot be answered with any certainty. A guaranteed positive effect of the cooperation is that emergency aid planning and implementation were better aligned and coordinated with each other, so friction was avoided and governments could learn from the Replica partners. At the same time, it is reported that the finalisation of the emergency plans and the high requirements of ARC in this regard were particular contributing factors to delays. Furthermore, governments were not always prepared for the provision of emergency aid at an early stage and caused delays among the Replica partners due to protracted processes, which, although not formally bound to the government's time schedule, de facto depend, in many ways, on a certain lockstep in terms of provision. It therefore seems plausible that the Replica partners would have been potentially faster in providing their emergency aid without the link to ARC and the associated coordination, and could therefore have taken anticipatory action in a practical sense. However, it cannot be conclusively clarified whether the efficiency gains from coordination and strengthening the capacity of governments or the efficiency losses due to time delays dominate. The simulations introduced by the WFP from 2020 onwards to create final emergency plans address part of the risk relating to the loss of time.

Traditionally, funds for emergency aid are only committed ad hoc by donors after fundraising efforts by humanitarian stakeholders, so that these funds would generally have arrived later than it was the case for ARC Replica. The WFP therefore also emphasised the advantages of donor financing for ARC Replica as a reliable needs-based disbursement mechanism ("money when you need it") in contrast to otherwise uncertain humanitarian commitments.

A different risk transfer mechanism for drought risks at national level was not available at the time and any solution available on the market would have been more expensive than ARC. ARC is structured as a mutual insurance association in which the African countries are shareholders. Profits or premium payments that are neither distributed as insurance payments nor used to cover reinsurance costs remain in the pool and are available for future hedging, resulting in premium costs below the market price. Alternatively, national reserve funds could also have been financed, as it was the case for Senegal during implementation. However, these conceptual payments are more likely to be for frequent and less extreme weather events, and disaster preparedness incentives should have been created.

In addition to the WFP and Start Network, other organisations were considered as Replica partners, as the ongoing discussions on expanding the Replica partner base show. For the pilot phase, the choice of the WFP and Start Network seems convincing. The WFP is the largest humanitarian organisation involved in the fight against food crises and has a history with ARC, and Start Network explicitly focuses on anticipatory action.

The cost of the emergency aid provided per beneficiary reached is difficult to compare between ARC Replica's disbursement cases and other food aid and cash transfer projects, not least because there was no monitoring of the impact that the emergency aid had had on the beneficiaries. The cost of using the insurance mechanism, on the other hand, can be compared with the disbursements, although a one-year pilot is not meaningful here. In the 2019/2020 pilot year, the premiums paid by the Replica partners (USD 7,233,637) were lower than the cumulative disbursements (USD 11,115,933). In fact, disbursements were also higher than the project's overall budget. According to the WFP, after five years of empirical evidence from Replica, the premiums are at the same level as the payout. The WFP therefore asserts that the insurance mechanism does not provide more financing overall, but provides financing quicker and in a higher amount where it is needed. In fact, however, the added value of Replica is not evident in the financing mechanism itself, but rather in the positive effects in disaster risk reduction and the shift in thinking among governments and Replica partners towards anticipatory action.

Summary of the rating

The outputs and impact were delivered in a very cost-efficient manner, especially in view of the high disbursements during the pilot phase. Alternative concepts would probably not have led to any better effects or the same effects at lower costs, in particular because synergies with the existing ARC mechanism could be used and ARC Replica is not only a mechanism for financing emergency aid – the coordinated approach of the government and the Replica partners creates a wide range of positive effects in disaster prevention. Whether time gains during provision through an alternative mechanism would have outweighed these effects is unclear.

Efficiency: 2

Impact

Overarching developmental changes (intended)

The objective adjusted as part of the EPE was to contribute to alleviating the worst effects of food crises resulting from droughts in Sub-Saharan Africa. However, no indicators were defined with regard to the achievement of the objective at impact level.

In 2020 – at the time of the disbursements as part of the pilot project – there were food crises in 41 countries in Sub-Saharan Africa for various reasons. More than 100 million people were in an acute crisis situation, facing an emergency or were starving. The WFP states that extreme weather events represented the primary cause of these conditions for around 8 million people. These include drought and, above all, heavy rainfall, which has led to flooding and landslides. Furthermore, according to the WFP, close to 64 million people in the region benefited from the WFP's support in 2020, although not all of them were (yet) in an acute food crisis or worse, but were still at a preliminary stage in some instances. In this respect, it can be inferred that the worst effects of droughts could be mitigated for some, but by no means all, of the project's target group (see section below).

Contribution to overarching developmental changes (intended)

In 2020, the project directly supported 264,000 people in Senegal, Mauritania and Zimbabwe with emergency aid to alleviate the worst effects of food crises resulting from droughts. With regard to impact measurement, it must be taken into account that the objectives and indicators at outcome and output level are partly aimed at institutional changes that should result in the improved provision of emergency aid. However, whether these effects occurred in terms of the budget was not monitored or reported as part of the project. The following section therefore triangulates the extent to which overarching development policy changes can be identified. Overall, it can be confirmed that the programme had a positive impact for the beneficiaries, even if it was less positive than originally hoped for.

Due to the size of the disbursement in Senegal, three evaluations were carried out (see footnote 1), which allow conclusions to be drawn on the impact at budgetary level. In Senegal, the population data was insufficient, so an ex-ante calculation was made with a household size that was too small. Instead of the assumed 8 people, an average household consisted of 12.5 people (Kimetrica (2021), OPM (2021)). Cash transfers were therefore too low to meet people's basic needs for the planned three-month period. For this reason, not all negative coping strategies for dealing with hunger could be avoided. However, the worst strategies, such as selling cattle, were prevented during the procurement of emergency aid (Kimetrica (2021), Start Network (2021)). However, the effects were only short-term, so no stabilising effect was achieved. The situation of the beneficiaries during the drought in the month before receiving the emergency aid was similar to the situation in the month after the emergency aid – around 60% of households went into debt to buy food, while 40% reduced the number of meals consumed per day. Within the period when emergency aid was received, the impact on the beneficiaries was consistently positive and the situation was better than without the provision of emergency aid. Concerning particularly disadvantaged people, households participating in the evaluations reported that pregnant women, breastfeeding women and children under 5 years of age received at least two meals per day. However, the fortified flour was used up faster than expected, so very simple meals were prepared (Start Network (2021)).

The aim was to provide emergency aid not just when people are already struggling with the worst consequences of the food crisis, but to do so in advance so that negative coping strategies can be prevented. The timing therefore had a direct impact on the effectiveness of the emergency aid. In Senegal, emergency aid was provided at least one month later than the maximum time planned in the project (target value: less than 120 days, period in Senegal: 154 days). It could therefore not be conclusively established whether Replica emergency aid that had been planned and financed by ARC was faster and therefore more effective than regular emergency aid from the Start Network members. In Mauritania and Zimbabwe, the services were delayed by approximately one month according to the final emergency plan. However, due to the overlap with the Covid-19 pandemic, the general conditions for implementation were made even more complicated, so that, conversely, it could also be concluded that emergency aid services could be provided despite the pandemic, albeit with a certain delay. In Senegal, it was reported that the close relationships established by Replica were very helpful at a local level, so it was possible to progress with the implementation despite the pandemic-related restrictions.

Within the scope of its capacity, ARC Replica could naturally only have a limited impact in proportion to all the people starving because of droughts in sub-Saharan Africa and all those who were starving in the three countries in 2020. In the countries participating in ARC, this is because the maximum insurance sum per country is capped and the government’s insurance policy is often not optimally designed. For Senegal, in 2020, around 800,000 people were classified by the WFP as being in an acute food crisis or worse (ARC Replica beneficiaries: 220,000 for three months). In Zimbabwe, around 4.3 million people suffered an acute food crisis, an emergency situation or severe hunger in 2020, affecting 45% of the rural population (ARC Replica beneficiaries: 40,000 for one month). The effects of drought played a decisive role in this[6].

Key to helping to mitigate the worst impacts were the ARC disbursements as well as the executing agencies' structures and experience in planning and implementing emergency aid, including the targeting procedures. The close coordination and joint planning with the government proved positive, which led to the coordinated and therefore more efficient implementation of emergency aid (see section on efficiency). On the other hand, coordinating the final emergency aid plans with the government and the ARC agency also cost the Replica partners valuable time in some cases, which negatively impacted the effectiveness of the emergency aid provided. In this context, the simulations introduced by the WFP for the preparation of the final emergency plans have proven to be very useful.

ARC, as an insurance mechanism, and the executing agencies have a decisive impact on the project. The difficulties of the project are thus also inextricably linked to those of the ARC. Since the Replica partners “mirror” the governments' insurance parameters, i.e. the selected triggers, their success depends on the design of these policies. However, governments often do not opt for the best actuarial coverage. Instead of covering serious events that rarely occur, they choose those that occur frequently, which, from a policyholder’s point of view, does not represent a cost-efficient use of an insurance policy, nor does it correspond to the objective of an insurance policy. In addition, governments use the disbursements more to finance traditional emergency aid, i.e. to distribute aid supplies when a crisis peaks, often also delaying the implementation by the Replica partners, who want to provide emergency aid at an early stage in accordance with the strategy of anticipatory action. While Replica partners do not need to formally wait for the start of the national emergency aid programme, there is in fact a certain dependency and a need for political sensitivity when humanitarian stakeholders in a region start earlier than the government.

The implementation of emergency aid coincided with the beginning of the Covid-19 pandemic. This external circumstance made it significantly more difficult to achieve the targets, especially the rapid provision of services.

In six countries (Senegal, Mauritania, Zimbabwe, Mali, Gambia and Burkina Faso), the participation of the Replica partners in the ARC process steps up to the conclusion of a policy helped the national governments to better align the insurance policy with their needs (especially risk modelling and vulnerability analyses in Mali and Mauritania) and to improve emergency aid planning (especially targeting, but also the type of emergency aid services). These improvements in models and procedures should also lead to better emergency aid outcomes throughout the insurance year and in the countries where no payment was made. Where a disbursement occurred, governments were also able to improve their monitoring and reporting, in part through the influence of the Replica partners. The scale and sustainability of these improvements and the actual impact at budgetary level cannot be clearly established due to the lack of indicators at budgetary level. In addition, these structural changes in the government’s disaster risk management were highly diverse in scope and nature and context dependent.

The executing agencies were able to develop internal capacities and expertise in risk modelling which they then used over and beyond the project, e.g. in the WFP’s efforts to also gain access to other regional insurance pools such as the Caribbean Catastrophe Risk Insurance Facility, or to set up a reserve fund for Start Network (Start Ready Risk Pool). ARC Replica has led to an even closer relationship of cooperation and trust with the governments in these countries and this extends beyond individual policies. For Start Network, the NGOs involved on site (Action Against Hunger, Catholic Relief Services, Oxfam, Plan International, Save the Children, World Vision) worked together closely for the first time, which also has a positive impact beyond the project.

One of the two outcomes explicitly targeted the broad impact of the approach in the international emergency aid system. Through ARC Replica, a UN humanitarian organisation and NGOs were able to gain experience with macro-level risk financing for the first time. Since the PA, anticipatory action has evolved as a field of activity. In humanitarian aid, there is an increasing number of approaches with a similar structure, but these focus on prefinancing emergency aid using a trigger-based reserve fund (e.g. forecast-based finance). The humanitarian sector has recently been experimenting with the use of risk pools (e.g. Start Ready) and is increasingly considering

[6] WFP (2021): Global Report on Food Crisis 2021

using insurance solutions for financing foreseeable humanitarian needs, with the ARC Replica approach as an example. Humanitarian stakeholders are increasingly showing an interest in using ARC Replica (e.g. the Danish Red Cross). Other humanitarian stakeholders (e.g. UNICEF) are currently preparing insurance solutions for their global portfolio to hedge their activities. The role played by ARC Replica in these developments cannot be determined with any accuracy. However, as the field is still very small, it can be assumed that it had a certain knock-on effect.

The additionality of the project in terms of development policy is clear in any case. Otherwise, the beneficiaries of emergency aid would have either received no benefits or significantly fewer benefits. In this respect, the effects of the food crisis would have been significantly worse.

Contribution to (unintended) overarching developmental changes

The Covid-19 pandemic has hit the participating countries hard and driven them into financial and social hardship, in part through increasing debt, which further increases their vulnerability to extreme weather events.

ARC Replica has made a clear contribution to coping with the Covid-19 pandemic. The disbursements in 2020 were implemented with the governments' general coronavirus aid and closely coordinated with the government in this context. This coordination and the additional funds have helped governments to focus more on coronavirus aid. Particularly vulnerable people were also often significantly affected by Covid-19 and its effects.

Summary of the rating

The project’s contribution to the intended developmental impact is classified as moderately successful. The direct impact for the target group is to be classified as positive, but there is potential for improvement with regard to emergency aid services. The results chains are consistently logical, but the measurability of the results at this level is lacking.

Impact: 3

Sustainability

Capacities of participants and stakeholders

The participating countries and Replica partners are willing to continue with ARC Replica. Governments and executing agencies have the human resources to continue the approach.

However, there is a risk that participating countries will shift their political priorities due to parallel crises and debt problems and that there will no longer be any interest in ARC (demand risk). Having said this, now that financing mechanisms have been created to subsidise government premiums, being able to continue to take out insurance with ARC offers a certain degree of financial security here. In addition to the financing of premiums through the FC-financed premium subsidisation facility, the African Development Bank launched the Africa Disaster Risk Financing Programme, which also includes a multi-donor trust fund, for this purpose.

The WFP and Start Network are dependent on premium subsidies. If these grants are discontinued, Replica cannot be continued (risk to financial sustainability). Due to the follow-up financing that has been acquired, this risk is currently not acute. The Replica approach was continued and expanded after the pilot phase (more Replica partners, more donors). There are now three replica partners – the WFP, Start Network and the UNHCR. BMZ provided funds for a further year immediately after the pilot project to finance the Replica insurance premiums. USAID also made a multi-year commitment and FCDO repeated ad hoc commitments. Since 2022, the FC has been using BMZ funds to subsidise governments as well as Replica partners via a premium subsidisation facility created for this purpose and implemented by ARC. Besides the current phase, a follow-up phase of EUR 31 million is being planned, one third of which is intended for Replica partners. There is also an ongoing commitment from USAID and Canada.

On a budgetary level, the effects of the Replica approach cannot be maintained without further disbursements. The target group has only minimal or no resilience in the event that emergency aid services are reduced or discontinued.

Contribution to supporting sustainable capacities

ARC Replica's positive impact on governments has strengthened its willingness to continue or introduce Replica in Zimbabwe. Knowledge that has been imparted by the Replica partners and has found its way into national emergency aid planning and implementation should also contribute to achieving positive effects for the target group over time.

Due to the positive experience with the pilot, the Replica partners are also willing to continue and further develop the approach. The institutions have created the appropriate technical and personnel capacities for this, which in turn depend on grant funding. The Replica pilot contributed to other donors deciding to issue grants for Replica policies, so that follow-up financing ensures the continuation of the effects.

Thanks to ARC Replica, ARC's insurance policies for the countries were improved, which counteracts the demand risk. In addition, the follow-up financing for ARC Replica, which came about through active fundraising by the Replica partners, has ensured financial sustainability for subsequent years.

ARC Replica has not contributed to the resilience of particularly vulnerable groups, but only to alleviating the worst effects of an acute food crisis. ARC Replica does not contain any resilience-promoting programmes at budgetary level. An acute crisis is also not always an appropriate time to develop and implement these programmes. An increase in the population's resilience to ongoing and future crises can only be expected at outcome level if the programmes are long term and extensive (especially food/cash for assets and food for training).

Durability of impacts over time

The context of the project is assessed as relatively unstable. Various countries in Sub-Saharan Africa are in a fragile political situation and are struggling with economic and financial problems, which were also exacerbated by the Covid-19 pandemic. These factors can have a negative impact on the sustainability of the positive effects, especially at government level.

The short duration and pilot nature of the project make it clear that the durability of the impacts could not as yet be estimated at the time of design and that the project was particularly aimed at having a demonstration effect. The establishment of ARC Replica contributes to structural changes in international emergency aid and can have a lasting impact if further financing is provided. The provision of emergency aid without resilience-building programmes is inherently designed for short-term effects, i.e. the contribution to alleviating the worst effects of droughts in Sub-Saharan Africa is limited to the period of the acute food crisis.

It should be noted that the ARC insurance policies need to be renewed annually. The project financed insurance premiums for one year, meaning that the hedging to protect poor and vulnerable people against drought risks was therefore only designed for one year. The positive effect on the further development of the international emergency aid system along the lines of anticipatory action*,* on the other hand, will continue beyond the term of the project; even if new learning experiences are added, ARC Replica will probably have a lasting effect as the first insurance approach of its kind for humanitarian stakeholders.

At output level, the positive effects can presumably continue through improved government procedures, although the strengthened technical capacities cannot be sustained in the long term without the continued involvement of the Replica partners and the capacity building that is continuously provided by the ARC agency, as the executing agencies and evaluations critically note. It can be assumed the expertise created in the executing organisations is permanent and has been appropriately included in the internal planning processes. The positive impact on the implementation of emergency aid through close coordination with the government and high-quality and timely monitoring and reporting is limited to the year when the emergency aid was implemented.

The direct gender results are also limited to the period of emergency assistance. Indirect positive effects may also have been permanent where the government has adapted its targeting approach based on the expertise and recommendations of Replica partners, which has also benefited women. No detailed information is available.

Summary of the rating

For a project that was set up as a pilot, that relies entirely on grant financing and finances emergency aid for acute crises, sustainability is rated as successful, as the issue of follow-up financing was considered, actively pursued and achieved from the outset. Nevertheless, it should be emphasised that it was already pointed out in the PA that the concept is being piloted as part of the project, meaning the sustainability of the project could not be estimated.

Sustainability: 2

Overall rating: 2

The project is rated as overall successful. In all dimensions of the evaluation – with the exception of the impact criterion – the project met the expectations set without any significant deficiencies. At the time of the PA, the decision to use ARC as a mechanism for piloting risk financing for humanitarian stakeholders coupled with disaster risk reduction was sensible and understandable. Other existing or more efficient risk financing instruments than ARC, and the weaknesses of ARC that may also affect ARC Replica are not part of this evaluation.

Contributions to the 2030 Agenda

The project contributes to Sustainable Development Goals (SDGs) number 1 (no poverty), 2 (zero hunger) and 13 (climate action). It is characterised by a high degree of coherence, as the existing systems of ARC and the executing agency were applied throughout. Further donors could also be recruited for the approach, with the result that ARC Replica continues to this day. The interplay of economic, environmental and social development was not the focus of the project, which is common for projects of this type. Moreover, no interrelationships between the dimensions were observed. Poor and vulnerable people were the project's direct target group, i.e. beneficiaries of emergency aid. Pregnant women, nursing women and children under the age of five were again given special consideration. Start Network is also characterised by a gender-inclusive design and implementation.

Project-specific strengths and weaknesses as well as cross-project conclusions and lessons learned

The project had the following strengths and weaknesses in particular:

Strengths:

- The executing agencies WFP and Start Network both had very high technical and institutional capacities for planning and implementing emergency aid as well as expert knowledge on risk financing. In this way, they were able to quickly gain the trust of the government, bring valuable improvements to the design of policies and government procedures, and ensure that the emergency assistance provided by the Replica partners is implemented to the highest standards.
- The project was highly relevant for all parties involved and was coherent at every level. This has led to a high level of ownership and support for the programme by governments, executing agencies and donors.
- The project was able to establish or expand on a trusting relationship between governments and executing agencies. This was central to the success of the project, which is based on close cooperation between the stakeholders. The executing agencies' advice as an "expert brother" is also appreciated beyond the scope of the project in matters of emergency aid and risk financing.
- The project is inherently linked to the strengths and weaknesses of ARC as insurance. Above all, strengths include i) reliable and transparent disbursement, ii) early announcement of disbursement, which facilitates anticipatory action, and iii) the requirements for disaster preparedness in advance, which promotes the best possible implementation of emergency aid.
- The flexibility to be able to conclude a Replica policy even if the respective government decides not to do so or is unable to do so ("decoupling") enables countries to be supported that would otherwise not receive any ARC protection. This applies, for example, to countries in a fragile context, financial difficulties or under political sanctions, where the state is no longer capable of acting.

Weaknesses:

- The IGP indicator specified for measuring the maximum number of insured persons covered by the acquired insurance and, in the case of maximum disbursement, the beneficiaries of emergency aid leads to a massive overestimation of the number of insured persons due to an excessively low-cost estimate for emergency aid benefits per person.
- The lack of an indicator to measure the impacts at the level of the direct target group – the beneficiaries of insurance payments or emergency aid – means that only limited statements can be made on the contribution at impact level. Since these are short-term effects, they cannot be compiled retrospectively. The monitoring requirements of the ARC-financed emergency aid of the Replica partners could have been more detailed so that conclusions can be drawn about the impacts at a budgetary level, e.g. in addition to the period from the announcement of disbursement to the start of the distribution of emergency aid, the number of beneficiaries disaggregated by gender and other characteristics should also be included.
- The general weaknesses of the ARC insurance mechanism also affect the project. (i) For example, ARC's restriction to droughts until 2020 led to food crises due to other extreme weather events being disregarded although they are equally frequent and serious. However, cyclone insurance, which has been in place since 2020, has so far only been used in Madagascar and Comoros. (ii) The governments' technical capacities were limited, which may lead to delays and suboptimal decisions, with negative implications for the Replica partners as well. For example, governments often opted for less-than-optimal insurance coverage (i.e. frequent events rather than rare serious events), including in the absence of other financing mechanisms for emergency aid. iii) Food crises could only be counteracted at an early stage (anticipatory action) to some extent. Although the announcement of disbursement is made well before the food crisis, the Replica partners depend, in part, on the speed of the governments when it comes to finalising the emergency plans and their implementation. The governments, in turn, do not always have the capacity or awareness for the early-stage initiation of emergency aid. In addition, ARC has very detailed requirements for the final emergency plans.

Conclusions and lessons learned.

- Insurance can have a developmental impact beyond its role as a pure financing mechanism if it influences the use of disbursements. This is possible by specifying that concrete plans for the use of the funds in the event of a disbursement are a prerequisite for taking out insurance and by subsequently monitoring compliance with the plans.
- Emergency planning coordinated between governments and humanitarian stakeholders in advance has a positive effect on a government's emergency planning and implementation while also leading to improved cooperation between the government and humanitarian stakeholders. This, in turn, facilitates the implementation of emergency aid by humanitarian stakeholders.
- Suitable indicators to monitor the impact of insurance projects on the direct target group are the ones that have been tested for the respective sector for which the disbursements are used and, ideally, are collected from policyholders anyway.
- A critical examination of indicators specified by international initiatives and, where appropriate, project-specific adjustments or additions increase the resilience of the results.
- Contributions to food security at impact level should be formulated as realistically as possible and be measurable with precise indicators.
- Insurance payments are suitable for financing anticipatory action by humanitarian actors, i.e. counteracting the worst effects of a crisis before they occur.
- In isolation, insurance solutions cannot provide comprehensive protection against climate risks. In view of the different climate risks and the associated financing requirements to mitigate the worst effects, there is a need for comprehensive risk management that starts with a risk analysis, includes risk-reducing measures, i.e. adjustment measures, and then involves management of the remaining risks. With regard to the latter, it is essential to combine various risk transfer and risk financing instruments, such as insurance, reserve funds or contingency loans (known as risk layering).
- The use of an insurance mechanism or the participation of the private sector in the financing of emergency aid by humanitarian stakeholders may suggest that the mechanism bears its own weight on the market. This hope should be clearly rejected, as humanitarian stakeholders continue to need grants to finance insurance premiums. Over time, these financing needs are likely to be similar to the traditional

direct financing of emergency aid via grants. In this respect, it is also crucial to consider follow-up financing from the outset when using insurance as a financing mechanism for humanitarian aid.

Evaluation approach and methods

Methodology of the ex-post evaluation

The ex-post evaluation follows the methodology of a rapid appraisal, which is a data-supported qualitative contribution analysis and constitutes an expert judgement. This approach ascribes impacts to the project through plausibility considerations which are based on a careful analysis of documents, data, facts and impressions. This also includes – when possible – the use of digital data sources and the use of modern technologies (e.g. satellite data, online surveys, geocoding). The reasons for any contradicting information are investigated and attempts are made to clarify such issues and base the evaluation on statements that can be confirmed by several sources of information wherever possible (triangulation).

Documents: Internal project documents, comparable evaluations by ARC Replica and ARC

Data sources and analysis tools: Monitoring data from the partner and from comparable evaluations

Interview partners: Project-executing agency, African government representatives, other donors

The analysis of impacts is based on assumed causal relationships, documented in the results matrix developed during the project appraisal and, if necessary, updated during the ex-post evaluation. The evaluation report sets out arguments as to why the influencing factors in question were identified for the experienced effects and why the project under investigation was likely to make the contribution that it did (contribution analysis). The context of the development measure and its influence on results is taken into account. The conclusions are reported in relation to the availability and quality of the data. An evaluation concept is the frame of reference for the evaluation.

On average, the methods offer a balanced cost-benefit ratio for project evaluations that maintains a balance between the knowledge gained and the evaluation costs, and allows an assessment of the effectiveness of FC projects across all project evaluations. The individual ex-post evaluation therefore does not meet the **requirements** of a scientific assessment in the sense of a clear causal analysis.

The following aspects limit the evaluation:
As no indicators were assigned at impact level and no follow-up was carried out at budgetary level, corresponding impacts could not be measured.

Methods used to evaluate project success

A six-point scale is used to evaluate the project according to OECD DAC criteria. The scale is as follows:

Level 1 very successful: result that clearly exceeds expectations

Level 2 successful: fully in line with expectations and without any significant shortcomings

Level 3 moderately successful: project falls short of expectations but the positive results dominate

Level 4 moderately unsuccessful: significantly below expectations, with negative results dominating despite discernible positive results

Level 5 unsuccessful: despite some positive partial results, the negative results clearly dominate

Level 6 highly unsuccessful: the project has no impact or the situation has actually deteriorated

The overall rating on the six-point scale is compiled from a weighting of all six individual criteria as appropriate to the project in question. Rating levels 1-3 of the overall rating denote a “successful” project while rating levels 4-6 denote an “unsuccessful” project. It should be noted that a project can generally be considered developmentally “successful” only if the achievement of the project objective (“effectiveness”), the impact on the overall objective (“impact”) and the sustainability are rated at least “moderately successful” (level 3).

List of abbreviations:

AA	German Federal Foreign Office
FI	Final Inspection
ARC	Africa Risk Capacity
BMZ	Federal Ministry for Economic Cooperation and Development
DAC	Development Assistance Committee
EPE	Ex-post evaluation
EUR	Euro
FCDO	Foreign, Commonwealth and Development Office
FC	Financial cooperation
FC E	FC evaluation
PA	Project appraisal
Start	Start Network
SDG	Sustainable Development Goal
UNFCCC	United Nations Framework Convention on Climate Change
UNHCR	United Nations High Commissioner for Refugees
UNICEF	United Nations International Children's Fund
USAID	United States Agency for International Development
USD	US Dollar
WFP	World Food Programme

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Target system and indicators annex

Project objective at outcome level	Rating of appropriateness (former and current view)
During project appraisal: The use of ARC is increased by the introduction of replica policies. A contribution is made to the further development of the international emergency aid system in the form of the greater use of insurance approaches. In the final report: Hedging of additional poor and vulnerable people against climate risks in Sub-Saharan Africa. A contribution has been made to the further development of the international emergency aid system in the form of the increased use of insurance approaches.	Both outcome objectives are linked to the impact objective (the first as a direct contribution to overcoming acute food crises during the project term, the second as a contribution to structurally overcoming financing bottlenecks in humanitarian aid). However, these are not the outcomes traditionally used for this purpose in emergency food aid or cash transfers, which tend to measure the direct, short-term to medium-term changes in the target group. The first objective reflects the direct impact of the programme. The clarification in the final report seems appropriate as it makes it clear what the purpose of using ARC is. It would also have been conceivable to use the conclusion of the insurance policies and the associated cover amount, which is used as a proxy for the maximum number of insured people, as an output and to use the actual recipients of the emergency aid provided as an outcome instead. The second objective focuses on the indirect impact of the pilot project on the humanitarian aid system. The slight reformulation in the EPE makes it clear that the use of insurance is to be understood as a further development of the emergency aid system. With its predominantly medium to long-term and structural changes, the second module objective could also function as an impact objective. In fact, the successful hedging of other people via ARC Replica (module objective 1) could have a signalling effect, which leads to insurance companies being structurally included in international emergency aid. Alternatively, the raising of additional funds could also have been listed as an output, as was the case with the executing agencies' impact matrix (keyword: "Roadmap to financial sustainability"). On the procedural side, there is no provision for formulating two independent objectives as one module objective. Only one module objective is to be formulated for a module, and no composite objective formulations are to be selected. In fact, it appears the objectives and the levels of the project's impact matrix do not seem to dovetail 100%, as too many objectives were formulated at the same time. The project's outputs, on the other hand, measure the emergency aid procedures

	(coordinated planning, speed of implementation, and reporting) rather than whether the emergency aid has arrived and the desired effect achieved.

During EPE (if target modified):

1. Hedge the additional poor and vulnerable people against climate risks in Sub-Saharan Africa.
2. Contribute to the further development of the international emergency aid system with a view to anticipatory action through the use of insurance approaches.

Indicator	Rating of appropriateness (for example, regarding impact level, accuracy of fit, target level, smart criteria)	PA target level	PA status (2016)	Status at final reporting (2022)	Optional: EPE status (year)
Indicator 1 (project appraisal, PA): Number of additional recipients to benefit from the introduction of Replica policies (target contribution to the G7/G20 InsuResilience Global Partnership initiative to mitigate climate risks. Measurement of beneficiaries using the InsuResilience method. This is based on the assumption of an average payment of USD 10 per beneficiary in the event of drought. The number of beneficiaries is based on the maximum insured sum (i.e. the disbursement in the event of an extreme drought) divided by USD 10. The actual number of beneficiaries of the insurance cover may vary depending on the national context). **Indicator 1 (NEW):** Number of poor and vulnerable people additionally hedged due to the introduction of Replica policies	The indicator is slightly adjusted for the EPE to make it clear that the number of beneficiaries does not refer to the actual recipients of emergency aid, but to the maximum number of people covered by the insurance in the event of a natural disaster. In principle, the indicator meets the SMART criteria (specific, measurable, achievable, relevant and time-bound), but the calculation basis is not realistic and may require revision by the InsuResilience Global Partnership (IGP). USD 10 per person is clearly too little, therefore leading to an overestimation of the number of beneficiaries.	Value allocation in 2020 reporting: 2018: 3 million 2019: 3 million	0	2018: 0 2019: 5.5 million (via financing of premiums in 2019, which correspond to an insured sum of USD 50,543,847)	Financing via another FC project, USAID and FCDO 2020: 3.88 million 2021: 4.93 million 2022: 5.80 million
Indicator 2 (PA) Funds provided in addition to the current German financing contribution for financing Replica or similar schemes **Indicator 2 (EPE)**	In principle, this is very appropriate (specific, measurable, relevant, time-bound). However, the target value was very ambitious for such a short pilot project and could actually only be achieved one year later than planned.	Target value: €10 million (2018–2019)	0	2018:0 2019: 0 2020: USD 10 million USAID to WFP; EUR 8.5 million FC	Replica premium payments in USD million (financed by

In addition to the current German financing contribution, additional grant funds are being raised for the ARC Replica approach.				funds to WFP and Start Network 2021: FCDO GBP 0.75 million to Start Network	donor grants) as proxy: 2019: 7.2 2020: 6.7 2021: 8.5 2022: 9.6

Project objective at impact level	Rating of appropriateness (former and current view)
In the PA: • The overarching development objective of the programme is to contribute to food security and alleviate poverty. For 2020 reporting ff.: • The overarching development objective of the programme is to strengthen climate resilience in Africa through food security during extreme weather events.	Food security is generally suitable as an impact, as it is to be guaranteed by the emergency aid services financed by ARC Replica stakeholders. However, with regard to the developmental effects of emergency food aid or cash-based assistance for food security, it should be taken into account that many factors have an impact on the undernourishment of the population and that undernourishment can therefore only be counteracted sustainably in conjunction with multi-sectoral, longer-term programmes. As shown by the FC evaluations of emergency food aid provided by the WFP, a short-term contribution to prevent further deterioration or to stabilise/improve the food situation can be expected at outcome level. The ambition to break the cycle of cross-generational and chronic hunger and to be able to contribute directly and indirectly to the SDGs seems too ambitious. In the reporting, the subsequent addition of climate resilience to the impact does not appear to make sense, as the term is generally used to express the ability to adapt to or withstand climate hazards and thus reduce damage. However, ARC Replica is only aimed at disaster preparedness and does not strengthen capacity for adaptation. In addition, only the preparedness of governments is strengthened to a certain extent, but not that of beneficiaries, since no structural measures take place at this level.
During EPE (if target modified): The overarching development objective of the programme is to help alleviate the most severe effects of food crises caused by droughts in Sub-Saharan Africa.	

Indicator	Rating of appropriateness (for example, regarding impact level, accuracy of fit, target level, smart criteria)	Target level PA / EPE (new)	PA status (year)	Status at final inspection (year)	EPE status (year)
No indicators were assigned for the PA	In projects for emergency food aid or cash-based assistance for food security, it is common to use indicators such as the reduction in the prevalence of acute and/or chronic malnutrition, increased household income and wealth, the improved food consumption score or the improved coping strategy index. In the design of ARC Replica, on the other hand, there are no indicators at impact, outcome or output level that could measure whether the situation of the beneficiaries has improved as a result of the project. In its 2020 report, the WFP expresses a similar criticism: “The monitoring and evaluation systems for ARC Replica do not measure impact, which is essential to promote and improve early action approaches.” This is regrettable insofar as this impact measurement takes place as standard in other projects with the WFP. The FC evaluations of the emergency food aid provided by the WFP also recommend agreeing on core indicators that can be realistically collected and – if possible – regularly collected by the WFP throughout the implementation period, e.g. as part of the performance monitoring in the country strategic plans. Indicators were not defined during the EPE, as the achievement of objectives should have been measured immediately after the distribution of emergency aid, as these are short-term effects.				

Risk analysis annex

Risk	Relevant OECD-DAC criterion
The ARC insurance approach shows shortcomings: 1. ARC premiums are not attractive to the insured persons and do not allow ARC to be financially sustainable. 2. No new products aimed at tropical hurricanes and floods are being introduced by ARC Ltd, which means ARC's offer is not sufficiently attractive. Occurred during the course of the project and subsequently.	**Relevance**
Demand risk – below target increase in insurance volume: 1. The countries that had previously declared their interest in being insured are not purchasing insurance. 2. The solvency of these countries is deteriorating and they are not buying insurance. Occurred during the course of the project and subsequently.	**Relevance**
Coordination of the final emergency aid plans between the government and the Replica partners, along with approval by ARC, and coordination of the implementation of emergency aid with the government leads to delays in output by the Replica partners.	**Effectiveness**

Project measures and their results annex

The following measures were implemented as part of the project:

- Creation of the legal and procedural framework conditions, especially adjustment of the ARC insurance contracts to the Replica concept

In the respective countries:

- Participation in technical working parties on adjusting the ARC insurance model and risk transfer parameters to the needs of the government ("customisation") as well as the joint disaster risk analysis and vulnerability assessment

- Emergency response planning and coordination with the government (prerequisite for concluding a policy) incl. simulation of the finalisation of the emergency response plans in the event of a disaster

- Purchase of the one-year insurance policy for the 2019/2020 harvest season

- Senegal: establishment of an emergency aid fund by Start Network

In the event of a payout:

- Preparation of the final emergency plan, coordination with the government and approval by ARC (condition for disbursement)

- Emergency aid output, especially cash transfers, but also food

- Monitoring and reports on emergency aid provided to ARC

The project financed Replica policies for the 2019/2020 harvest season in 6 countries (Start Network: Senegal, WFP: Mauritania, Zimbabwe, Mali, Gambia, Burkina Faso). In these countries, the active participation of the Replica partners in the ARC annual cycle (see activities above) strengthened the government's capacity in the area of designing and implementing emergency relief. Emergency response planning and implementation was more coordinated among the government and the Replica partners, which is reflected in the coordinated emergency response plans; it was also more efficient, which is indicated by the time between the occurrence of the insurance event and the receipt of benefits by the affected parties. Originally, 9 policies were envisaged (3 in 2018 and 6 in 2019), which was reduced to 6 in 2019 during the term of the project. In the event of a disbursement, the period of provision by the Replica partners should remain below 120 days, but this was slightly exceeded at an average of 131 days, which is mainly due to its provision during the first months of the Covid-19 pandemic. Furthermore, there should be an improvement in the quality of monitoring the Replica partners' design and implementation of ARC-financed emergency aid as well as the corresponding reporting in relation to the government stakeholders. This was achieved in terms of the speed of provision and qualitative information content of the reports.

The PA stipulated that Replica partners could only take out insurance if the government did the same. This restriction was lifted after the first year of implementation so that it could cover countries where the government cannot buy a policy in a given year for a variety of reasons. The initial commitment to the conclusion of a government policy prevented the conclusion of the Replica partners' policies in 2018 and was, among other things, the reason for the delay in implementation or the extension of the term by one year.

Recommendations for operation annex

Since the final report only took place one year ago at the time of the EPE, the relevance of the recommendations for the further implementation and support of the ARC Replica programme is limited.

1. Attracting further grants by the BMZ: since the approach is 100% financed by grants, it is essential to attract further donors for financing. The current considerations under the Global Shield against Climate Risks, where Germany plays a central role in providing financing for regional risk pool premiums, are therefore heading in the right direction. It should be ensured that Replica partners also have access to these funds and that these are, at best, multi-year commitments for a better design year.

2. Clear division of roles between the German Federal Foreign Office and BMZ on the topic of anticipatory action: to better capitalise on ARC Replica and future approaches internationally and to promote the necessary systemic change for ex-ante climate risk financing with greater clout, a clearly coordinated distribution of roles would be required. – No change can be identified here yet.

3. Expand Replica partners: the number of Replica partners should be actively expanded in order to achieve greater coverage in Africa and to contribute to the financial sustainability of the insurance through greater diversification and revenue for ARC. – In addition to the WFP and Start Network, the UNCHR has now become a Replica partner.

4. Boosting potential when selecting countries: there is potential that has not yet been fully exploited in countries that cannot insure themselves independently, such as countries with great political instability (e.g. Sudan, Somalia) or that lack fiscal leeway (e.g. Mozambique). In these countries, insurance coverage through the ARC country product is not possible, so humanitarian actors play a special role in emergency aid. – Initial successful experiences have been gathered. In Somalia, a Replica policy was purchased for the first time in 2022. This served as proof of concept for the government, which also purchased a small policy the following year. In Sudan, no government policy could be purchased in 2023 due to political instability; the WFP was able to take out insurance by recognising a government no-objection as sufficient instead of an MoU.

5. Replica partner as an alternative payment mechanism by default: if an ARC insurance payment cannot be paid to the government due to sanctions, the Replica partner could serve as an alternative payment mechanism by default. in Mali, this case occurred in 2022 and valuable months were lost in the search for an alternative recipient of payments.

6. Lower barriers to government approval for Replica involvement: Replica partners repeatedly experience significant delays in concluding the required MoUs with the government – these are a prerequisite for purchasing the insurance. This means that there is a risk that the insurance can no longer be taken out in time. There could be a lower threshold such as in the form of a no-objection, for example, when expressing government’s consent.

Evaluation questions in line with OECD-DAC criteria/ex-post evaluation matrix annex

Relevance

Evaluation question	Specification of the question for the present project	Data source (or rationale if the question is not relevant/applicable)	Rat-ing	Weighting (- / o / +)	Reason for weighting
Evaluation dimension: Policy and priority focus			1	o	
Are the objectives of the programme aligned with the (global, regional and country-specific) policies and priorities, in particular those of the (development policy) partners involved and affected and the BMZ?	Does the expansion of insurance ap-proaches to promote food security and improve the responsiveness of emer-gency humanitarian aid correspond to the development policy priorities of BMZ (quality characteristic poverty reduction)? Is protecting poor and vulnerable people against climate extremes and thus their food security in line with the strategic pri-orities of the WFP and Start Network? Do the ongoing development of emer-gency humanitarian aid through the use of insurance and more anticipatory action correspond to the strategic priorities of the WFP and START Network?	BMZ website AA website, including G7 Foreign Minis-ters' Statement on Strengthening Anticipa-tory Action in Humanitarian Assistance WFP website START Network website 20220613_Finance for Early Action_FI-NAL.pdf (early-action-reap.org)			
Do the objectives of the programme take into account the relevant political and institutional framework conditions (e.g. legislation, administrative capac-ity, actual power structures (including those related to ethnicity, gender, etc.))?	Do the objectives of the project take into account the framework conditions in the African countries and with the partners WFP and Start Network? Were the gen-eral conditions in the countries such that WFP and Start Network could work there in accordance with the design of the pro-ject?				

Evaluation dimension: Focus on needs and capacities of participants and stakeholders			1	o	
Are the programme objectives focused on the developmental needs and capacities of the target group? Was the core problem identified correctly?	Do the ARC Replica targets address the needs and capacities of the African countries?				
Were the needs and capacities of particularly disadvantaged or vulnerable parts of the target group taken into account (possible differentiation according to age, income, gender, ethnicity, etc.)? How was the target group selected?	How were the participating countries (direct target group) selected? How were the poor and vulnerable people receiving emergency aid (indirect target group) identified in the implementation of the specific emergency aid? How were the needs of children, pregnant women and nursing women addressed?	PP, reports from executing agencies			
Would the programme (from an ex-post perspective) have had other significant gender impact potentials if the concept had been designed differently? (FC-E-specific question)	Could targeting have had a stronger gender focus from the start?	Interviews, reports from the executing agencies			
Evaluation dimension: Appropriateness of design			3	o	
Was the design of the programme appropriate and realistic (technically, organisationally and financially) and in principle suitable for contributing to solving the core problem?	Is the Replica concept generally suitable for organising and providing financial resources for emergency relief by way of humanitarian aid, given the limited capacities of the partner countries?				
Is the programme design sufficiently precise and plausible (transparency and verifiability of the target system and the underlying impact assumptions)?	Is the concept precise and plausible? Can the effects be traced back to the target group and verified?	PA, reporting			
Please describe the results chain, incl. complementary measures, if necessary	See above.	PA, reporting			

in the form of a graphical representation. Is this plausible? As well as specifying the original and, if necessary, adjusted target system, taking into account the impact levels (outcome and impact). The (adjusted) target system can also be displayed graphically. (FC-E-specific question)					
To what extent is the design of the programme based on a holistic approach to sustainable development (interplay of the social, environmental and economic dimensions of sustainability)?	To what extent was a holistic approach to sustainable development pursued? How would the individual dimensions of sustainability be taken into account, especially in terms of the environmental and social impact assessment (ESIA) and financial sustainability?	PA, reporting, FC ESIA expertise			
For projects within the scope of DC programmes: is the programme, based on its design, suitable for achieving the objectives of the DC programme? To what extent is the impact level of the FC module meaningfully linked to the DC programme (e.g. outcome impact or output outcome)? (FC-E-specific question)		Not relevant, as there is no DC programme			
Evaluation dimension: Response to changes/adaptability			2	o	
Has the programme been adapted in the course of its implementation due to changed framework conditions (risks and potential)?	What changes have been made to the design of the ARC Replica concept over time and in the implementation of emergency aid? What adjustments had to be made to the implementation of emergency aid due to the Covid-19 pandemic?				

Coherence

Evaluation question	Specification of the question for the present project	Data source (or rationale if the question is not relevant/applicable)	Rat-ing	Weighting (- / o / +)	Reason for weighting
Evaluation dimension: Internal coherence (division of tasks and synergies within German development cooperation):			2	o	
To what extent is the programme designed in a complementary and collaborative manner within the German development cooperation (e.g. integration into DC programme, country/sector strategy)?	Is it coherent with the BMZ Africa strategy? Are the participating countries BMZ partner countries and which priorities exist (formally, regional projects do not have to be limited to BMZ partner countries and may also operate outside the bilateral priorities)?	BMZ Africa Strategy			
Do the instruments of the German development cooperation dovetail in a conceptually meaningful way, and are synergies put to use?	Are there synergies with the bilateral FC priorities in the participating African countries?	Overview of core topics and fields of action for partners of the German DC			
Is the programme consistent with international norms and standards to which the German development cooperation is committed (e.g. human rights, Paris Climate Agreement, etc.)?	Is ARC Replica consistent with the Paris Agreement, InsuResilience, the Global Shield against Climate Risks, the Sendai Framework for Disaster Reduction and the Risk-informed Early Action Partnership?				
Evaluation dimension: External coherence (complementarity and coordination with actors external to German DC):			2	o	
To what extent does the programme complement and support the partner's own efforts (subsidiarity principle)?	How does ARC Replica support the participating countries' own efforts in terms of preparedness and emergency aid and how are the executing				

	agencies WFP and Start Network supported in this regard?	
Is the design of the programme and its implementation coordinated with the activities of other donors?	How was ARC Replica coordinated with other donors? Describe the co-operation with the UK and US, which later contributed to the project?	
Was the programme designed to use the existing systems and structures (of partners/other donors/international organisations) for the implementation of its activities and to what extent are these used?	To what extent does ARC Replica build on the existing ARC approach and use the established procedures? To what extent does the ARC Replica concept build on the executing agencies' existing implementation structures and was actually utilised?	
Are common systems (of partners/other donors/international organisations) used for monitoring/evaluation, learning and accountability?	Were common systems used for MEAL?	

Effectiveness

Evaluation question	Specification of the question for the present project	Data source (or rationale if the question is not relevant/applicable)	Rating	Weighting (- / o / +)	Reason for weighting
Evaluation dimension: Achievement of (intended) targets			2	o	
Were the (if necessary, adjusted) objectives of the programme (incl. capacity development measures) achieved? Table of indicators: Comparison of actual/target	Were 6 million people covered by the project and was a further EUR 10 million in grant funding raised from other donors for the approach?				
Evaluation dimension: Contribution to achieving objectives:			2	o	

To what extent were the outputs of the programme delivered as planned (or adapted to new developments)? *(Learning/help question)*	To what extent could the outputs be delivered, also with regard to the Covid-19 pandemic?	
Are the outputs provided and the capacities created used?	Are the capacities created for planning and implementing the emergency aid planning and implementation used, is emergency aid coordinated and provided efficiently, and has the quality of monitoring and reporting improved with regard to the emergency aid provided?	
To what extent is equal access to the outputs provided and the capacities created guaranteed (e.g. non-discriminatory, physically accessible, financially affordable, qualitatively, socially and culturally acceptable)?	Do disadvantaged groups also have access to emergency aid and are they involved in the design stage?	
To what extent did the programme contribute to achieving the objectives?	To what extent did the project contribute to protecting the additional poor and vulnerable people against drought risks and to the further development of the international emergency aid system?	
To what extent did the programme contribute to achieving the objectives at the level of the intended beneficiaries?	To what extent has the project contributed to alleviating the worst effects of food crises for poor and vulnerable people as a result of droughts?	
Did the programme contribute to the achievement of objectives at the level of the particularly disadvantaged or vulnerable groups involved and affected (potential differentiation according to age, income, gender, ethnicity, etc.)?	Did the emergency aid also reach particularly disadvantaged people? How has it been ensured that the benefits are also received by women, children, pregnant women and nursing mothers (access)? Is there disaggregated data on beneficiaries?	
Were there measures that specifically addressed gender impact potential (e.g. through the involvement of women in	How were gender aspects addressed, e.g. in targeting?	

project committees, water committees, use of social workers for women, etc.)? (FC-E-specific question)					
Which project-internal factors (technical, organisational or financial) were decisive for the achievement or non-achievement of the intended objectives of the programme? *(Learning/help question)*	Which factors, e.g. among the executing agencies, governments and the ARC, were decisive for achieving the intended objectives?				
Which external factors were decisive for the achievement or non-achievement of the intended objectives of the programme (also taking into account the risks anticipated beforehand)? *(Learning/help question)*	To what extent have the framework conditions in the participating countries and during the Covid-19 pandemic made it difficult to achieve the targets?				
Evaluation dimension: Quality of implementation			1	o	
How is the quality of the management and implementation of the programme to be evaluated with regard to the achievement of objectives?	Did the WFP and Start Network consistently steer the project towards concluding the policies and actively promote donor recruitment? How well did the WFP and Start Network manage and implement the project and participate in the design?				
How is the quality of the management, implementation and participation in the programme by the partners/sponsors evaluated?	Same as above				
Were gender results and relevant risks in/through the project (gender-based violence, e.g. in the context of infrastructure or empowerment projects) regularly monitored or otherwise taken into account during implementation? Have corresponding measures (e.g. as part	Were gender aspects addressed, monitored and taken into account during the course of the project?				

of a CM) been implemented in a timely manner? (FC-E-specific question)					
Evaluation dimension: Unintended consequences (positive or negative)			–	–	
Can unintended positive/negative direct impacts (social, economic, ecological and, where applicable, those affecting vulnerable groups) be seen (or are they foreseeable)?	What unintended direct positive/negative consequences were achieved?				
What potential/risks arise from the positive/negative unintended effects and how should they be evaluated?	What potential and risks have arisen from the unintended consequences?				
How did the programme respond to the potential/risks of the positive/negative unintended effects?	How did ARC Replica respond to this?				

Efficiency

Evaluation question	Specification of the question for the present project	Data source (or rationale if the question is not relevant/applicable)	Rating	Weighting (- / o / +)	Reason for weighting
Evaluation dimension: Production efficiency			2	o	
How are the inputs (financial and material resources) of the programme distributed (e.g. by instruments, sectors, sub-measures, also taking into account the cost contributions of the partners/executing agency/other participants and affected parties, etc.)? (Learning and help question)	How were the funds distributed between the two executing agencies? How have the funds been spent over time? What are the cost categories in the project?				

	What are the direct costs and what are the indirect costs? What premium payments were made for the participating countries? How high was the share of premium payments in proportion to the total costs (cf. PP statement of 80%)?				
To what extent were the inputs of the programme used sparingly in relation to the outputs produced (products, capital goods and services) (if possible in a comparison with data from other evaluations of a region, sector, etc.)? For example, comparison of specific costs.	What proportion of the direct and indirect costs fall on the 3 outputs (if activities for output 1 and 2 cannot be separated from each other)?				
If necessary, as a complementary perspective: To what extent could the outputs of the programme have been increased by an alternative use of inputs (if possible, in a comparison with data from other evaluations of a region, sector, etc.)?	Could the output have been increased if the inputs had been brought in differently, e.g. by a complementary measure?				
Were the outputs produced on time and within the planned period?	Were the outputs produced on time?				
Were the coordination and management costs reasonable (e.g. implementation consultant's cost component)? (FC-E-specific question)	Were the indirect costs reasonable?				
Evaluation dimension: Allocation efficiency			2	o	
In what other ways and at what costs could the effects achieved (outcome/impact) have been attained? *(Learning/help question)*	Would implementation via national emergency aid also have been an option or would the national ARC premiums have been increased?	Internal FC comparison of 12 NGO projects in terms of the cost structure from 2018 (see FC knowledge management on cooperation with NGOs)			

	How could poor and vulnerable people in Sub-Saharan Africa have been alternatively protected against climate risks and at what cost? Why, for example, were the governments' premiums not increased? Would a direct grant to the executing agencies, without using ARC, have been just as efficient? What alternative contribution could have been made to the ongoing development of the international emergency aid system with a view to anticipatory action and at what cost? Would a reserve fund have been an alternative for an executing agency?	Interviews with government, executing agency, other donors Expert assessment of KfW WFP key account, insurance
To what extent could the effects achieved have been attained in a more cost-effective manner, compared with an alternatively designed programme?	Could another form of emergency aid have been provided at the same cost?	See above
If necessary, as a complementary perspective: To what extent could the positive effects have been increased with the resources available, compared to an alternatively designed programme?	Same as above	
Note: If PSP (Private Sector Participation; see Inpro under 1.11) was issued for the project or there is generally cooperation with private actors (commercial banks, companies, professional NGOs) in the implementation of FC (private sector as an instrument), the following evaluation question must be taken into account:		
In what respect was the use of public funds financially complementary?	No specification necessary	

Impact

Evaluation question	Specification of the question for the present project	Data source (or rationale if the question is not relevant/applicable)	Rating	Weighting (- / o / +)	Reason for weighting
Evaluation dimension: Overarching developmental changes (intended)			3	o	
Is it possible to identify overarching developmental changes to which the programme should contribute? (Or if foreseeable, please be as specific as possible in terms of time.)	Was it possible to alleviate the worst effects of droughts in Sub-Saharan Africa?				
Is it possible to identify overarching developmental changes (social, economic, environmental and their interactions) at the level of the intended beneficiaries? (Or if foreseeable, please be as specific as possible in terms of time)	Was it possible to alleviate the worst effects of droughts on poor and vulnerable people, including particularly disadvantaged groups?				
To what extent can overarching developmental changes be identified at the level of particularly disadvantaged or vulnerable parts of the target group to which the programme should contribute? (Or, if foreseeable, please be as specific as possible in terms of time)	See above				
Evaluation dimension: Contribution to overarching developmental changes (intended)			3	o	
To what extent did the programme actually contribute to the identified or foreseeable overarching developmental changes (also taking into account the political stability) to which the programme should contribute?	To what extent has ARC Replica contributed to alleviating the worst effects of food crises caused by droughts in Sub-Saharan Africa?	WFP "GLOBAL REPORT ON FOOD CRISES 2021"			

To what extent did the programme achieve its intended (possibly adjusted) developmental objectives? In other words, are the project impacts sufficiently tangible not only at outcome level, but at impact level? (e.g. drinking water supply/health effects)	Has ARC Replica had a tangible impact on mitigating the worst effects of food crises caused by droughts in Sub-Saharan Africa?	
Did the programme contribute to achieving its (possibly adjusted) developmental objectives at the level of the intended beneficiaries?	Has ARC Replica helped to alleviate the worst effects of drought-related food crises for those who have received emergency aid? What contribution was made for the most disadvantaged?	
Has the programme contributed to overarching developmental changes or changes in life situations at the level of particularly disadvantaged or vulnerable parts of the target group (potential differentiation according to age, income, gender, ethnicity, etc.) to which the programme was intended to contribute?	See above.	
Which project-internal factors (technical, organisational or financial) were decisive for the achievement or non-achievement of the intended developmental objectives of the programme? *(Learning/help question)*	Which internal project factors were decisive for mitigating the worst impacts?	
Which external factors were decisive for the achievement or non-achievement of the intended developmental objectives of the programme? *(Learning/help question)*	What external factors were critical to mitigating the worst impacts?	
Does the project have a broad-based impact? - To what extent has the programme led to structural or institutional changes (e.g.in organisations, systems and	Has ARC Replica initiated structural changes in the international emergency aid system? What structural/institutional modifications can be identified at the level of the executing agency and partner governments beyond the parameters of the project? Is	

regulations)? (Structure formation) - Was the programme exemplary and/or broadly effective and is it reproducible? (Model character)	ARC Replica a role model and can it be replicated?				
How would the development have gone without the programme (developmental additionality)?	What would have been the impact of the food crises caused by droughts if the project had not taken place?				
Evaluation dimension: Contribution to (unintended) overarching developmental changes			2	o	
To what extent can unintended overarching developmental changes (also taking into account political stability) be identified (or, if foreseeable, please be as specific as possible in terms of time)?	To what extent can overarching unintended developmental changes be identified?				
Did the programme noticeably or foreseeably contribute to unintended (positive and/or negative) overarching developmental impacts?	Has ARC Replica contributed noticeably to coping with the Covid-19 pandemic?				
Did the programme noticeably (or foreseeably) contribute to unintended (positive or negative) overarching developmental changes at the level of particularly disadvantaged or vulnerable groups (within or outside the target group) (do no harm, e.g. no strengthening of inequality (gender/ethnicity))?	Has ARC Replica contributed noticeably to coping with the Covid-19 pandemic at the level of particularly disadvantaged or vulnerable groups?				

Sustainability

Evaluation question	Specification of the question for the present project	Data source (or rationale if the question is not relevant/applicable)	Rating	Weighting (- / o / +)	Reason for weighting
Evaluation dimension: Capacities of participants and stakeholders			2	o	
Are the target group, executing agencies and partners institutionally, personally and financially able and willing (ownership) to maintain the positive effects of the programme over time (after the end of the promotion)?	Do the participating countries, the WFP and Start Network have the institutional, staffing and financial capacity and the will to continue the Replica approach?				
To what extent do the target group, executing agencies and partners demonstrate resilience to future risks that could jeopardise the impact of the programme?	To what extent does the direct target group comprising poor and vulnerable people, the participating countries, the WFP and Start Network demonstrate resilience to future risks that could jeopardise the impact of the programme?				
Evaluation dimension: Contribution to supporting sustainable capacities:			2	o	
Did the programme contribute to the target group, executing agencies and partners being institutionally, personally and financially able and willing (ownership) to maintain the positive effects of the programme over time and, where necessary, to curb negative effects?	Has ARC Replica contributed to ensuring that the participating countries, the WFP and Start Network have the institutional, staffing and financial capacity and the will to maintain the positive effects of the programme over time?				
Did the programme contribute to strengthening the resilience of the target group, executing agencies and partners to risks that could jeopardise the effects of the programme?	Did ARC Replica contribute to strengthening the resilience of the participating countries, the WFP and Start Network to risks that could jeopardise the effects of the programme?				

Did the programme contribute to strengthening the resilience of particularly disadvantaged groups to risks that could jeopardise the effects of the programme?	Did Replica contribute to strengthening the resilience of particularly vulnerable groups?				
Evaluation dimension: Durability of impacts over time			2	o	
How stable is the context of the programme (e.g. social justice, economic performance, political stability, environmental balance)? (*Learning/help question*)	How stable is the context in Sub-Saharan Africa?				
To what extent is the durability of the positive effects of the programme influenced by the context? *(Learning/help question)*	To what extent does the context in Sub-Saharan Africa influence the sustainability of the positive impacts?				
To what extent are the positive and, where applicable, the negative effects of the programme likely to be long-lasting?	To what extent can the positive effects on impact, outcome and output level be assessed as permanent?				